COMPREHENSIVE NATIONAL ENERGY POLICY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MARCH 5, 12, and 13, 2003

Serial No. 108–7

Printed for the use of the Committee on Energy and Commerce

(

Available via the World Wide Web: http://www.access.gpo.gov/congress/house

COMPREHENSIVE NATIONAL ENERGY POLICY

COMPREHENSIVE NATIONAL ENERGY POLICY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MARCH 5, 12, and 13, 2003

Serial No. 108–7

Printed for the use of the Committee on Energy and Commerce

(

Available via the World Wide Web: http://www.access.gpo.gov/congress/house

U.S. GOVERNMENT PRINTING OFFICE

86–052CC WASHINGTON : 2003

COMMITTEE ON ENERGY AND COMMERCE

W.J. "BILLY" TAUZIN, Louisiana, *Chairman*

MICHAEL BILIRAKIS, Florida
JOE BARTON, Texas
FRED UPTON, Michigan
CLIFF STEARNS, Florida
PAUL E. GILLMOR, Ohio
JAMES C. GREENWOOD, Pennsylvania
CHRISTOPHER COX, California
NATHAN DEAL, Georgia
RICHARD BURR, North Carolina
Vice Chairman
ED WHITFIELD, Kentucky
CHARLIE NORWOOD, Georgia
BARBARA CUBIN, Wyoming
JOHN SHIMKUS, Illinois
HEATHER WILSON, New Mexico
JOHN B. SHADEGG, Arizona
CHARLES W. "CHIP" PICKERING, Mississippi
VITO FOSSELLA, New York
ROY BLUNT, Missouri
STEVE BUYER, Indiana
GEORGE RADANOVICH, California
CHARLES F. BASS, New Hampshire
JOSEPH R. PITTS, Pennsylvania
MARY BONO, California
GREG WALDEN, Oregon
LEE TERRY, Nebraska
ERNIE FLETCHER, Kentucky
MIKE FERGUSON, New Jersey
MIKE ROGERS, Michigan
DARRELL E. ISSA, California
C.L. "BUTCH" OTTER, Idaho

JOHN D. DINGELL, Michigan
HENRY A. WAXMAN, California
EDWARD J. MARKEY, Massachusetts
RALPH M. HALL, Texas
RICK BOUCHER, Virginia
EDOLPHUS TOWNS, New York
FRANK PALLONE, Jr., New Jersey
SHERROD BROWN, Ohio
BART GORDON, Tennessee
PETER DEUTSCH, Florida
BOBBY L. RUSH, Illinois
ANNA G. ESHOO, California
BART STUPAK, Michigan
ELIOT L. ENGEL, New York
ALBERT R. WYNN, Maryland
GENE GREEN, Texas
KAREN MCCARTHY, Missouri
TED STRICKLAND, Ohio
DIANA DEGETTE, Colorado
LOIS CAPPS, California
MICHAEL F. DOYLE, Pennsylvania
CHRISTOPHER JOHN, Louisiana
TOM ALLEN, Maine
JIM DAVIS, Florida
JAN SCHAKOWSKY, Illinois
HILDA L. SOLIS, California

DAVID V. MARVENTANO, *Staff Director*
JAMES D. BARNETTE, *General Counsel*
REID P.F. STUNTZ, *Minority Staff Director and Chief Counsel*

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

JOE BARTON, Texas, *Chairman*

CHRISTOPHER COX, California
RICHARD BURR, North Carolina
ED WHITFIELD, Kentucky
CHARLIE NORWOOD, Georgia
JOHN SHIMKUS, Illinois
Vice Chairman
HEATHER WILSON, New Mexico
JOHN SHADEGG, Arizona
CHARLES W. "CHIP" PICKERING, Mississippi
VITO FOSSELLA, New York
STEVE BUYER, Indiana
GEORGE RADANOVICH, California
MARY BONO, California
GREG WALDEN, Oregon
MIKE ROGERS, Michigan
DARRELL ISSA, California
C.L. "BUTCH" OTTER, Idaho
W.J. "BILLY" TAUZIN, Louisiana (Ex Officio)

RICK BOUCHER, Virginia
(Ranking Member)
ALBERT R. WYNN, Maryland
THOMAS H. ALLEN, Maine
HENRY A. WAXMAN, California
EDWARD J. MARKEY, Massachusetts
RALPH M. HALL, Texas
FRANK PALLONE, Jr., New Jersey
SHERROD BROWN, Ohio
BOBBY L. RUSH, Illinois
KAREN MCCARTHY, Missouri
TED STRICKLAND, Ohio
LOIS CAPPS, California
MIKE DOYLE, Pennsylvania
CHRIS JOHN, Louisiana
JOHN D. DINGELL, Michigan (Ex Officio)

CONTENTS

Page

Hearings held:
- March 5, 2003 1
- March 12, 2003 231
- March 13, 2003 295

Testimony of:
- Aurilio, Anna, Legislative Director, U.S. Public Interest Research Group .. 124
- Benjamin, Jeffrey A., Vice President, Licensing and Regulatory Affairs, Exelon Nuclear 131
- Brownell, Hon. Nora Mead, Commissioner, Federal Energy Regulatory Commission 55
- Buccino, Sharon, Senior Attorney, Natural Resources Defense Council 419
- Douglass, Bill, CEO, Douglass Distributing Company, on Behalf of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America 444
- Early, A. Blakeman, Environmental Consultant, American Lung Association, on Behalf of Northeast States for Coordinated Air Use Management 449
- English, Glenn, CEO, National Rural Electric Cooperative Association 329
- Ervin, Sam J., Commissioner, North Carolina Public Utility Commission . 349
- Fertel, Marvin S., Senior Vice President of Business Operations, Nuclear Energy Institute 117
- Gent, Michehl R., President and Chief Executive Officer, North American Electric Reliability Council 389
- Kanner, Marty, Coordinator, Consumers for Fair Competition 410
- Keil, Julie, Director of Hydro Licensing and Water Rights, Portland General Electric 248
- Lyman, Edwin S., President, Nuclear Control Institute 136
- Masonis, Rob, Director, Northwest Regional Office, American Rivers 255
- Massey, Hon. William L., Commissioner, Federal Energy Regulatory Commission 47
- McSlarrow, Hon. Kyle, Deputy Secretary, U.S. Department of Energy 23
- Meserve, Hon. Richard A., Chairman, U.S. Nuclear Regulatory Commission 33
- Meyer, Alden, Director of Government Relations, Union of Concerned Scientists 159
- Moore, W. Henson, President and CEO, American Forest & Paper Association, on Behalf of Electricity Consumers Resource Council and American Chemistry Council 343
- Murphy, Edward, General Manager, Downstream, American Petroleum Institute 431
- Nadel, Steven, Executive Director, American Council for an Energy-Efficient Economy 141
- Norlander, Gerald A., Executive Director, Public Law Project of New York, Chairman, National Association of State Utility Consumer Advocates 398
- O'Hagan, Malcolm, President, National Electrical Manufacturers Association 149
- Olson, Erik D., Senior Attorney, Natural Resources Defense Council 455
- Owens, David K., Executive Vice President, Business Operations Group, Edison Electric Institute 308
- Robinson, J. Mark, Director, Office of Energy Projects, Federal Energy Regulatory Commission 242
- Schori, Jan, General Manager and CEO, Sacramento Utility District, on Behalf of Large Public Power Council 316

Page
Segal, Scott M., Counsel, Oxygenated Fuels Association 465
Slaughter, Bob, President, National Petrochemical & Refiners Association 435
Szeptycki, Leon, Eastern Conservation Director and General Counsel, Trout Unlimited 263
Tezak, Christine L., Electricity Analyst, Washington Research Group, Schwab Capital Markets, LP 402
Twitty, John, General Manager, City Utilities of Springfield, Missouri, on Behalf of American Public Power Association 319
Walter, Ron, Executive Vice President, Calpine Corporation, on Behalf of Electric Power Supply Association 338
Wood, Hon. Patrick, Chairman, Federal Energy Regulatory Commission .. 38
Additional material submitted for the record:
Dinneen, Bob, President and CEO, Renewable Fuels Association, prepared statement of 486
Electricity Consumers Resource Council, supplemental comments 490
Lyondell Chemical Company, prepared statement of 491
McSlarrow, Hon. Kyle, Deputy Secretary, U.S. Department of Energy, response for the record 181
Rathbun, Dennis K., Office of Congressional Affairs, Nuclear Regulatory Commission, letter dated April 8, 2003, enclosing response for the record 193
Tezak, Christine L., Electricity Analyst, Washington Research Group, Schwab Capital Markets, LP, supplemental testimony of 495
Walter, Ron, Executive Vice President, Calpine Corporation, on Behalf of Electric Power Supply Association, letter dated March 25, 2003, enclosing response for the record 493
Wood, Hon. Patrick, Chairman, Federal Energy Regulatory Commission, letter dated March 31, 2003, enclosing response for the record 221

COMPREHENSIVE NATIONAL ENERGY POLICY

WEDNESDAY, MARCH 5, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Cox, Burr, Whitfield, Norwood, Shimkus, Wilson, Shadegg, Pickering, Fossella, Buyer, Radanovich, Bono, Walden, Issa, Otter, Tauzin (ex officio), Boucher, Wynn, Allen, Waxman, Markey, Hall, Pallone, Brown, McCarthy, Strickland, Capps, Doyle, John, and Dingell (ex officio).

Staff present: Jason Bentley, majority counsel; Sean Cunningham, majority counsel; Dwight Cates, professional staff; Andy Black, policy coordinator; Prter Kielty, legislative clerk; and Sue Sheridan, minority counsel.

Mr. BARTON. The hearing will come to order. We appreciate everybody's attendance. We want to, before we start the opening statements, ask for unanimous consent to adopt and enforce a version of the new Committee Rule 4(e).

Under Committee Rule 4(e), the subcommittee chairman and the ranking member have the right to, on the opening statements, allow the chairman and the ranking full committee member and the subcommittee chairman and the ranking subcommittee member each get 5 minutes.

All other members get 3 minutes, unless they wish to defer their 3 minutes, in which case they get an extra 3 minutes on their question periods, the first question period.

Congressman Boucher and I have, are going to recommend unanimous consent to adopt a version of that, in that the non-ranking members can have perhaps a 1-minute opening statement and they get 2 extra minutes.

Or a 2-minute opening statement and get one extra minute. So that you can have some opening statement, but the time you don't use in your opening statement you can have that added to your time for questions.

Is there an objection to that unanimous consent request? Hearing none, so ordered. We want to begin today a series of hearings, which the series is going to be two. So I should say two hearings, on the energy policy of this country.

I have here, you can't see them all. These are copies of the 34 hearings we've done on this while I have been subcommittee chairman of this subcommittee.

So we have done extensive hearings on the general policy. We have a draft bill out. And today we are going to hear from a series of individuals representing various groups and also various agencies of the U.S. Government about this policy.

We're going to hold another hearing next week on Thursday. I want to thank Chairman Tauzin for his leadership on this issue. He and I have work with Mr. Boucher and Mr. Dingell for the last, really you could say the last 4 years, to try to get such a policy in place.

I also want to thank my good friend, Congressman Rick Boucher. He has worked tirelessly making sure that the views, not only of himself, but of his party and his region are fully aired during these hearings.

And also full committee ranking member Congressman Dingell. If we look at what is happening in the markets, we see several things.

Yesterday the spot price for oil in the New York market was $36 a barrel. Last week natural gas got as high as $12 in Mcf on the spot market.

We also, and this is just here in the Virginia, Washington, DC region, saw prices of a $1.65 for regular unleaded self-service gasoline. And I am told that up in New England last week a gallon of residential heating oil got as high as a $1.79 a gallon.

These are prices that show that our production in this country is lagging, so the price signal is going up. The signal that while we don't have shortages, some of these materials are getting scarcer and scarcer.

I think this Congress this year needs to enact a comprehensive energy policy, focusing across the board on all our energy needs.

Today, we're going to have before us, witnesses from the administration and key energy regulators to discuss what they think should be done.

It has been said that Congress does not legislate until there is a crisis. I don't think we're in a crisis, but I do believe we need to act in this critical time for both the short term and the long term.

Some other numbers that indicate why we should begin to act. Last month the Baker Hughes rig count for oil and gas rigs in the United States was 854. That is down from last year in spite of the price signals that I have just talked about.

I have been told that somewhere in the neighborhood of 50,000 megawatts of electricity generation has been canceled during the last year because of the crisis of confidence in the investor community in our utility industry.

Now zero is the number of nuclear power plants that have been ordered in the last 10 years. I believe that nuclear power could take some of the pressure off of coal and natural gas for the generation of electricity.

I could go on and on, but I think the message is clear. This subcommittee is going to soon consider legislating. I have circulated in the last week, with the support of the full committee chairman, Mr. Tauzin, a draft to start discussions.

I want to emphasize to my subcommittee and this is a draft, it is not written in stone. I fully expect to make changes based on what members on both sides of the aisle suggest after they have reviewed the draft.

I have also asked that the witnesses before us comment on elements of the draft. Some of these elements are very familiar. We have been over this ground many, many times. Others are new.

We have tried to come up with some innovative ways to solve some of the controversial parts of past energy bills. I look forward to working with members of all the subcommittees, Republicans and Democrats.

There are some elements in the draft that we have not had a markup on. The electricity title, the assumption that we did not mark up in my subcommittee last year.

I think the electricity title needs to be bi-partisan and I hope that it will be. Both my door and Chairman Tauzin's door are open to all members on both sides of the subcommittee to try to see if we can improve this title of the bill.

I am going to submit the rest of my statement for unanimous consent for the record. My good friend, Congressman Boucher, said that I should enforce the rule. So I have stopped my statement with 4 seconds over. And I would recognize my good friend, Mr. Boucher, for his opening statement.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. I also look forward to working with you, with Chairman Tauzin of the full committee, with our ranking Democratic member, Mr. Dingell, and all members of the subcommittee during the course of the 108th Congress as we seek to develop legislation that enjoys a broad consensus, that addresses our Nation's energy needs.

The hearing that we are having today and the one that has been scheduled for next week, will provide a valuable opportunity for subcommittee members to hear from a range of witnesses on the various topics addressed in energy policy legislation.

It also provides a useful forum to consider the provisions that Chairman Barton has now put before the subcommittee and the draft energy legislation that he circulated last week.

The chairman's draft addresses a number of important energy policy topics from authorization of a new clean coal power initiative, to new energy efficiency standards for appliances, to hydroelectric facilities re-licensing reforms to encouragement of the construction of the long awaited natural gas pipeline from Alaska to renewal of the Price-Anderson Act.

The draft legislation makes broad and valuable improvements to the Nation's energy laws and policies. Many of the provisions in the chairman's draft were agreed to by the conferees between the House and Senate last year.

And I am glad to see these provisions re-emerge in the draft that the chairman has now put before the subcommittee. I would particularly draw the attention of members to the provisions which would foster a new generation of advanced clean coal technology.

Coal is the Nation's most abundant fuel with reserves sufficient for the next 250 years. It generates electricity at less than one-half the cost of the fuel alternatives. It is clearly in the energy security

interest of the Nation to use to a greater extent this abundant domestic resource.

And I would note that consumers get the best prices when they purchase electricity generated through the combustion of coal. The inclusion of the clean coal power initiative acknowledges the value to the Nation of coal use and takes appropriate steps to assure the protection of air quality in those regions where coal is burned.

I strongly commend these provisions. While not a part of the Energy and Commerce Committee's jurisdiction, I would also take a moment to call attention to the incentives for the use of clean coal technologies that were included in both the House and Senate versions of energy policy legislation last year.

In the near future, I will be joining with our colleagues, Mr. Whitfield and Mr. Shimkus and others, in reintroducing our legislation to promote the use of coal in both new and retrofitted power plants that agree to use advanced clean coal technologies.

We have all urged that this comprehensive coal advancement measure be included in any comprehensive legislation considered by the house.

I will also offer a few comments this morning concerning the electricity title which is included in Chairman Barton's draft legislation.

The House Energy and Commerce Committee has devoted 4 years to a so far elusive quest for consensus of electricity reform measures.

We found no broad agreement on proposals to amend PUHCA or PURPA, to alter the merger review authority of the FERC, to establish incentive pricing for new transmission line construction, to vest the FERC with transmission line sighting authority, or to alter legislatively the rules pertaining to the management of an access to the transmission grid for wholesale market transactions.

While I appreciate the chairman's inclusion of provisions relating to net metering, time of use pricing and transmission reliability, I still have a number of concerns related to the electricity provisions.

These are complex matters. And notwithstanding several years of review, we have not been able to reach consensus on these contentious and difficult issues.

We have, however, under the Chairmanship of Pat Wood, an increasingly active and shall I say imaginative FERC. The commission has taken positive steps in order to make the wholesale market more reliable and has provoked a spirited debate over its proposal for a standard market design for the Nation's transmission grid. I have a number of questions concerning that proposal which we may be able to address this morning.

Dependency of the SMD rulemaking obviously complicates even further the process of seeking consensus on legislation relating to the electricity market. Perhaps before adopting fundamental electricity law changes, we should carefully consider—10 more seconds. We should——

Mr. BARTON. Enforce the rule, somebody said.

Mr. BOUCHER. I know I did say enforce the rule and I am proud to be the first violator. My view is that we should carefully consider how electricity markets should be best served.

Does the statutory law truly stand in need of change or the alternative. Can we look with confidence to the FERC to direct the future development of the wholesale market using existing statutory authority.

Thank you very much, Mr. Chairman. I appreciate your indulgence and I look forward to the testimony of these witnesses.

Mr. BARTON. Well, you just gave Markey and additional 42 seconds. That is what that is going to amount to. And I would say that imaginative and creative is good to my FERC.

There are other things that have been said about what you all have been doing, so that is a good start. I would now recognize the full committee chairman, the distinguished gentleman from Louisiana, Mr. Tauzin, for a 5-minute opening statement.

Chairman TAUZIN. Thank you, Mr. Barton. Let me first thank the subcommittee. This year, unlike 2 years ago, this subcommittee's task is make somewhat simpler.

We now have the experience of the last 2 years when this subcommittee produced the basic frame of the energy bill that worked its way through the House and into a conference with the Senate.

And, as I understand, the draft the chairman has circulated in built on that frame. On the knowledge we gained in the process of working H.R. 4 through the House and a similar bill or comparable bill through the Senate.

It is somewhat more difficult because the chairman has engaged the issue of electricity in this title this year when it was not engaged in the House on the energy bill last year.

And so this committee has some especially difficult decisions to make regarding that particular title of the bill. But I wanted to update you on the progress we made. We came within an eyelash of concluding the conference last year.

We got caught in the last minute politics of the closing session and did not finish it. But I want you to know that the Senate conferees and the House conferees, all of you who worked in the process, deserve a lot of credit for bringing this to the point where we almost completed this work in the last session.

And so a lot of the hard work has been done. And I particularly want to commend, again, Mr. Boucher who has been thanked, I know, by your chairman and Mr. Dingell for the extraordinary cooperative spirit in which we worked in the last Congress and encourage that same spirit this year.

It is my intent, I know it is the chairman's intent to work with you to make sure that to the extent we can, this is as much a bipartisan effort as we can possibly engage in.

We will have differences. We will have different approaches. And members on either side of our committee who have some very different views about how best to draft an energy policy for our country and what to stress and what not to stress.

And those differences will be aired in this and other hearings and in our final debates. But we're on a fast track. And no one should be upset about that. A lot of work went through last year.

We came this close to finishing it. We'll buildupon that experience and move as quickly as we can to get an energy policy before the House so that Senator Pete Domenici, on the Senate side, can

begin his process and meet us in a conference that he will chair, under our agreements, as quickly as we can accomplish that.

That is in the nature, rather, that is an ingredient of America at this particular moment in our history. Now I will say early off in this process we will have some great debates and great differences of approach.

Mr. Markey and Mr. Waxman I know will have different ideas and emphasis in the bill than perhaps I will or perhaps Mr. Barton and others on this committee will have. That is good. We ought to have those good debates.

But we are all joined in this debate for a common purpose that is especially true today. I want to hold up a fact sheet that was prepared in the last Congress. Details of imports from Iraq in the first quarter of the year 2002.

What this fact sheet indicates is that indirect sales of Iraqi oil to America then was requiring Americans to spend, indirectly, money which we sent to Saddam Hussein in Iraq to the tune of about $12.7 million per day on Iraqi oil.

But things have changed since then. What has changed is that an awful situation has occurred in Venezuela. Imports of Iraqi oil have, indirectly again, grown dramatically. And the price has changed from $20, yesterday's spot crude price of Texas sweet was $36.88, from $20 then to $30 plus today.

Which means that everyday we are sending to Saddam Hussein, every time we fill up our gas tank, every time we fill up a jet engine, every time, with jet fuel, every time we buy fuel oil, every time we buy any oil derivative product in this country, we are helping to send Saddam Hussein better than $20 million per day.

Because of a necessary, unavoidable dependence upon that resource. Now whatever path we choose to end that dependence, whether it is for conservative or alternative fuels, more production in the United States, whatever path we choose, we had better make some decisions quickly.

It is absolutely insane for us to depend today, as our troops, our young men and women are preparing perhaps to do battle in Iraq, to depend upon that country for such a large amount of our oil import.

And to send Mr. Saddam Hussein $20 million a day to arm his troops to kill our young men and women. There is something insane about that. And I give back the balance of my time.

Mr. BARTON. Thank you, full committee chairman. We now want to recognize Mr. Waxman. Does he wish an opening statement, and if so, you have 1 minute, 2 minutes or 3 minutes?

Mr. WAXMAN. I have what?

Mr. BARTON. You can have 1, 2 or 3, and whatever time you don't use now you get on your question period.

Mr. WAXMAN. Thank you very much, Mr. Chairman. Today, the committee——

Chairman TAUZIN. Mr. Chairman——

Mr. BARTON. Which do you want——

Chairman TAUZIN. Mr. Chairman, if I can correct the chairman. Our rule does not allow that. Our rule says you have to choose to either give an opening statement——

Mr. BARTON. We understand that, but we got unanimous——

Chairman TAUZIN. [continuing] and if you don't give it, you get 3 extra minutes on questions.

Mr. BARTON. But we, by unanimous consent, agreed to let him have part of it. Honest.

Chairman TAUZIN. I wish I had been around to object to it.

Mr. BARTON. You were around.

Chairman TAUZIN. I missed it.

Mr. BARTON. You just didn't object.

Chairman TAUZIN. I wasn't paying attention. I'm going to pay better attention.

Mr. BARTON. You need to tell us how much of the opening——

Mr. WAXMAN. May I inquire of the chair, if I take 8 minutes and forego questions——

Mr. BARTON. No, no, no.

Mr. WAXMAN. I think my opening statement will take 3 minutes.

Mr. BARTON. Three minutes.

Mr. WAXMAN. If I succeed in doing it in 1 minute, I'd like to reserve the two.

Mr. BARTON. All right, the gentleman is recognized for 3 minutes.

Mr. WAXMAN. Today the committee begins consideration of an energy bill for this 108th Congress. And based on legislation circulated on Friday, the committee starting point appears to be where we left off in the last Congress.

The legislation that was circulated last Friday, not only fails to reflect the energy needs of the 21st Century, it fails to reflect even the most dramatic events in the energy sector that have occurred since the House finished consideration of an energy bill in August 2001.

I would like briefly to mention some of these important issues. The collapse of Enron was one of the more dramatic illustrations of the dangers of inadequate government oversight of the energy industry.

But the examples of abuses in the gas and the electricity sectors are rampant. Back in early 2001, many of us in California believed that energy markets were being manipulated to price gouge western families.

It has now been revealed that our worst suspicions were true. Unfortunately, the committee has never held a hearing on these abuses.

For example, El Paso was recently found to have withheld pipeline capacity in order to increase gas prices in California. Energy traders from Dynagy, El Paso Corporation, American Electric Power and Williams Company have all been involved with providing false information on gas trades which could have had major price impacts on consumers.

Reliant Energy revealed their coordinated strategy to shut down power plants in order to drive up electricity prices. Cynically Reliant decided to wage a campaign to blame the Clean Air Act.

We must address the corruption in this industry in order to protect consumers and shareholders. We must also look seriously at this industry's practices in order to protect the environment.

No longer can the administration turn a blind eye to the serious threat of global warming. They are out of step with the rest of the world, the American people and even many in the industry.

Although the Senate has done considerable bi-partisan work on climate change, this committee has never held a hearing on the Senate's extensive legislative work.

And finally I would like to mention several issues that came up in the energy conference last year that have never been considered by this committee.

The Senate proposed a provision placing a moratorium on EPA regulation of the practice of hydraulic fracturing. This committee certainly should examine this before legislation on this issue.

The majority has also proposed, in the conference, protecting MTBE producers from liability for polluting ground water and drinking water.

This issue is highly contentious. It has never been examined by the committee. Mr. Chairman, I hope the committee can work together in a collegial, bi-partisan fashion on the legislation.

To that end I hope the committee can examine these critical energy issues through additional hearings and investigations.

We have an obligation to responsibly address the energy problems facing the nation.

Mr. COX [presiding]. Thank you, gentleman. The gentlelady from New Mexico.

Mrs. WILSON. Thank you, Mr. Chairman. I will reserve my time for questions.

Mr. COX. The gentleman from Michigan, Mr. Dingell.

Mr. DINGELL. Mr. Chairman, I thank you. Last Congress Chairman Tauzin asked me to work on a bi-partisan issued bill. We did that. Members of both sides worked together to determine which topics should be addressed in the committee of energy and commerce's bill, and how.

As a result, the bill was supported by a wide, bi-partisan margin. And with few exceptions, was left intact when merged with legislation from other committees to be taken up on the House floor as H.R. 4.

Well, veritably we find ourselves in markedly different circumstances today. The bill circulated on Friday is not a bi-partisan bill and the very tight committee schedule with only two errors will make it particularly difficult for new members of the committee to have an opportunity to fully participate in this bill's consideration, or indeed to understand it.

Indeed, witnesses in today's hearings had little time to review the language circulated last Friday, that concerns significant areas of energy policy, conservation, and nuclear matters, and the controversial topics of electricity and hydropower.

While I appreciate the chairman's cooperation with the minority in inviting witnesses, and I thank him for that, I am concerned that this scheduled is so compressed as to preclude meaningful testimony on the draft bill.

I note that there seems to be a pattern moving in this direction, as we face a similar situation with regard to medical malpractice, and I suspect other bills coming before us.

Unlike the bill we recorded in this last Congress. This bill would repeal the Public Utilities Holding Company Act, PUHCA, and major portions of the Public Utility Regulatory Policies Act of 1978, or PURPA.

It also contains a controversial proposal to allow States to override Federal agency's rulings concerning potential sighting of new transmission lines on Federal lands.

This is an extraordinary and altogether new proposal, not contained in either the Senate or House bill last year, and is likely to prove very troublesome since it can compromise the authority of several Federal agencies and disregard a number of settled pieces of environmental and other law and regulations.

I am perplexed at the decision to further deregulate the Nation's electricity markets at a time when turmoil in the industry, if anything, shows that consumers need more protection from naked market forces.

It seems to me if we must act now, that a better approach would be for us to reach agreement on a narrow range of reforms that address specific problems in wholesale markets and leave controversial restructuring issues, such as PUHCA repeal, PURPA repeal, and diminishing FERC's merger authority, to another day.

The committee held its last electricity oversight hearing in December, 2001. Much has occurred since then.

We have learned enough about market manipulation by Enron and other high flying marketers with no sense of responsibility for the interest of consumers or investors, to know that there are probably other shoes yet to drop.

FERC's own internal investigation into the turmoil in west coast markets during the 2001 year is still underway. Criminal investigations into Enron and others' behavior is still pending.

In light of what we have learned since our last hearing, what we are likely to learn when FERC releases its internal investigation, it seems to me to be irresponsible for this committee to act to further deregulate the electric utility industry.

It may well be we will want different deregulation, no deregulation or a return to more regulation. It is far more important to learn what happened and to take time to formulate a thoughtful response, than to move legislation on some kind of a preordained schedule.

Furthermore, as the Chair knows, I have a special interest in hydropower reform. I was disheartened to learn that the carefully crafted bi-partisan House compromise in favor of objectionable language developed by the Senate.

This does not bode well for building support for the overall bill. Finally, I would be remiss in not mentioning one consumer concern that constantly arises among my constituents.

That is the continuing volatility of gasoline prices. In many areas we have seen prices with more than $2 per gallon. While it is important to keep Congress' watchful eye on the big picture of energy, I think our constituents all would appreciate our attention to this which is a far less than theoretical problem. Thank you for your kindness, Mr. Chairman.

Mr. COX. Members are obviously aware that there is a vote on the floor. There is a vote on the journal. And after discussing this

with Mr. Boucher, it is our proposal that we continue with opening statements and members can come and go during the open statements to ensure that they make the vote on the floor.

And if there is no objection, I would go next to a gentleman from Oregon, Mr. Walden.

Mr. WALDEN. Thank you very much, Mr. Chairman. I have prepared statement I will submit for the record and reserve the balance of my time for question and answer.

Mr. COX. Next, I would like to welcome to the committee the gentleman from Maine, Mr. Allen.

Mr. ALLEN. Thank you, Mr. Chairman. I would like to take 2 minutes and I will do my best to stay within that. I want to thank you for hold this hearing on comprehensive national energy policy.

And I look forward to hearing from the panelists who are here today. Electric deregulation in Maine has been accompanied by rising electricity costs. The cold winter has reminded us how much it costs to heat 19th Century homes, and gasoline prices last week reached an all time high.

National policies of the past have perpetuated an energy system dependent on fossil fuels, which has caused serious human health problems in our Nation's downwind States, of which Maine is one.

In Maine we have the highest levels in the country of methyl mercury within, in our fish. Our adults endure the highest rate of asthma in the country, and ozone levels made Maine's air dangerous 17 days this past summer.

I hope that as we go forward we can craft an energy bill that will encourage economic growth around this country, that will protect the health of our citizens, and will confront the looming global environmental challenges that we face.

I am not convinced that the bill in front of us will do that, but I hope in the process of debate and discussion within this subcommittee we will make progress to a better product. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Mr. Allen. Mr. Whitfield.

Mr. WHITFIELD. Mr. Chairman, there are so many important issues that I am going to defer to the length of my question period.

Mr. BARTON. Mr. Whitfield defers. Ms. McCarthy. Whoops, we have Ms. Capps. Was Ms. Capps before Ms. McCarthy?

Ms. CAPPS. Thank you, Mr. Chairman, for holding this hearing. Shall I begin my opening statement?

Mr. BARTON. If you tell us how much you are going to use.

Ms. CAPPS. The full amount.

Mr. BARTON. All right, 3 minutes. The gentlelady from California.

Ms. CAPPS. We need a national energy strategy. We need to ensure that we have stable and predictable sources of energy.

There are new technologies to let us use energy more efficiently. We need to identify and encourage the development of new sources of energy, but I worry that the bill before us would not foster these developments.

It would leave consumers at the mercy of unregulated energy companies operating with little oversight. I want to highlight a couple of concerns I have about this bill.

First, it contains many provisions to increase energy efficiency and promote conservation, but it leaves out probably the single most important step we can take, increasing the fuel efficiency of our cars and trucks.

We all know about the National Academy of Sciences report that concludes a significant improvement in the miles per gallon performance of cars and trucks over the next 10 years is possible.

One of our witnesses, Steve Nadel, will testify that attaining an average fuel economy of one, 41 miles per gallon is possible by 2012.

Such an improvement would result in real fuel savings that would benefit consumers and our economy. Perhaps more importantly, in light of what Chairman Tauzin noted, it would reduce our dependence on foreign oil and increase our national security.

For those who say these improvements are just not possible, consider the President's plan to build a hydrogen car. It has some rather bold assumptions.

Reducing the cost of fuel sales by a factor of ten.

Dramatically lowering the cost of hydrogen by 75 percent. Solving expensive infrastructure challenges. Surely if we can get a government program to achieve these goals, our private companies could meet the challenges of increasing fuel efficiency.

It is likely that hydrogen cars wouldn't have any appreciable impact on the market for 20 or 30 years. Increasing the efficiency of our cars and trucks can begin very quickly.

It is the right thing to do. Mr. Nadel notes that there may not be the political will to require the kind of increases in fuel economy, but perhaps, and I hope and pray that when we go to mark up, it will miraculously occur.

Another major flaw in the legislation is the call for national electricity deregulation without any real assurance that a repeat of the price gouging that took place in California does not happen again.

With all due respect to our witnesses here today, the FERC response has gone from being completely nonexistent a couple of years ago, to being inadequate today.

Energy marketers ripped off Californians, my constituents, to the tune of billions of dollars. We said back then the power was being withheld from the market and inappropriately, if not illegally, driving wholesale prices, power prices through the roof.

FERC did essentially nothing. This committee's reaction was halting and grudging. When FERC finally stepped in, the damage had been done to California and the western States.

Over the last couple of years we have seen some documents from the energy companies involved in the California heist.

Enron has outlined some of their schemes, complete with catchy names like "Get Shorty" and "Death Star". Recent documents from Reliant Energy catch the traders' illuminating discussion about how to jack up wholesale rates by removing power from the grid.

If asked about it, the traders said they would just blame the lack of power on the Clean Air Act. I know that FERC still has some of these issues under investigation, but I have been deeply disappointed in the outcome so far.

This bill does not address the shortcomings in FERC's authority, or its inability or refusal to be the tough cop on the beat.

If national electricity deregulation is enacted, we could see the same kind of market gaming strategies that hurt California so badly.

So I look forward to hearing from our witnesses today. And I yield back my time.

Mr. BARTON. I thank you. The gentleman from Indiana is recognized for 1 minute.

Mr. BUYER. Thank you, Mr. Chairman. I did not get the opportunity to sit through those 34 hearings last year. I am, but what I did was I held an energy forum in Indiana, Mr. Chairman, and invited producers and consumers.

We had 4 hours. I want you to know that there was a degree of comfort out there between both, with regard to the product that you produced last year.

The inquisitiveness would be on the electricity side, and I think there is a pretty good agreement coming out of Indiana that they concur with your product last year.

That we need a broad based and diversified portfolio with regard to our energy sources, and that was the goal that you had in that bill.

So complements from Indiana for the product that you had put together. I did not know what to expect from all theses individuals that came.

And I look forward to these two hearings and let us have at it.

Mr. BARTON. Thank you, gentleman from Indiana. The gentlelady from Missouri.

Ms. MCCARTHY. I will just need 1 minute, Mr. Chairman.

Mr. BARTON. One minute.

Ms. MCCARTHY. It is imperative, as we consider energy policy, that we address the environmental ramifications of proposals such as carbon emissions, which significantly contribute to global climate change.

And that we establish greenhouse gas emissions reductions in our own country by providing for an industry-wide sale of carbon allowances by all entities that bring carbon into the stream of commerce.

Our committee should forge policy that will provide for reductions and a reasonable compliance time and have a safety valve that will ensure no economic injury to our economy, and yet move this country toward reducing carbon emissions.

Mr. Chairman, about two dozen U.S. companies including Ford, Dupont and International Paper, and a number of large electric utilities are already voluntarily doing this in the Chicago area.

The Chicago Climate Exchange, if it succeeds, could be a model for us to use with the rest of the Nation. They are struggling in a voluntary program, and I believe what I heard in the reports in the news that they think we should move to broaden it and to make it something that all companies participate in, in our country.

I yield back what little time I can and I thank you, Mr. Chairman, for this recognition.

Mr. BARTON. The gentlelady yields back the time. The gentleman from Ohio, Mr. Brown.

Mr. BROWN. Three minutes, Mr. Chairman.

Mr. BARTON. He wants his full 3 minutes.

Mr. BROWN. I will take the full 3. Thank you, Mr. Chairman. We should do something on energy policy and legislation, but we should employ a process which helps us do more than just something, we should do the right thing.

Mr. Chairman, I have significant concerns about the electricity title of the new energy bill. Instead of responding to Enron and market power abuses, by strengthening PUHCA, the bill would repeal it.

I am concerned about the transmission siting provision which seems to make FERC look more like a Court of Appeals for energy companies dissatisfied with State decisions, than a true backstop.

For States like Ohio, which have worked hard to modernize their siting laws, the potential for FERC review for every siting decision seems a step backward.

Let me turn to my principal concern for today's hearing, price volatility in the retail gasoline market and NRC safety oversight.

Many observers, including AAA, raised concerns about the role of oil industry business decisions in recent price increases. These concerns are well founded in light of findings by the FTC and a Senate committee concerning the oil industry's business decision and their effect on price volatility in the retail market.

I would make two requests on these important, this important issue. First, Mr. McSlarrow, I would ask that you and Secretary Abraham schedule meetings this month with oil company representatives to do two things.

Impress upon them the importance of ensuring adequate reserves of gas this spring and summer especially serving areas like the midwest and demonstrate its susceptibility to price spikes.

Second, ensure that the spring refinery maintenance cycles are completed well in advance of the summer driving season. The Energy Department needs to act now to prevent price spikes and minimize those that are unavoidable.

My second request, Mr. Chairman, is that you schedule investigative hearings on the issue of retail gas price volatility.

The Senate held hearings last year and this year, but this subcommittee has remained silent. Turning briefly to NRC oversight, my district is 50 miles from the Davis-Besse Nuclear Power Plant.

My colleagues know a football size crater was discovered in the reactor head last year at Davis-Besse. The most alarming part of this alarming story was the NRC Inspector General's report.

The IG concluded that the regulators considered the financial consequences in making their decision not to order a shut down for inspection that would have revealed the reactor had erosion months earlier.

Some observers have pointed the finger of blame at Davis-Besse operators, others have blamed the senior NRC regulator who made the decision.

The more compelling question for Congress is the protectiveness of a regulatory philosophy that defines as unnecessarily burdensome any action above and beyond the bare minimum necessary for reasonable assurance of safety.

It has been years since the subcommittee has held an NRC oversight hearing. I ask, Mr. Chairman, you schedule oversight hear-

ings in this subcommittee concerning the NRC's approach to safety and a security regulation.

Thank you, Mr. Chairman. I look forward to beginning the debate on the future of America's energy policy.

Mr. BARTON. We thank you, Mr. Brown. Seeing no other members who have not given an opening statement, the Chair is going to recess briefly while I go vote.

When we come back, we will resume opening statements. The members right to reserve who had to go vote. I am going to take a point of personal privilege before I leave and recognize one of my good friends from West Junior High School and Waco High School, Mr. Tim Mitchell.

He was an all-district guard at Waco High while I was kind of a has-been, also-ran. He's also been a precinct chairman in my congressional district. He is up here with his brother attending a conference.

Tim, why don't you stand up and let everybody recognize you. We are going to recess very briefly. As soon as members get back, we will resume our opening statements.

[Whereupon, at 10:44 a.m., the subcommittee recessed, to reconvene at 10:59 a.m., the same day.]

Mr. BARTON. The subcommittee will come to order. When we, the reason we recessed is we ran out of members to give statements. But I promised that we would let everybody give an opening statement.

Congressman Brown of Ohio was the last member to give an opening statement, so we would recognize Mr. Norwood.

Mr. NORWOOD. Mr. Chairman, I will reserve my time for questions.

Mr. BARTON. Mr. Norwood reserves his time. We go to Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman. Mr. Chairman, I would like to take up 2 minutes.

Mr. BARTON. Two minutes. Mr. Markey is recognized for 2 minutes.

Mr. MARKEY. Thank you, Mr. Chairman. Mr. Chairman, today is Ash Wednesday, which I really think is quite an appropriate day to hold a hearing on the Bush Administration's energy plan.

Ash Wednesday is recognition of the day in which you, as Catholic, have to give something up as a sacrifice in our religion. Well, today the Republicans have announced that they have a plan which essentially gives up energy consumers for Lent, and declares every day to be Fat Tuesday.

Mardi Gras for the energy producing companies across this Nation. If the Republican energy plan is enacted into law, the big oil companies, the natural gas companies, the coal industry, the nuclear industry, the utility industries will all be saying let the good times roll as long as they can chow down on the huge legislative king cake that is being delivered up to them by the Bush Administration and their allies in the Republican energy crew.

And unlike more Mardi Gras king cakes, this bill has a little plastic baby prize in every single slice. They will be drilling in the arctic refuge and other pristine public lands for the oil and gas industries.

Price-Anderson liability insurance subsidies for the nuclear industry. Clean coal subsidies for the coal industry. Hydroelectric licensing reform for the dam owners. Higher incentive transmission rates.

Participant funding. PUHCA and PURPA repeal for the utility industry, and no meaningful improvement in automobile fuel efficiency for the car industry.

The SUV industry can breathe a sigh of relief. Consumers, on the other hand, will be left nursing a legislative and regulatory hang over of higher electricity costs, dirtier air, disfoiled public lands and ugly—can I take the whole 3? It is just such good stuff.

Mr. BARTON. All right. Well, you have the Boucher 42 second override anyway.

Mr. MARKEY. Thank you, I will just use up the whole three, if I could. Disfoiled public lands and ugly transmission wires, who's sighting they are preempted from blocking.

Yes, consumers may have been thrown a few legislative beads as the Republican energy crew went by. A net metering program, an FTC privacy rulemaking there, with a few new appliance efficiency standards over there.

They are nice, but they are mere baubles compared to the pinata of hefty benefits being afforded to the energy-producing companies.

We need a balanced, comprehensive, national energy policy that is fair to both producers and consumers. This plan is not fair. Mr. Chairman, I look forward to today's hearing.

Mr. BARTON. We knew it was too good to be true. Congressman Boucher said, look, it is working, he is only going to take 2 minutes.

And I said, he hasn't finished yet. But it is a start. You wanted to only do two.

Mr. MARKEY. No Irishman has ever given up talking for Lent, okay. There is no known instance of that.

Mr. BARTON. All right. The Chair recognizes the gentleman from California, Mr. Cox, I believe for 1 minute, is that correct.

Mr. COX. I think I can get this done in 1 minute.

Mr. BARTON. All right.

Mr. COX. Mr. Chairman, I want to begin by commending you for assembling this legislation which I hope will deal with our country's troubling energy situation. The policy we have had up until now, at least in California, is best described as lights out.

And I think we need to do a lot of work to change that. I want to just point out to my colleague, Mr. Markey, how happy I am that the Price-Anderson reauthorization language in this bill includes the Cox-Markey Amendment.

Beginning in the Clinton Administration, the State Department had been giving serious consideration to making U.S. taxpayers liable for nuclear actions in North Korean nuclear facilities.

As was first uncovered by the Los Angeles Times, Clinton Administration lawyers were trying to contort the Price-Anderson Act in recovering the costs from Kim Jong-il failed nuclear power plants, which was never intended by this legislation.

The Cox-Markey Amendment which has been overwhelmingly adopted in this committee and on the floor on multiple occasions, makes it clear that U.S. taxpayers cannot be held liable for nuclear

actions in North Korea or any other government, government of any other country that sponsors terrorism or engages in the proliferation of weapons of mass destruction.

And I yield back the abundant balance of my time.

Mr. BARTON. All right. We now go to Mr. Wynn of Maryland.

Mr. WYNN. Thank you, Mr. Chairman, I will defer at this time.

Mr. BARTON. Mr. Wynn defers. Mrs. Bono from California.

Ms. BONO. Thank you, Mr. Chairman, I will submit for the record.

Mr. BARTON. She defers. Mr. Pallone of New Jersey.

Mr. PALLONE. Thank you, Mr. Chairman. I am going to ask to use my time, the 3 minutes.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. PALLONE. Mr. Chairman, I believe that this country would benefit from a comprehensive energy plan, but last Friday we received a copy of the majority's energy bill and sadly we did not receive a comprehensive plan.

While the bill is extensive, it contains harmful provisions that weaken existing consumer protections that could elicit potentially dangerous business practices, including going out of its way to repeal PUHCA, at the same time the FERC's merger authority is also repealed. The bill also threatens to trample on environmental laws by providing overriding authority to States and Federal land management agency decisions and FERC authority to override a State's decision for transmission sighting.

It also includes no renewable portfolio standard and provides only modest provisions for energy efficiency and conservation efforts, and I am also concerned about the potential inclusion of a renewable fuel provision that would mandate the use of ethanol.

This effort is premature in that there has been no independent analysis of the impact of the mandate on consumer's gasoline supplies or fuel prices and numerous questions regarding the environmental impact of ethanol use remain unanswered.

During the next month, I hope the subcommittee will make a concerted effort to address some of these concerns. First, I believe it is critically important for us to reach an agreement on a renewal portfolio standard. I understand that during last year's energy conference, disagreement between the House and Senate conferees on the inclusion of an RPS was a significant factor in the failure of the energy bill.

Furthermore, I understand there is a continued disagreement between the scope and definition of renewable energy sources as well as the percentages and timeframes that were proposed during discussions last year.

I believe that an RPS must be included in any energy bill that leaves the subcommittee, especially given the fact that language in this bill provides relief for mandatory purchase obligations under PURPA without including strong enough language to promote further development of small, renewable energy facilities and distributed energy sources.

Finally, I would like to note that I am encouraged by the FERC's activities with regard to standard market design. But I would add that while the PJM structure works well for my State and region,

I understand that a complete replica of the system may not work for every area of the country.

I believe that FERC's efforts to create standardized markets, while allowing for regional differences can help to provide the best certainty for customers. And we need to proceed cautiously on SMD, but we should not undermine the process with unnecessary and premature prescriptive measures while FERC's rulemaking is still being developed.

There are a lot of issues that need to be addressed. I have not mentioned my concern about lack of strong nuclear security language, or the failure to include tax incentives for purchasers of hybrid vehicles.

But I hope that through this hearing and subsequent hearings we can move ahead and address these concerns that are absent from this energy proposal and develop sensible legislation that will effectively address current problems of the energy industry today, as well as establish a long, forward thinking energy plan which I think is so crucial that we try to accomplish this year. Thank you, Mr. Chairman.

Mr. BARTON. And thank the gentleman from New Jersey. We recognize Mr. Radanovich from California.

Mr. RADANOVICH. Thank you, Mr. Chairman. Just to say one quick thing that I hope to hear some comment on the hydro relicensing section of this bill and I applaud you for your efforts on this bill.

Mr. BARTON. So you are going to defer? Okay, Mr. Strickland of Ohio.

Mr. STRICKLAND. I will save my time for questioning, Mr. Chairman.

Mr. BARTON. All right. Mr. Shimkus of Illinois.

Mr. SHIMKUS. Mr. Chairman, I will defer also, thank you.

Mr. BARTON. Mr. Hall of Texas.

Mr. HALL. Mr. Chairman, I will be very brief. I just want to put an addendum on to what the gentleman of Massachusetts, his fine State, that I enjoyed so much, that I have heard so many times.

And I do enjoy him. I want to remind him of the gentleman we had come before this committee who was the Railroad Commission chairman of Texas. The Railroad Commission governs oil and gas in Texas. His name was Jim Nugent.

And he had made a speech over in Birmingham to the effect of let the Yankees freeze and starve in the dark. When asked about that here, and I think Mr. Markey had a copy of his speech in front of him, he denied making that speech.

But he told me earlier he was going to deny it and for me to ask him exactly what he said. He denied saying let the Yankees freeze and starve in the dark.

And when I asked him to tell Mr. Markey exactly what he said, he said let the thieving Yankees freeze and starve in the dark.

But I don't consider them thieving Yankees. We have to have an energy policy and we need to work toward it. I yield back my time and congratulate Mr. Markey.

Mr. BARTON. I think you cleaned up what he really said. I don't think it was thieving Yankees.

Mr. MARKEY. What Mr. Hall always forgets is that Red Sox fans are constantly saying let the thieving Yankees starve and freeze in the dark. We hate them as much as you do.

Mr. HALL. Maybe he paraphrased.

Mr. BARTON. That's better than your opening statement, Mr. Markey. That was good. Mr. Burr of North Carolina.

Mr. BURR. Though tempted to get into this debate, I will defer my opening statement.

Mr. BARTON. Mr. John of Louisiana.

Mr. JOHN. Unlike Mr. Burr, I can't resist. I thank you, Mr. Chairman, for convening this hearing. And I think you for the remarks from the gentleman from Massachusetts in sharing with us his vast knowledge of the customs of Mardi Gras.

Although, I seem to have lost it in his frame when he talked about pinatas, and so I'm a little confused about pinatas and Mardi Gras. But you did well.

But thanks a lot, I will just be very brief. But there are some important things about which I would like to speak. First is the fact that as we face a possible war with Iraq and the unsettling situation in Venezuela and around the Middle East, I think it has never been more appropriate for Congress to enact a comprehensive energy policy that will increase our domestic energy security.

If there was an equivalent to the Department of Homeland Security's threat level indicator for energy security, it would surely be code orange, which is a high alert situation, and certainly duct tape and plastic sheeting would not fix this problem.

The spikes in gasoline and natural gas reflect our need to increase domestic production and really modernize our national distribution system.

Unfortunately, there is bi-partisan blame to go around for locking up the known quantities of oil and gas around the country. No more glaring to me than the administration's decision to deny developing natural gas, the abundance of it, in the large areas of the eastern Gulf of Mexico, and at the same time promote a bill in Congress that promotes drilling in Alaska.

I just want to say if it is good for Alaska, why isn't it good for Florida, Mr. Chairman? And I look forward to hearing from the Deputy Secretary of Energy today to talk about our natural gas supply.

Second, I would like to comment briefly on the recent actions by the FERC on SMD, the Standard Market Design, that has my Public Service Commission in Louisiana and certainly the Governor in Louisiana, to name only a few, concerned about the increased costs that may lie with Louisiana consumers and residents.

Unlike my good friends and colleagues from Texas, who will think this debate may be only academic, for those of us who face the real prospect of increased rates in our States to benefit customers in higher cost States, the current SMD proposal, in my eyes, is a non-starter.

I look forward to hearing from Chairman Wood on how he intends to address the concerns raised by the southern and western States, and what positive impacts and results to low cost States, like Louisiana, you can guarantee in the SMD rule.

So, Mr. Chairman, thank you for calling this hearing. I look forward to continue my focus and debate on a national energy policy as I did in the last Congress, because I think today, more than last year, that it is important that we have a comprehensive policy for the energy security of our country. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, gentleman from Louisiana. I recognize the gentleman from Pennsylvania, Mr. Doyle.

Mr. DOYLE. Thank you, Mr. Chairman, and I will take the whole enchilada.

Mr. BARTON. You got it.

Mr. DOYLE. Mr. Chairman, I thank you for the time in convening this hearing today. I anticipate an interesting and useful discussion on a number of issues involving our national energy policy and our efforts to improve and strengthen that policy.

Let there be no mistake that this is one member who thinks it is vitally important that we have a national energy policy.

Improving our energy infrastructure and national policy has been a focus of mine since I came to Congress. Two years ago when I first joined this committee, and one of the reasons I sought that assignment, was that I wanted to continue this focus and expand my ability to influence the direction that we take.

I share the frustration that some of us have that for the work we did on this issue during the last Congress that did not result in the final conference report to become law.

But of course these are difficult issues and not everything happens the first time, so we begin again this year on this effort.

From my perspective, I'll continue to hold true to many of the same principles that I brought to this debate in the last Congress.

I continue to believe that it is integral that a national energy policy be comprehensive and inclusive. I believe that the best way to solidify our long term energy health, that that is the best way to solidify our long term energy health.

I want to see our national portfolio involve and support traditional fossil fuels, such as coal, oil gas, as well as hydro power and nuclear.

But it must be in conjunction with a sincere commitment to renewable energy sources, such as fuel cells, solar, wind power and combined heat and power systems, as well as developing new technologies, like the research that is ongoing to extract gas from methane hydrates.

It is only by encouraging a diverse portfolio like this, that we can guarantee our future energy independence and ensure that we have access to energy that we will need in the years to come.

Now I know it is not an easy task to marry all of these forces and competing interests, as you can well imagine, there is a lot to cover.

I hope we can use this hearing to begin to glean a little more understanding of the heavy lifting ahead. But there is one item that does concern me.

Considering the variety of issues we need to examine, I am concerned that, as I understand it, we only have one additional hearing scheduled on these subjects, before I assume we will move to a mark up.

I would add my voice to those suggesting that at least one additional hearing would be helpful. From my perspective, representing my district in Pittsburgh, Pennsylvania, I can attest to the fact that there is great potential in, when we talk about an electricity title this session, that there is great interest in Pennsylvania, as we have made significant strides since we passed our electricity restructuring law several years ago.

According to some recent independent studies, conducted by the Pennsylvania public interest organization, consumers in Pennsylvania have seen more than $2.82 billion in savings and rate cuts of up to 39 percent since Pennsylvania law took effect in January 1997.

It is my understanding that some of the areas I represent in Pittsburgh, have seen some of the biggest savings. So, Mr. Chairman, I look forward to engaging this debate.

Being able to include a discussion of the proposed electricity title as part of that mix. I am sure we are going to have some disagreements along the way, but I am hopeful in the end we will be able to achieve some positive results that will benefit the country and my constituents in Pittsburgh. Thank you, Mr. Chair.

Mr. BARTON. We thank the gentleman from Pittsburgh. All members not present who have not made an opening statement will have the opportunity to put their opening statement in the record.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. VITO FOSSELLA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. Chairman, thank you for holding this hearing today. Few topics are as important as defining and passing into law a comprehensive national energy policy. The lack of such a policy to date has caused uncertainty in energy markets and highlighted America's severe reliance on foreign energy sources. A Venezuelan oil strike, a chilling winter, and the potential for war with Iraq among other things have sent oil and gas prices soaring to near record highs. These concerns hit home for me recently, when an explosion at a storage facility in my hometown of Staten Island, New York, sent crude futures skyrocketing. The current price of oil puts many Americans in a tough spot when making decisions about paying for everything from gas and heating oil to their groceries. Given such circumstances, we must take fast, bold steps to shed our unnatural dependence on foreign oil.

Oil prices aren't the only cause for concern in America. The recent crisis in California generated great uncertainty in our nation's electricity markets and brought to the forefront serious deficiencies in America's system of electricity transmission, generation and distribution. With energy consumption projected to grow significantly by 2025, we must ensure Americans have faith in transparent energy markets and receive access to reliable electricity. The Federal Energy Regulatory Commission is here today to discuss, among other things, it's Standard Market Design. FERC hopes its proposal will, "provide certainty to all market participants, encourage new infrastructure investment, promote fair competition and prevent a repeat of the mistakes made previously in California." I'm am extremely interested in learning more about the Commission's plan and how it responds to American's concerns.

While oil independence and strong electricity markets are critical goals, they are just two factors among many that need to be addressed in sculpting a national energy policy. As we forge ahead with this initiative, it is imperative we examine a diverse range of options to ensure our country receives reliable energy in a clean environment. Enhancing energy efficiency and conservation, the production of renewable sources, and modernizing our energy infrastructure are all crucial aspects of securing our country's power needs. It is also important to look into the future; to plans such as the President's proposal to expand the role of clean burning fuel cells in our country's energy portfolio. Achieving these goals is essential to addressing America's energy needs and allowing our great economy to expand and flourish in the 21st century.

PREPARED STATEMENT OF HON. GEORGE RADANOVICH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Thank you, Mr. Chairman for holding this hearing, and I applaud your efforts to enact energy legislation that will spawn economic development around our country.

The energy issues that continue to impact California and the Pacific Northwest have only underscored the importance of the hydro electric relicensing legislation included in the energy bill draft, which mirrors the Radanovich/Towns Hydroelectric Licensing Improvement Act of 2003. This legislation will help repair our broken licensing process and will strengthen hydropower's ability to improve quality for future generations.

The emergency surrounding hydroelectric relicensing has not changed with the passage of time. In fact, every day that passes, we dig ourselves into a deeper hole. As we look at the next 15 years, enough non-federal hydroelectric capacity to serve approximately 30 million homes must undergo the FERC relicensing process. The relicensing process must be modified before our nation's hydropower resources lose the ability to provide clean, emissions-free energy to America's energy consumers.

In order for California to have a vibrant energy market, we have to address the issue of supply in California. Industry analysts now predict the financial situation facing the industry could result in electricity shortages beginning in 2004, potentially hampering economic recovery. In addition to these problems, insufficient licensing reform threatens available hydropower supplies this year. Dependable and affordable hydroelectric energy requires a licensing process that is efficient and fair in order to accomplish these goals.

I congratulate FERC on their leadership in developing a policy that will resolve many important problems with the licensing process. However, legislation is still needed to address the fundamental problems that have plagued the licensing process for so long. The fact that federal resource agencies mandate restrictive conditions on the operations of hydropower projects without either comprehensive analysis of their impacts or an independent review of the conditions is unacceptable. The FERC rulemaking is not meant to, nor can it, address this problem with the licensing process. I believe that greater interaction between the resource agencies and the licensees in the development of environmental measures, which this legislation would encourage, will improve the process.

In the end, I hope we can work together to forge bipartisan legislation that will build on our Committee's progress in the 107th Congress and result in continued improvements in the nation's energy markets in a time of war.

Thank you, Mr. Chairman, for holding this hearing today. I look forward to the witnesses' testimony.

PREPARED STATEMENT OF HON. MARY BONO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman: Thank you for holding this important hearing.

Prior to commenting on the bill as it relates to the witnesses here today, I would like to urge FERC to continue looking into refunds as they relate to the California energy crisis. I've always believed that it should be up to FERC to uncover the extent of abuse and then recommend corrective action. There are several ongoing cases before the commission, so I urge you to continue to evaluate them in a thorough and timely manner. The actions you take on this matter could very well serve to either prevent or encourage future abuses of the system.

One aspect of the proposed energy bill I support is the reauthorization of the Renewable Energy Production Incentive. While I continue to work on refining the exact language of this section of the bill, I am quite pleased it was included and urge the Department of Energy to advocate for full funding of REPI once it is reauthorized. Obviously, in these challenging economic times, we have to make difficult funding choices. However, providing such an incentive benefits both the production and development of alternative fuels which is something our country needs to invest in.

Finally, I would also like to commend the Chairman for including the President's Freedom Car provision in the bill. I've had the honor and privilege of working on hydrogen fuel cell technology with the Sunline Transit Agency, a true leader in this field. I look forward to hearing from Deputy Secretary McSlarrow on how we can also use this program to assist the development of hydrogen fuel cell technology with regards to public transportation. This bill could provide a valuable platform to encourage the development of this promising technology in both the public and private sectors.

Thank you Mr. Chairman. I look forward to hearing from the witnesses.

PREPARED STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. Chairman, I'm from a hydro rich area of the United States where 70% of our energy comes from our abundant hydro resources. It is the most inexpensive energy there is, and it is renewable. However, we in the Northwest region are having a drought, and that coupled with the current energy markets in the West is having a devastating effect on Oregon's economy and the rest of the Northwest. The situation is becoming so severe that large industrial customers that were once considered the driving force behind the Northwest economy and provided good high-paying jobs are beginning to look elsewhere to see if they can't produce their products more efficiently.

In a year like this when hydrologists are predicting that we will have only 73% of our normal water levels, and because 70% of our electricity comes from hydro (as compared to 7% nationwide), the remaining 30% from coal, nuclear and natural gas fired generation, this puts us in a tricky predicament for the upcoming summer.

I am happy to say that we are looking at a number of new projects in Oregon that will be gas fired. Most of these plants are being sited in my district because a large natural gas pipeline goes right down the center. They are an important part of meeting our region's growing generation needs. The Northwest is no longer a region with cheap surplus power in abundance like it was just after Bonneville, Grand Coulee and the other dams along the Columbia were completed. It is a region that must continue to develop alternative sources of generation instead of relying on the traditional supply of hydropower to meet its ever-increasing energy needs.

Coming from a district that possesses the windsurfing capital of the World, I don't think I need to tell you what potential we have for the further development of wind generation. Just last year I toured a wind farm in one of my counties, which has generated enough revenue to double the property tax base of this county. Let me put it in perspective in explaining the economic development potential for my district, 15 of the 20 counties have unemployment rates above the state average of 7.0% and the state average rate is more than a point above the national rate. The continued development of this renewable energy source could really turn around some of the failing local economies in my district.

If the administration could continue to support incentives to increase the development and production of these alternatives, whether it is geothermal, solar or wind, it would help the region plan for its future load growth, and like I just said significantly benefit many of the communities in my district.

And finally, Mr. Chairman, I must get my two cents in regarding the future of RTO's and the much talked about and equally maligned Standard Market Design (SMD). I think it's gross understatement to say that many people in my district and in the Northwest are "concerned" with the prospect of an SMD regime being uniformly applied to the Northwest. And, I know my colleagues from other regions of the country are equally concerned about the ramifications of its implementation. This proposed rulemaking makes no sense whatsoever, particularly when you take into consideration the progress that was being made last summer concerning BPA becoming integral part, albeit with a list of concerns still to be addressed, of an RTO West. In light of SMD, and its potential to supercede all the progress that was made during last year's RTO discussions, I see no reason why BPA would want to become part of RTO West. As BPA owns approximately 70%-80% of the transmission lines in the region, I think all of you would agree it would be difficult to have an RTO West without its participation.

I appreciate your being here today, and I look forward to you addressing these issues of importance for the Northwest.

With that Mr. Chairman, I'm anxious to hear what the panels have to say and yield back the remainder of my time.

PREPARED STATEMENT OF HON. MIKE ROGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for holding this important hearing as we begin to move forward on how best to provide for our nation's energy needs.

One issue of concern to me is the Department of Energy's Office of Energy Efficiency and Renewable Energy is seeking to change the prescriptive criteria for the Energy Star Windows program, and the Department has offered two proposals for public comment. I am concerned with any proposal that lessens the choices currently available to consumers, damages the marketplace for existing manufacturers, and ultimately results in lost jobs for workers in the industry. I look forward to

learning from the Department of Energy the criteria that will be used as the Department makes its selection between the two proposals.

Finally, coming from a state that for nearly one hundred years has been the world's leader of automotive technology, Michigan is poised to develop the next generation of automobiles. Clearly, hydrogen fuel cells will be at the forefront of the vehicles of tomorrow. I am excited to see the strong commitment of Chairman Barton on this critical issue to Michigan and our nation's economy and environment. I look forward to learning how the Department envisions the FreedomCAR proposal being integrated with current technologies being developed by domestic automakers and then with the men and women working on the line tasked with making the best cars in the world.

Mr. Chairman, thank you again for your continued leadership on these key issues. I look forward to working with you as we proceed.

Mr. BARTON. The Chair would now recognize and welcome our first panel. We have a very distinguished panel. We have the Deputy Secretary of Energy, the Honorable Kyle McSlarrow.

We have the Chairman of the Nuclear Regulatory Commission, the Honorable Richard Meserve. We have three of our Commissioners from the FERC, including the distinguished Chairman from Texas, Mr. Pat Wood.

We are going to start with our Deputy Secretary from Energy and then we will just go with Chairman Meserve and then Chairman Wood, and Ms. Brownell and Commissioner Massey.

The Chair would recognize Deputy Secretary McSlarrow. Do you have any idea about how long your statement should take? Under 5 minutes, okay, then we will recognize you for 6 minutes, and let us see if we can do it in under 6 minutes.

You need to really turn the microphone on and speak into it.

STATEMENTS OF HON. KYLE McSLARROW, DEPUTY SECRETARY, U.S. DEPARTMENT OF ENERGY; HON. RICHARD A. MESERVE, CHAIRMAN, U.S. NUCLEAR REGULATORY COMMISSION; HON. PATRICK WOOD, CHAIRMAN, FEDERAL REGULATORY COMMISSION; HON. WILLIAM L. MASSEY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; AND HON. NORA MEAD BROWNELL, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. MCSLARROW. Thank you, Mr. Chairman. I will be brief. I am pleased to present the administration's views on the need for comprehensive energy legislation.

First, I would like to compliment you, Mr. Chairman, and the entire committee on your leadership in tackling these important issues, once again.

What was true in the beginning of 2001, is still true. We had a series of long term energy challenges that require action now. These challenges are present along the entire energy continuum and affect the environment and economy, the generation and transmission of electricity and commodities ranging from crude oil and its associated products to natural gas.

The issues that relate to electricity pose their own set of challenges and possible policy responses, which I will address later. But the other challenges can be summarized by one phrase, energy security.

To be more specific, the United States is increasingly dependent on foreign oil and may not be far from the point in which we can

no longer assume a domestic or even a North American supply of natural gas that fully meets our demand.

These trends are a concern, Mr. Chairman. Quite simply, we are at the mercy of events and decisions over which we have often limited, sometimes no control. When winters and summers are mild, when no refineries or pipelines break down, when supply from abroad is abundant and reliable, we do not feel this dependency.

But when almost anything goes wrong, the markets react instantly and we confront the higher prices and volatility that have become by now an almost reliable, cyclical phenomenon.

Almost 2 years ago President Bush presented his solution to the national energy policy to the American people. I would like to take 1 minute to highlight one of his initiatives, and that is the hydrogen initiative.

Hydrogen can be produced from diverse domestic sources, freeing us from reliance on foreign imports for the energy we use at home.

Hydrogen emits no greenhouse gas emissions. When hydrogen is used to power fuel cell vehicles, it will do so with more than twice the efficiency of today's engines.

If we are successful with the President's hydrogen initiative, by 2040, we can reduce oil use in light duty vehicles by over 11 million barrels per day. The amount of oil that approximates that which American imports today.

Mr. Chairman, I would like to briefly comment on the draft legislation, because we have only had the last few days to review the draft, we are not in a position, obviously, to provide an administration position on every provision and we look forward to working with you and the members of this committee on it.

First, the administration strongly supports completing the transition to effective competition in wholesale power markets, and believes that much of the electricity title in the draft legislation is a strong step in the right direction.

Well functioning markets will, we believe, lead to lower costs for consumers and businesses. But there is more than simply the benefit of lower prices.

A well functioning market brings its own rewards. As confidence is gained that the system is reliable and capable of coping with high demand for electricity, much needed investment is likely to be attracted.

Investment in new technologies and an improved generation in transmission facilities, to produce additional energy and environmental benefits.

When the opposite is true, when uncertainty reigns, when reliability is questioned, when prices seem detached from market forces, investment vanishes.

Because the administration supports efforts to ensure open access for all generators to grid, we support the open access language in section 7021.

We also support establishing mandatory enforceable reliability rules, as found in section 7031. The administration agrees that the Public Utility Holding Company Act should be repealed and we support reform of PURPA in an innovative and competition-friendly manner as contemplated in Subtitle E.

We also believe that facilitating an effective national electric transmission grid for the benefit of consumers, last resort Federal sighting authority for high priority transmission lines is needed.

The administration has strongly supported efforts to increase energy efficiency and I am pleased to note the chairman's inclusion in this draft of agreements reached toward this end by the energy conferees in the last Congress.

The administration strongly supports a renewable fuel standard that will increase the use of clean, domestically produced renewal fuels, especially ethanol, which will improve the Nation's energy security, farm economy and environment.

However, the administration firmly believes, and I know this is a jurisdictional point, but a balanced comprehensive energy plan with increased domestic production in order to reduce our rising dependence on imported oil and gas.

And the key to achieving this balance is the President's proposal to open a small portion of ANWR to environmentally responsible oil and gas exploration and development.

The administration strongly supports the construction of a commercially viable Alaskan natural gas pipeline as a critical part of our energy security portfolio.

And finally, the administration strongly believes that comprehensive energy legislation should include long term reauthorization of the Price-Anderson Act. And therefore we applaud the draft bill's extension of Price-Anderson to 2017.

And at this point, I will close my statement, Mr. Chairman, thank you.

[The prepared statement of Hon. Kyle McSlarrow follows:]

PREPARED STATEMENT OF HON. KYLE MCSLARROW, DEPUTY SECRETARY OF ENERGY

Thank you, Mr. Chairman. I am pleased to be able to present the Administration's views on the need for comprehensive and balanced energy legislation, and where appropriate, our views on specific proposals before this committee.

I. INTRODUCTION

First, I would like to compliment you, Mr. Chairman, and the entire committee on your leadership in tackling these important issues once again.

To almost no one's surprise, the turbulent times on the energy front continue. From our first week in office, we knew that the United States faced an energy crisis long in the making. In addition to the California electricity crisis, you will recall that consumers faced unparalleled rises in natural gas and gasoline prices, and OPEC was in the midst of a series of production cuts that aimed at higher prices for crude oil.

That is why President Bush so quickly directed the completion of a comprehensive and balanced national energy policy.

II. THE LONG-TERM CHALLENGE

What was true in the beginning of 2001 is still true: we have a series of long-term energy challenges that require action now. These challenges are present along the entire energy continuum, and affect the environment and economy, the generation and transmission of electricity, and commodities ranging from crude oil and its associated products to natural gas.

The issues that relate to electricity pose their own set of challenges and possible policy responses, which I will address later. But the other challenges can be summarized by one phrase: energy security. To be more specific, the United States is increasingly dependent on foreign oil and may not be far from the point at which we no longer can assume a domestic-or even a North American-supply of natural gas that fully meets demand.

Thus, before I address some of the policy issues before this committee and Congress, it is worth analyzing the premise of growing dependence on foreign energy. I will use the analysis presented by the Department of Energy's independent analytical arm, the Energy Information Administration, in its Annual Energy Outlook 2003 (AEO 2003), and will confine this brief review to petroleum specifically and total energy supply and demand.

A. Petroleum Trends

The historical record shows substantial variability in world oil prices, and there is similar uncertainty about future prices. Three *AEO2003* cases with different price paths allow an assessment of alternative views on the course of future oil prices. The three price cases are based on alternative assumptions about OPEC oil production levels, primarily from the Persian Gulf: lower output in the high price case and higher output in the low price case. However, with its vast store of readily accessible oil reserves, OPEC is expected to be the principal source of marginal supply to meet demand increases in all scenarios.

By 2025, OPEC production is projected to be 61 million barrels per day (more than twice its 2001 level) for the "Reference" case. Based on growth in world oil demand of about 2.0 percent annually, projected prices in real 2001 dollars reach about $27 per barrel in 2025. In nominal dollars, the reference case price is expected to exceed $48 per barrel in 2025.

In the high world oil price case, OPEC production is assumed to only increase to 46 million barrels per day by 2025 (about 25 percent less than the reference case) and prices rise by about 3 percent per year from 2001 to 2015. Prices remain at about $33 per barrel (in real 2001 dollars) after 2015 as market penetration of alternative energy supplies become economically viable at the higher price and cap oil prices.

In the "low world oil price" case, with assumed greater expansion of OPEC production to 71 million barrels per day by 2025 (about 15 percent greater than the reference case), prices are projected to decline from their high in 2003, reaching $19 a barrel by 2010 (in real 2001 dollars), and remain at that level to 2025.

U.S. petroleum consumption varies, not only with oil prices, but the level of economic growth. While projected U.S. petroleum consumption varies with the projected price of crude oil, from 28.2 million barrels per day in the high world oil price case to 30.2 million barrels per day in the low world oil price case in 2025, the largest variation is with different assumptions about the rate of economic growth. Total petroleum consumption in 2025 ranges from 26.9 million to 31.8 million barrels per day in the low and high economic growth cases, respectively.

In the reference case, gross domestic product is expected to increase by 3.0 percent per year between 2001 and 2025. In the high economic growth case, GDP grows at a faster 3.5 percent per year and in the low economic growth case at a slower 2.5 percent per year. However, while petroleum consumption varies with each scenario, it increases in all cases from today's level.

In 2001, net imports of petroleum accounted for 55 percent of domestic petroleum consumption. Dependence on petroleum imports is projected to grow in the reference case, reaching 68 percent in 2025. The corresponding import shares of total consumption in 2025 are expected to be 65 percent in the high world oil price case and 70 percent in the low world oil price case.

The growth in the share of petroleum accounted for by imports has received little notice in recent years. Expenditures on petroleum as a share of GDP have fallen from a peak of 9 percent in 1980 to only 3 percent today. The OPEC share of U.S. petroleum imports has fallen from a peak of 70 percent in 1977 to 47 percent in 2001. More importantly, the share of U.S. petroleum imports originating from the Persian Gulf is about 23 percent today versus a peak of 28 percent in the late 1970s.

However, as the marginal source of supply, OPEC and, ultimately, the Persian Gulf are expected to be become increasingly important for future supplies to the United States and the world. By 2025, 53 percent of U.S. petroleum supply is expected to come from OPEC, including 26 percent from the Persian Gulf.

Although crude oil is expected to continue as the major component of petroleum imports, refined products are projected to represent a growing share. Growth in domestic U.S. refinery capacity is expected to remain constrained by regulations and economics. While total capacity is projected to grow by 3 million barrels per day between 2001 and 2025, all of the growth is at existing refineries. No new grassroots facilities are expected to be built over the forecast period.

Growth in total U.S. petroleum demand in the reference case, from 20 million barrels per day in 2001 to over 29 million barrels per day by 2025, is projected to outstrip U.S. refinery capacity. As a result, refined petroleum products are projected to account for a growing portion of total net petroleum imports, reaching 34 percent

of total net imports by 2025 (6.7 million barrels per day) in the reference case, up from a 15 percent share of total imports in 2001 (1.6 million barrels per day).

This means that the U.S. will increasingly rely on foreign refinery investors to provide not just the volume of petroleum product needed by U.S. markets but products that meet the required characteristics (e.g., sulfur content, octane levels, etc.) of the U.S. supply slate. This decreases the flexibility and direct control that U.S. policymakers have in dealing with petroleum supply issues.

B. Total Energy Trends

Another way to analyze our energy picture is to look at our total energy consumption and balance it against our total energy production.

Total U.S. primary energy consumption is projected to increase from 97 quadrillion Btu in 2001 to 139 quadrillion Btu by 2025 in the reference case, 1.5 percent per year. It is important to note that the reference case already assumes continued improvement in energy-consuming and producing technologies, consistent with historic trends. Without these improvements, total primary energy consumption would otherwise grow to about 200 quadrillion Btu by 2025.

The difference between reference case consumption and domestic energy production is the level of net imports (all energy types) required to meet projected U.S. energy consumption levels. Because of slow growth in domestic energy production, total net imports are projected to grow from about 26 quadrillion Btu in 2001 to almost 50 quadrillion Btu in 2025.

As I mentioned earlier, this already assumes that future gains in energy efficiency take place at the same impressive rate as in recent years. Nonetheless, the EIA also analyzed what it termed a "high technology" case, with an even more aggressive decline in energy intensity.

With more rapid decline in energy intensity, total energy consumption could be reduced to levels below that shown in the reference case. In the high technology case, it is assumed that increased spending on research and development will result in earlier introduction, lower costs, and higher efficiencies for end-use and electric generation technologies than assumed in the reference case. Due to a faster decline in energy intensity in the high technology case, total primary energy consumption is projected to be 6 percent lower in the high technology case by 2025, at 130 quadrillion Btu.

With lower levels of total consumption, net imports are also reduced. However, the reduction in imports is partially offset by lower levels of domestic energy production resulting from a decline in the energy prices that producers see with lower consumption levels. Net energy imports decline to 45 quadrillion Btu by 2025 in the high technology case from nearly 50 quadrillion Btu by 2025 in the reference case. The result is that even in a case with an accelerated decline in energy intensity, the U.S. will still be highly dependent on energy imports to meet future consumption needs.

III. RISING TO THE CHALLENGE: PRESIDENT BUSH'S NATIONAL ENERGY POLICY.

These trends are a concern. We long ago ceased to fully provide for our petroleum needs domestically, and though most of our natural gas can be supplied currently by North American production, the trend here is also toward a greater share for imported gas.

Quite simply, we are at the mercy of events and decisions over which we have often limited-sometimes no -control. When winters and summers are mild; when no refineries or pipelines break down; when supply from abroad is abundant and reliable, we do not feel this dependency. But when almost anything goes wrong, the markets react instantly, and we confront the higher prices and volatility that have become by now an almost reliable cyclical phenomenon.

President Bush recognized that to prevent those problems from becoming a permanent, recurring feature of American life, we needed a long-term plan for energy security that would promote reliable, affordable and environmentally sound energy for the future.

Almost two years ago, President Bush presented his solution, a national energy policy, to the American people.

The key to the comprehensive plan's approach was the recognition that over the next 20 years our country would demand large and timely increases in energy in order to keep our economy growing, keep Americans working, and keep the nation secure.

The National Energy Policy helped define six general objectives to ensure America's continued growth and prosperity:

— First, we would aggressively reduce demand by employing energy efficient technologies and encourage sound conservation measures as essential components of our energy policy.
— Second, realizing that even the most aggressive energy efficiency and conservation programs would not be enough by themselves to bring supply and demand into balance, we resolved to increase energy supply, with an emphasis on domestic supply.
— Third, to ensure energy security, we would maintain a diversity of fuels from a multiplicity of sources.
— Fourth, we would dramatically upgrade our national energy infrastructure so as to more efficiently and reliably deliver energy from the source to the consumer.
— Fifth, we would accomplish our energy production, consumption and conservation goals while building on our successful record of environmental protection.
— Sixth, realizing that our energy challenges would extend beyond the next two decades, we would provide a vision of the future in which solutions to these challenges would transform our energy future.

IV. NATIONAL ENERGY POLICY ACHIEVEMENTS

Above all else, the underlying goal of the National Energy Policy was to strengthen America's energy security; and pursuant to this goal, the Administration has made significant progress in the past two years.

This Administration has made great strides toward increasing domestic energy supplies and diversifying foreign energy sources. The President's decision to move forward on Yucca Mountain, and Congress' subsequent approval, will ensure the continued viability of the nation's nuclear industry. And the President's Coal Research Initiative continues to demonstrate great promise for the development of new technologies for cleaning—and potentially eliminating—coal emissions and thereby protecting the viability of this nation's most abundant energy resource.

As part of our efforts to modernize and expand the infrastructure we have established an interagency Task Force on Permit Streamlining that has been instrumental in coordinating the permit process for many infrastructure projects, joined with Congress to enact Pipeline Safety legislation, and begun construction on the Path 15 transmission line to ease electricity congestion in California.

The Administration's commitment to encouraging conservation, boosting energy efficiency, and expanding the potential for the use of clean renewable energy is demonstrated in the President's request for increased weatherization funding, and the largest request for funding for the Department of Energy's Office of Energy Efficiency and Renewable Energy in 20 years.

Our promise to protect the environment for future generations is the foundation of proposals such as Clear Skies, which will substantially reduce the amount of pollutants resulting from the production of electricity and through the Administration's Brownfields initiative which seeks to return abandoned industrial properties to beneficial use allowing location of combined heat and power facilities on remediated lands.

V. TRANSFORMING OUR ENERGY FUTURE.

Of particular significance, however, are two Presidential initiatives that I would like to take a moment to highlight. The National Energy Policy recommended that the President direct the Secretary of Energy to develop next generation technologies, and it specifically focused on hydrogen and fusion.

A. Hydrogen.

The President soon carried out this recommendation by announcing the FreedomCAR initiative, a program designed to greatly accelerate the pace of development of hydrogen vehicles.

The potential benefits of hydrogen-fueled vehicles are incredible.

- Hydrogen can be produced from diverse domestic sources, freeing us from reliance on foreign imports for the energy we use at home.
- When hydrogen is used to power fuel cell vehicles, it will do so with more than twice the efficiency of today's engines.
- And hydrogen-powered vehicles would have a tremendous positive impact on the environment, as they would produce none of the harmful emissions that we see with today's gasoline-powered fleet. In fact, the only byproduct of the fuel cell is pure water.

These factors also led to the development of the President's Hydrogen Fuel Initiative, which he announced just over one month ago during the State of the Union Address.

Today's gasoline-powered vehicles are fueled by an infrastructure that is the result of nearly 100 years and 1 trillion dollars of investment. It is remarkably efficient, and it is everywhere. Initially, we won't need a hydrogen station on every corner, and our hydrogen production will not need to match gasoline production overnight. But we needed a plan for making the necessary research and development breakthroughs to enable industry to develop a fueling infrastructure that would allow hydrogen vehicles to operate alongside their gasoline counterparts, that would be ready when the vehicles are entering the marketplace, and that will grow with the use of this new technology.

The President's Hydrogen Fuel Initiative provides this plan for the future hydrogen economy, and it has already generated tremendous enthusiasm among the energy and auto industries—partners that will be integral to transforming our nation's energy future from one dependent on foreign petroleum, to one that utilizes the most abundant element in the universe.

As the President has said, his goal is to see to it that the first car driven by a child born today could be powered by hydrogen and pollution free. Pursuant to the FreedomCAR partnership and Hydrogen Fuel Initiative, we propose to focus $1.7 billion over the next five years on several significant barriers to hydrogen, fuel cell, and advanced automotive technologies:

- First, we will work to lower the cost of fuel cells by another factor of ten. If we were to mass-produce the fuel cell designs we have today, they would cost approximately $300 per kilowatt. The comparable cost of a modern internal combustion engine is $30 per kilowatt, so we have our work cut out for us to make this technology competitive.
- Second, we will endeavor to lower the cost of hydrogen, which is approximately four times more expensive than its gasoline equivalent today. Our 2010 goal is to bring down the cost of the hydrogen equivalent of an untaxed gallon of gas to $1.50. The way to do that is by developing cost effective, efficient means of production and distribution.
- Third, we will undertake research aimed at devising new methods to store sufficient amounts of hydrogen fuel aboard a vehicle, to provide consumers with a driving range of at least 300 miles between refuelings.
- Fourth, and most critically, we will work to solve the overarching infrastructure challenges, to develop a hydrogen-based delivery and refueling infrastructure like the petroleum-based one we now have.

If we are successful in this endeavor, we estimate that industry could make a commercialization decision on fuel cell vehicles, hydrogen production, and refueling infrastructure by 2015. A positive decision would lead to hydrogen fuel cell vehicles in the showroom by 2020, and by 2040, this could reduce oil use in light duty vehicles by over 11 million barrels per day—an amount of oil that approximates that which America imports today.

B. Fusion

A second element of the National Energy Policy technologies recommendation received much attention domestically and internationally when President Bush recently announced that the United States would make a major commitment to the development of fusion energy.

Fusion is the process that powers the sun and the stars, and our best scientists believe it may become the ultimate energy source for earth as well. In the stars, hydrogen atoms combine under extremely high temperature and pressure to produce helium and energy. The envisioned fusion energy plants would harness this process here on earth, relying on an abundant fuel that is readily available to all nations: simple seawater. Fusion energy plants would produce no harmful emissions, no long-term radioactive waste, and because no fissile materials are required in the fusion process, it presents virtually no proliferation threat. It promises to be the ultimate safe, clean, abundant energy source, and it may be the energy source for the future.

The great promise of fusion, however, presents great scientific challenges, challenges we believe we can meet if we engage the talents of experts from around the world. That is why on January 30, 2003, President Bush announced that the United States would join with the international community to develop the International Thermonuclear Experimental Reactor. When built, ITER is expected to achieve the first sustained burning plasma, an essential next step in demonstrating the feasibility of commercial fusion energy systems. In his announcement, the President noted that ITER is "an ambitious international research project" that will "advance the effort to produce clean, safe, renewable, and commercially-available fusion energy by the middle of this century."

Both our hydrogen initiative and our fusion energy research program will, of course, depend on Congressional funding and approval, and we look forward to working with Congress to ensure that these initiatives are fully supported.

VI. PRINCIPLES GUIDING ENERGY LEGISLATION.

Hydrogen and fusion present a long-term promise, and are primarily focused on research and development. But there are a number of proposals that can be implemented now. Some require action by the Administration-indeed, three-quarters of the National Energy Policy's 105 recommendations can and are being done by actions in the Executive Branch. However, some of the most important actions require legislative action.

Let me outline a few of the principles that the Administration believes should guide the development of energy legislation, and the goals we think we should achieve.

A. Modernization of Wholesale Electricity Laws

The Administration strongly believes a comprehensive energy bill must include a sound electricity title that modernizes our Nation's antiquated wholesale electricity laws.

Our overarching goal is to ensure that Americans have abundant, affordable, clean and secure electricity supplies.

Developments in the electricity industry in recent years have brought the industry to a crossroads. While the move to competitive markets has fostered enormous benefits, some serious problems have given rise to a significant policy debate, especially over the past two years.

We have three basic policy choices.

- First, go back to comprehensive rate regulation for wholesale power sales. Have FERC set regulated rates for each jurisdictional utility. Abandon reliance on market forces and competition as the underpinning of Federal electricity policy.
- Second, maintain the status quo. Defer making decisions on major policy issues. Continue to straddle the fence.
- And, third, complete the transition to effective competition in wholesale power markets.

Going back to comprehensive rate regulation is not really an option. Too much has happened, and too much has changed. The process of change introduced into electricity markets by past Federal and State policies is probably irreversible.

Preserving the status quo is not a real option, either. The status quo has meant dramatic price spikes in wholesale power markets in California and the West, attempts to manipulate power markets, a dramatic expansion of generation by many independent power producers and the subsequent challenges some have faced as a result, and stagnant investment in an inadequate transmission grid that restricts entry into regional power markets.

The Administration believes that there really is only one viable policy choice: completing the transition to effective competition in wholesale power markets designed to generate and deliver reliable, abundant and affordable electricity.

The evidence of the price benefits derived from increased efficiencies can already be seen. As imperfect as the market has been, wholesale power prices declined by 23 % from 1985 to 2000. Even when one takes into account the volatile price increases of 2001, the decline from 1985 is still 12%.

Well-functioning markets will, we believe, lead to lower costs for consumers and businesses. But there is more than simply the benefit of lower prices. A well-functioning market brings its own rewards. As confidence is gained that the system is reliable and capable of coping with high-demand for electricity, there will increasingly be less need for restrictive and prescriptive regulation. And that is the point when much-needed investment is likely to be attracted—investment in new technologies, and in improved generation and transmission facilities that produce additional energy and environmental benefits.

When the opposite is true—when uncertainty reigns, when reliability is questioned, when prices seem detached from market forces—investment vanishes.

What is required to complete the transition is new and aggressive reform, and that requires new legislation and new, streamlined regulatory regimes.

The reforms that lead to greater competition are embodied in the following principles:

- Prevent market manipulation and market power abuse.
- Promote reliability of electricity service.
- Ensure open access to the interstate transmission grid.
- Eliminate undue discrimination in wholesale power markets.

- Ensure that customers have the ability to respond to price in real-time.
- Encourage investment in new generation and transmission facilities.
- Support transmission policy options, including participant funding, that appropriately allocates costs; and
- Lower barriers to entry to electricity markets.

The Federal Energy Regulatory Commission has already taken a number of steps in these directions. For example, FERC already has begun a rulemaking to establish incentive-based and performance-based rate treatments to encourage construction of new transmission facilities, and has acted to make regional transmission organizations a reality.

However, legislation still is needed, and the Administration believes that much of the Electricity title in the draft House bill is a strong step in the right direction. Because the Administration supports efforts to ensure open access for all generators to the wholesale electricity grid, the open access language in section 7021 of the draft House bill is a desirable goal, and we support that goal. The Administration also supports establishing mandatory and enforceable reliability rules that will reduce the chances for power outages. Therefore, we support section 7031 of the bill concerning electric reliability.

The Administration agrees that the Public Utility Holding Company Act (PUHCA), an outdated law that restricts utility investment, should be repealed, and so we support Subtitle D of the Electricity title in the House bill. We also have advocated reform of the Public Utility Regulatory Policies Act (PURPA) in an innovative and competition-friendly manner as contemplated in Subtitle E of the Electricity title.

The Administration supports FERC's ability to review mergers and prohibit abuses of market power. As a result, we oppose section 7101 of the bill, which would repeal FERC's authority to review mergers. The Administration supports enacting legislation to further protect consumers against unauthorized disclosure of personal information, unauthorized switching of electricity service, and unethical individuals and companies in this industry. As a result, we generally support Subtitle H of the draft bill and look forward to working with you on some of the details of this subtitle.

We also believe that to facilitate an effective national electric transmission grid for the benefit of consumers, last-resort federal siting authority for high-priority transmission lines is needed. Therefore, we support the concepts of section 7012 concerning siting of transmission facilities. However, we still are reviewing the details and legal ramifications of this proposal. We believe the Tennessee Valley Authority and the Power Marketing Administrations (PMA) should be an integral part of the national grid and relevant authority should be included in the bill. We also generally support Subtitle B of the draft bill concerning transmission operation, though we do have some concerns about the regional transmission organization section because, among other things, it does not explicitly provide for Federal cost recovery when a PMA joins an RTO, or for preserving prior contracts and third-party financing obligations of the PMAs. We look forward to working with you to address our concerns.

Finally, the Administration supports the ban on roundtrip trading, the increases in criminal penalties, and the other modifications made to the Federal Power Act in Subtitle G of the draft bill. We are still studying the provisions of Subtitle F concerning Renewable Energy, but it appears that the bill contains much we can support there as well.

B. Energy efficiency and conservation

A comprehensive energy policy must be balanced, and must include initiatives that foster both supply and demand side improvements-and importantly, those which increase energy efficiency and energy conservation. The Administration has strongly supported efforts to increase energy efficiency, and I am pleased to note the Chairman's inclusion in his energy legislation of agreements reached to this end by the energy conferees of the 107th Congress.

C. Tax Provisions

Comprehensive energy legislation must increase energy conservation and efficiency. Nearly every dollar of the NEP's energy tax proposals for FY 2002-2012 would be devoted to increasing efficiency, conservation, and renewable energy. For example, the NEP includes a consumer tax credit for the purchase of hybrid and fuel cell vehicles. Other fiscal incentives include extending and modifying the tax credit for producing electricity from environmentally friendly sources, such as biomass and wind; providing tax credits for energy produced from landfill gas, residential solar energy systems, and investment in combined heat and power; and extend-

ing the ethanol tax exemption. It is imperative that the tax provisions of comprehensive energy legislation reflect the President's priorities of environmental protection and energy conservation and maintain the fiscal discipline reflected in the FY 2004 Budget.

D. Renewable Fuels Standard

The Administration strongly supports a renewable fuels standard that will increase the use of clean, domestically produced renewable fuels, especially ethanol, which will improve the Nation's energy security, farm economy, and environment. The Administration also supports the inclusion of a market-based, national credit trading mechanism—such as that included in Section 5052 of the draft legislation—that will increase efficiency and reduce costs.

E. Alaska Natural Gas Pipeline

The Administration strongly supports the construction of a commercially viable Alaska natural gas pipeline as a critical part of our energy security portfolio, and believes that market forces should select the route of the pipeline. Although no such provision appears in the House draft, the Administration reiterates its strong opposition to a price-floor tax subsidy—and any similar provision—because it would distort markets. It is also likely to undermine Canada's support for construction of the pipeline, setting back broader bilateral energy integration.

F. ANWR

As I've stated earlier, the Administration firmly believes that a balanced, comprehensive energy plan is imperative to the long-term strength of our economic and national security. This balance must include a recognition that we must also increase domestic production in order to reduce our rising dependence on imported oil and gas; and key to achieving this balance is the President's proposal to open a small portion of the Arctic National Wildlife Refuge (ANWR) to environmentally responsible oil and gas exploration and development.

As you are aware, primary responsibility for managing the vast public resources of this nation rests with the Department of the Interior. Secretary Norton has set a goal of forging strong partnerships with Federal and State agencies, Tribal governments, and all of the stakeholders-including the Congress-to create greater opportunities for the responsible development of energy resources on Federal lands.

The Department of the Interior has taken several actions to advance the goals of the National Energy Policy, including the approval of a 5-year Oil and Gas Leasing program to ensure that the Outer Continental Shelf remains a solid contributor to our nation's energy security; completion of the EPCA inventory, which provides an estimate of undiscovered technically recoverable resources and proved resources of oil and gas; and recent collaboration with the Department of Energy on a joint report that identifies and evaluates renewable energy resources on public lands. The Bureau of Land Management will use this report's findings to prioritize land-use planning activities, and to increase the development and use of renewable energy resources.

G. Price-Anderson

The Administration strongly believes that comprehensive energy legislation should include long-term reauthorization of the Price-Anderson Act. Price-Anderson ensures prompt and equitable compensation for the public in the unlikely event of a nuclear accident.

In the Bob Stump National Defense Authorization Act of 2003, Congress extended Price-Anderson for DOE contractors until December 31, 2004. In the recent omnibus appropriations act, Congress extended Price-Anderson for Nuclear Regulatory Commission licensees only until December 31, 2003. We need a long-term extension of this important law, and therefore we applaud the draft House bill's extension of Price-Anderson to 2017.

We have only recently seen the provisions of the draft bill concerning financial accountability, safety, security and other matters relevant to the nuclear power industry, and look forward to working with Congress to ensure that the bill achieves its intended effect without detracting from the quality of potential contractors, or compromising security, anti-terrorism or non-proliferation efforts.

H. Strategic Petroleum Reserve

As was demonstrated by the President's decision to fill the Strategic Petroleum Reserve to its current statutory capacity, the Administration recognizes the tremendous importance of this national resource. We applaud the Chairman for including permanent SPRO authorization in the legislation.

The Administration intends shortly to initiate a study to determine the optimal size of the reserve. The results of this analysis are necessary to determine the full range of impacts on markets and national security of any decision to adjust capacity following its expected fill in 2005. We believe such an analysis is an important first step when considering an expansion of the Reserve above the current goal of 700 million barrels.

At this point, I thank you for the opportunity to testify before you today, and I welcome any questions the Committee might have.

Mr. BARTON. Now recognizing the distinguished chairman of the Nuclear Regulatory Commission. Tell him how much we have enjoyed working with you in your chairmanship and we wish you well in whatever future endeavors you incur once you leave the commission. Do you know how long your statement is?

Mr. MESERVE. Under 5 minutes.

Mr. BARTON. Well, you all are just doing great. Okay, we will recognize you for 6 minutes, also.

STATEMENT OF RICHARD A. MESERVE

Mr. MESERVE. Thank you for your generous comments, Mr. Chairman. Mr. Chairman and members of the committee, I am pleased to be here today to present the Nuclear Regulatory Commission's perspective on how nuclear energy fits into the national energy policy.

As the subcommittee knows, the NRC's mission is to ensure the adequate protection of public health and safety, the common defense and security, and the environment in the application of nuclear technology for civilian use.

The commission does not have a promotional role. Its role is to ensure the safe application of nuclear technology if society elects to pursue the nuclear energy option.

The commission, nonetheless, recognizes that the quality, predictability and timeliness of its regulatory actions bear on licensee decisions related to construction and operation of nuclear power plants.

Currently there are 104 nuclear power plants licensed by the commission to operate in the United States in 31 different States.

As a group they are operating at high levels of safety and reliability. Indeed the trends over the past decade are very favorable, as indicated by the graphs and tables in my submitted statement.

These plants have produced approximately 20 percent of our Nation's electricity for the past several years. Because of the improved economic performance of the plants, the commission has seen a significant increase in the number of requests for approval of license renewal that would allow the plants to operate beyond their original 40 year term.

The focus of the commission's review of license renewal applications is on maintaining plant safety, with a primary concern directed at the effects of aging on important systems, structures and components.

Applicants must demonstrate that they have identified and can manage the effects of aging, so as to maintain an acceptable level of safety during the period of extended operation.

The commission has now renewed the licenses of plants at five sites for an additional 20 years, comprising a total of ten units. A

thorough review of these applications were completed on or ahead of schedule.

And applications for 20 units from 12 additional sites are currently under review. Many more applications for renewal are anticipated in the coming years.

In recent years, the commission has also approved license amendments that permit its licensees to undertake power uprates.

The commission takes this step only after determining that safety margins can be maintained at the higher power. Collectively, these approved uprates supplied the electricity equivalent to that from three large power plants, approximately 3,000 megawatts electric.

Over the past 17 months, the commission has undertaken a comprehensive review of safeguards and security programs, in close consultation with the Department of Homeland Security, the Department of Energy, and other Federal agencies, and with significant involvement by State agencies.

Out of that review has come a series of interim compensatory measures to strengthen nuclear security at power reactors and other NRC licensed facilities, as well as in the transportation of spent fuel.

Last August we put in place a five tier threat advisory system compatible with the homeland security advisory system. We have issued orders to strengthen programs that control access at power reactors.

And have drafted proposed orders to strengthen guard training and address guard fatigue. We provided revised design based threats for comment to other Federal agencies, the States and cleared stakeholders.

We have been conducting enhanced table-top security exercises at our reactor facilities and are resuming the conduct of enhanced force-on-force exercises.

While the improved performance of operating nuclear power plants has resulted in significant increases in electrical output, increased demands for electricity will need to be addressed eventually by construction of new generating capacity of some type.

As a result, industry interest in new construction of nuclear power plants has recently emerged. As you know, the commission has already certified three new reactor designs.

The NRC staff is currently reviewing the Westinghouse AP1000 design and has six other designs in various stages of preapplication review.

In addition, discussions are taking place in preparation for three early site permit applications which are expected in 2003.

The commission has a stake in the national energy policy and has identified areas where new legislation would be helpful. These changes would maintain safety, while increasing flexibility.

Additionally, the commission has long sought additional authority in the nuclear security arena. With a strong Congressional interest in examining energy policy, the commission is optimistic that there will be a legislative vehicle for making these changes.

There are many elements of the proposed legislation before this committee that we support and a few that we believe are unnecessary.

Mr. Chairman, we would be very pleased to work with you and the committee in addressing matters of mutual concern. Thank you for the opportunity to testify today, I would be very pleased to take questions.

[The prepared statement of Hon. Richard A. Meserve follows:]

PREPARED STATEMENT OF RICHARD A. MESERVE, CHAIRMAN, U.S. NUCLEAR REGULATORY COMMISSION

INTRODUCTION

Mr. Chairman, members of the Subcommittee, I am pleased to submit this testimony on behalf of the U.S. Nuclear Regulatory Commission (NRC) regarding the NRC's perspective on how nuclear energy fits into the U.S. National Energy Policy. As the Subcommittee knows, the Commission's mission is to ensure the adequate protection of public health and safety, the common defense and security, and the environment in the application of nuclear technology for civilian use. The Commission does not have a promotional role—the agency's role is to ensure the safe application of nuclear technology if society elects to pursue the nuclear energy option. The Commission recognizes, however, that its regulatory system should not establish inappropriate impediments to the application of nuclear technology. Many of the Commission's initiatives over the past several years have sought to maintain or enhance safety and security while simultaneously improving the efficiency and effectiveness of our regulatory system.

The Commission's primary focus is on safety. The Commission nonetheless recognizes that the quality, predictability, and timeliness of its regulatory actions bear on licensee decisions related to construction and operation of nuclear power plants.

BACKGROUND

Currently there are 104 nuclear power plants licensed by the Commission to operate in the United States in 31 different states. As a group, they are operating at high levels of safety and reliability. Indeed, the trends over the past decade are very favorable.

These plants have produced approximately 20% of our nation's electricity for the past several years and are operated by about 35 different companies. In 2001, these nuclear power plants produced about 750-thousand gigawatt-hours of electricity.

Improved Licensee Efficiencies (Increased Capacity Factors)

The nation's nuclear electricity generators have worked for over ten years to improve nuclear power plant performance, reliability, and efficiency. According to the Nuclear Energy Institute, the improved performance of the U.S. nuclear power plants since 1990 is equivalent to placing 23 new 1000-MWe power plants on line. The average capacity factor for U.S. light water reactors was 90 percent in 2001, up from 71 percent just 10 years earlier. The Commission has focused on ensuring that safety has not been compromised as a result of these industry efforts.

U.S. Commercial Nuclear Power Reactor Average Capacity Factor and Net Generation

Year	Number of Operating Reactors	Average Annual Capacity Factor (Percent)	Net Generation of Electricity	
			Thousands of Gigawatthours	Percent of Total U.S.
1990	111	68	577	19.1
1991	111	71	613	20.0
1992	110	71	619	20.1
1993	109	73	610	19.1
1994	109	75	640	19.7
1995	109	79	673	20.1
1996	110	77	675	19.6
1997	104	74	629	18.0
1998	104	78	674	18.6
1999	104	86	728	19.6
2000	104	88	754	19.8
2001	104	90	767	20.0

INITIATIVES IN THE AREA OF CURRENT REACTOR REGULATION

License Renewals

Because of the improved economic performance of the plants, the Commission has seen a significant increase in the number of requests for approval of license renewal that would allow plants to operate beyond their original 40-year term. That term, which was established in the Atomic Energy Act, did not reflect a limitation that was determined by engineering or scientific considerations, but rather was based on financial and antitrust concerns.

The focus of the Commission's review of license renewal applications is on maintaining plant safety, with the primary concern directed at the effects of aging on important systems, structures, and components. Applicants must demonstrate that they have identified and can manage the effects of aging so as to maintain an acceptable level of safety during the period of extended operation.

The Commission has now renewed the licenses of plants at five sites for an additional 20 years: Calvert Cliffs in Maryland, and Oconee in South Carolina, Arkansas Nuclear One in Arkansas, Edwin I. Hatch in Georgia, and Turkey Point in Florida, comprising a total of ten units. The thorough reviews of these applications were completed on or ahead of schedule, which is indicative of the care exercised by licensees in the preparation of the applications and the planning and dedication of the Commission staff. Applications for twenty units from twelve additional sites are currently under review. As indicated by our licensees, many more applications for renewal are anticipated in the coming years.

Although the Commission has met the projected schedules for the first reviews, we seek further improvements. The extent to which the Commission is able to sustain or improve on our performance depends on the rate at which applications are actually received, the quality of the applications, and the ability to staff the review effort. The Commission recognizes the importance of license renewal and is committed to providing high-priority attention to this effort. As you know, the Commission encourages early notification by licensees, in advance of their intentions to seek renewals, in order to allow adequate planning so as not to create unmanageable demands on staff resources.

Reactor Plant Power Uprates

In recent years, the Commission has approved numerous license amendments that permit its licensees to make power uprates. The Commission takes this step only after determining that safety margins can be maintained at the higher power. Collectively, these approved uprates supplied the electricity equivalent to that from three large power plants (approximately 3,000 MWe). In addition, some nuclear generators have requested Commission safety review of increasing fuel burnup, thereby extending the operating cycle between refueling outages and thus increasing nuclear plant capacity factors. Again, such approvals are granted only after a thorough evaluation by Commission staff to ensure that safe operation and shutdown can be achieved at the increased fuel burnup.

Risk-Informing the Commission's Regulatory Framework

The Commission also is in a period of dynamic change as the agency continues to move from a prescriptive, deterministic approach towards a more risk-informed and performance-based regulatory paradigm. Improved probabilistic risk assessment techniques combined with over four decades of accumulated experience with operating nuclear power reactors have led the Commission to revise or eliminate certain requirements. On the other hand, the Commission is prepared to strengthen our regulatory system where risk considerations reveal the need.

Perhaps the most visible aspect of the Commission's efforts to risk-inform its regulatory framework is the new reactor oversight process. The process was initiated on a pilot basis in 1999 and fully implemented in April 2000. The new process was developed to focus inspection effort on those areas involving greater risk to the plant and thus to workers and the public, while simultaneously providing a more objective and transparent process.

Nuclear Security Enhancements

Over the past 17 months, the Commission has undertaken a comprehensive review of safeguards and security programs, in close consultation with the Department of Homeland Security and other Federal agencies, and with significant involvement by State agencies. Out of that review has come a series of interim compensatory measures to strengthen nuclear security at power reactors, Category I fuel cycle facilities, decommissioning reactors, research and test reactors, independent spent fuel storage facilities, the two gaseous diffusion plants, and the conversion facility, as well as in the transportation of spent fuel. Last August we put

in place a five-tier threat advisory system compatible with the Homeland Security Advisory System, and we have used that system twice to improve security measures at our licensed facilities. We have issued Orders to strengthen programs to control access at power reactors. We have drafted proposed Orders to strengthen guard training and address guard fatigue. We have provided revised design basis threats for comment to other Federal agencies, the States and cleared industry personnel. We have been conducting enhanced table-top security exercises at our reactor facilities and have just resumed the conduct of enhanced force-on-force exercises at these facilities. We plan to conduct force-on-force exercises on a thee-year cycle and have requested the resources to do this in our fiscal year 2004 budget. We have defined the actions that we need to take to ensure better control of high risk radioactive sources containing radioactive isotopes of the most concern for potential use in a radiological dispersal device.

FUTURE ACTIVITIES

Scheduling and Organizational Assumptions Associated with New Reactor Designs

While improved performance of operating nuclear power plants has resulted in significant increases in electrical output, significant increased demands for electricity will need to be addressed by construction of new generating capacity of some type. As a result, industry interest in new construction of nuclear power plants in the U.S. has recently emerged. As you know, the Commission has already certified three new reactor designs, pursuant to 10 CFR Part 52, making them readily available for new plant orders. These designs include General Electric's advanced boiling water reactor, Westinghouse's AP-600 and Combustion Engineering's System 80+.

In addition to the three already certified advanced reactor designs, there are new nuclear power plant technologies which some believe can provide enhanced safety, improved efficiency, lower costs, as well as other benefits. The NRC staff is currently reviewing the Westinghouse AP1000 design certification application and has six other designs in various stages of pre-application review. In addition, pre-application discussions are taking place in preparation for three early site permit applications expected in 2003.

The staff is also making infrastructure improvements to ensure that tools, information, and regulatory processes are in place for the efficient, effective, and realistic review of new site and reactor applications. For example, the NRC staff has developed proposed changes to 10 CFR Part 52 "Early Site Permits, Standard Design Certifications, and Combined Licenses for Nuclear Power Plants" based on lessons learned during the previous design certification reviews and discussions with industry representatives on the licensing processes. Additionally, the NRC staff has initiated early site permit pre-application public meetings in the vicinity of expected sites to inform the public about the early site permit process and their opportunities for participation. It should also be noted that the NRC staff is developing options for the efficient review of security aspects of new reactor designs and early site permits.

In order to confirm the safety of new reactor designs and technology, the NRC believes that a strong nuclear research program should be maintained. The NRC staff is performing a research infrastructure assessment for advanced reactors. The assessment identifies technology gaps and the means to fill the gaps in the form of methods, tools, data and expertise. The Advisory Committee on Reactor Safeguards has been briefed and has provided comments and recommendations regarding the assessment findings. With the benefit of these insights, the Commission expects to undertake measures to strengthen our research program for new reactor designs over the coming months.

NATIONAL ENERGY POLICY IMPLICATIONS

The Commission has a stake in the national energy policy and has identified areas where new legislation would be helpful to eliminate artificial restrictions and to reduce the uncertainty in the licensing process. These changes would maintain safety while increasing flexibility in decision-making. Although those changes would have little or no immediate impact on electrical supply, they would help establish the context for consideration of nuclear power by the private sector without any compromise of public health and safety or protection of the environment. Additionally, the Commission has long sought additional authority in the nuclear security arena to enhance security for these facilities, the need for which has been magnified by the events of September 11, 2001.

Legislation will be needed to extend the Price-Anderson Act. The Act, which recently received a one-year extension until December 31, 2003, establishes a framework that provides assurance that adequate funds will be available to compensate

the public in the event of a nuclear accident and sets out a process for considering nuclear liability claims. While our mission is not a promotional one, it is our understanding that without the framework provided by the Act, new private-sector participation in nuclear power would be discouraged. Moreover, the Commission believes it is important to assure that if an improbable accident should occur, the means are provided to care for the affected members of the public.

Over the years, the NRC has provided and continues to pursue legislative proposals to Congress detailing specific initiatives that would further enhance security of NRC-licensed activities. These proposals address a wide spectrum of activities. One provision would authorize guards at NRC-regulated facilities to use deadly force to protect property significant to the common defense and security. This would give guards protection from State criminal prosecution for actions taken during the performance of their official duties. Another provision would allow the Commission, in consultation with the Attorney General, to confer upon guards at NRC-designated facilities the authority to possess or use weapons that are comparable to those used by the Department of Energy's guard forces. Some State laws currently preclude private guard forces at NRC-regulated facilities from utilizing a wide range of weapons. Another provision would make it a Federal crime to bring unauthorized weapons and explosives into NRC-licensed facilities. The NRC would also make Federal prohibitions on sabotage applicable to the operation and construction of certain nuclear facilities. The NRC hopes that these and other more recently developed legislative initiatives, such as in the area of access authorization, will be enacted early in the 108th Congress.

With the strong Congressional interest in examining energy policy, the Commission is optimistic that there will be a legislative vehicle for making these changes and thereby for updating the Atomic Energy Act. As you know, the Commission has expressed significant concerns about several provisions that were contained in H.R. 4 and H.R. 2938 from the last Congress. We would be pleased to work with the Committee in addressing those concerns.

SUMMARY

The Commission has long been, and will continue to be, active in ensuring the adequate protection of public health and safety, the common defense and security, and the environment in the application of nuclear technology for civilian use. The Commission is mindful of the need to: (1) reduce unnecessary burdens, so as not to inappropriately inhibit any renewed interest in nuclear power; (2) maintain open communications with all its stakeholders; and (3) continue to encourage its highly qualified staff to strive for increased efficiency and effectiveness.

I look forward to working with the Committee, and I welcome your comments and questions.

Mr. BARTON. Thank you, Mr. Chairman.

We now recognize the distinguished Chairman of the Federal Energy Regulatory Commission, Mr. Wood. Do you know how long your statement—5 minutes. Okay, we will give you 6 minutes also.

STATEMENT OF HON. PATRICK WOOD

Mr. WOOD. Thank you, Mr. Chairman and members. Dependable, reliable, affordable, competitive wholesale energy markets require three key elements. Adequate infrastructure, balanced market rules and vigilant market oversight.

Since I became chairman 18 months ago at the FERC, the commission has been aggressively moving forward on each of these three elements.

For example, recently the commission has acted to safeguard information about our critical energy infrastructure. We have held public conferences across the country to assess infrastructure adequacy in the different regions of the country.

We propose to limit the sharing of cash assets between regulated and unregulated affiliates in ways that can harm utility customers, and, importantly, we formed a new office that is focused solely on market oversight and enforcement.

For wholesale electric energy markets, the commission is proposing to adopt a platform of market elements that are shared by the best functioning markets in the world.

We are looking at financial incentives for building new transmission or operating transmission independently of generation ownership and we are looking at a streamlined process to interconnect new generation to the transmission grid for that day in the future when supply and demand come closer into balance.

The commission also intends to act soon on the proceedings involving the energy crisis of 2000-2001, before Commissioner Brownell and I arrived at the commission, which plagued California and the west, including the refund proceedings, the staff's investigation of evidence of market manipulation in the energy markets in the west, efforts to revisit or reform long term power contracts, and the alleged withholding of natural gas transportation capacity on a major pipeline serving the California markets.

For gas markets itself, the commission has significantly expedited its processing of natural gas pipeline construction applications, cutting by one-third the environmental and sighting and regulatory reviews that existed when I was at FERC last in 1992.

We stand ready to process any applications to bring a pipeline of Alaska natural gas into the lower continental market. And in addition, the commission has taken steps recently to encourage greater development and streamline the regulatory approach for liquified natural gas, imported natural gas on barges to the United States from other countries or from other parts of our country.

That is a critical part of our long term gas solution. The commission has also proposed ways to streamline the processing of hydroelectric projects, which are an important part of the commission's responsibility under the law.

Our intent in this process is to craft a more efficient and timely process, while balancing the required stakeholder interest and improving the quality of decisionmaking.

In my view, in that light of what the commission is up to, to try to accomplish its statutory responsibilities, I would envision that there are three critical steps that Congress could take.

The first of which is to clarify FERC's authority to obtain the market information necessary for price discovery and effective monitoring of gas and electric markets; a lot of which is in the bill, a few others are recommended in my testimony.

Second, to increase the civil and criminal penalties for violations of both the Federal Power Act and the Natural Gas Act. Again, the Power Act issues are dealt with in the electricity title.

And third, to take the steps required to make the Alaska Natural Gas Pipeline project a reality in this decade.

This enormous Alaska Gas project is of national significance, and in order to maintain the long term health of all the energy markets, it must be built.

Chairman Barton, your proposed legislation would take a number of steps in these various areas, as well as a number of others that are really outside the FERC's issues, and I think that they will collectively provide strong support for a continued evolution of well overseen competitive wholesale energy markets to meet the Nation's future electric needs and natural gas needs as well.

[The prepared statement of Hon. Patrick Wood follows:]

PREPARED STATEMENT OF HON. PAT WOOD III, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

I. BACKGROUND

I appreciate the opportunity to testify on the current status of energy markets under the jurisdiction of the Federal Energy Regulatory Commission (FERC or the Commission). Today, I would like to focus particularly on natural gas data reporting, the Alaskan Natural Gas Transportation System, wholesale electricity markets and hydroelectric licensing.

Dependable, affordable, competitive wholesale energy markets require three key elements—adequate infrastructure, balanced market rules and vigilant oversight. Weakness in any one element can harm markets, American energy customers, and ultimately the entire U.S. economy. The Commission is pursuing a number of initiatives to establish the framework needed to spur investment in much-needed infrastructure, to support the most efficient and competitive wholesale marketplace, and to adequately monitor the marketplace so customers continue to derive benefits from energy markets. Achieving these goals restores confidence to investors and customers by promoting greater transparency and regulatory certainty.

This FERC's commitment to prevent future market abuses, and to remedy past ones, is now a firmly established part of our agency's mission, and we will continue to strengthen our present coordination with other federal agencies to ensure that we effectively regulate energy industries so that customers and investors are fully protected.

Additionally, the Commission is moving aggressively to take steps within its authority to remedy problems in the California and Western energy markets. The Commission has learned many lessons from the Western energy crisis in 2000-01, which caused unacceptable harm to ratepayers and demonstrated the consequences of poorly designed wholesale markets. We also have learned lessons from successful wholesale market reforms in the East. The Commission remains convinced that customers are best served by moving forward to complete the transition of the wholesale power business to competition. We are drawing from markets that work well to develop a national platform for competitive wholesale energy markets.

While the Commission is taking steps within its authority to encourage needed electric and natural gas infrastructure and to bring stability and regulatory certainty to energy markets, there are several actions that the Congress could take to help us do our job more effectively and to ensure adequate protection of energy customers. In my view, the three most important steps that Congress can take are these: first, clarify FERC's authority to obtain market information necessary for price discovery and effective monitoring of natural gas and electric markets; second, increase civil and criminal penalties for violations of the Federal Power Act (FPA) and Natural Gas Act (NGA) or our rules and regulations thereunder; and, third, take the steps required to make the Alaska Natural Gas Pipeline project a reality in this decade. With respect to the Alaska Natural Gas Pipeline project, in particular, I would observe that this enormous project is of such national significance that Congress may want to consider focused financial support in any legislation. Chairman Barton's proposed legislation would take a number of steps in these areas as well as provide support for the continued evolution of strong competitive wholesale energy markets to meet our future energy needs.

II. INITIATIVES IN ENERGY MARKETS GENERALLY

While the natural gas and electricity industries differ in some ways, they share many issues. For example, both raise the issue of how we can safeguard our energy infrastructure against terrorists. Both also raise issues on the need for dependable, transparent accounting and the separation of utility operations financed by captive customers from unregulated ventures. On these issues and others, the Commission has taken a cross-industry approach to protect the interests of our Nation's energy customers.

Critical Energy Infrastructure Information (CEII)—On February 21, 2003, the Commission issued a final rule to protect the American public by safeguarding certain information about the Nation's energy infrastructure. Within a month of the terrorist attacks of September 11, 2001, the Commission began a public proceeding to examine its CEII policies. The final rule defines CEII and establishes a timely procedure for the public to request and obtain such information, which encompasses only a small portion of the information available from the Commission.

Regional Infrastructure Conferences—In the past 20 months, the Commission held conferences to address infrastructure concerns across the country—California, the Northeast, Southeast, Midwest and West. The aim of these conferences was to conduct in-depth studies of the broad conditions of the area's energy infrastructure, and to understand the issues in each region. These conferences featured informative presentations on the state of each region's energy infrastructure (electric power plants, fuel sources, hydroelectric facilities, gas pipelines, electric transmission system, and other relevant information), demographic and energy load forecasts, and were attended by state energy regulators as well as industry members and concerned citizens.

Proposed Rules on Regulation of Cash Management Practices—In August 2002, the Commission proposed requirements for participation by public utilities and natural gas pipelines in cash management programs in order to prevent the abuse of such programs. Such abuse could occur where cash from Commission-regulated utility subsidiaries is transferred to the parent holding company and then used to finance unregulated activities by non-utility subsidiaries. The Commission has received comments on this proposal and I expect that we will act on this matter very soon.

Proposed Rulemaking on Affiliate Standards of Conduct—In September 2001, the Commission proposed to revise its restrictions on the relationship between regulated transmission providers and their energy affiliates. The Commission proposed, for example, to broaden the definition of an affiliate to include newer types of affiliates, including those operating trading platforms. The proposed standards of conduct would rely on three principles to prevent transmission market power from being exercised in commodity markets: (1) separating employees engaged in transmission services from those engaged in commodity marketing services; (2) ensuring that all transmission customers, affiliated and non-affiliated, are treated on a non-discriminatory basis; and (3) prohibiting a transmission provider from granting its energy affiliate an undue preference over non-affiliates by sharing confidential or transmission information. The Commission also proposed to eliminate the differences between the Commission's rules for natural gas companies and electric utilities. The Commission intends to adopt final rules soon.

Final Rule on Accounting—In October 2002, the Commission issued a final rule on accounting and reporting of financial instruments, comprehensive income, derivatives and hedging activities. The final rule directs public utilities, licensees, natural gas companies and oil pipelines to report changes in the fair value of certain investment securities, derivatives and hedging activities. The new rules will enhance the transparency of financial information and facilitate a better understanding of the nature and extent to which derivatives and hedging activities are used by regulated companies and the impact these transactions may have on the companies' financial condition.

Industry Financial Condition Conferences—In January and February the Commission hosted two conferences on financial conditions in the energy markets. At these conferences, a number of factors were cited as causing the current financial problems. FERC is continuing to explore solutions to the financial conditions in the energy sector.

Office of Market Oversight and Investigations (OMOI)—In order to better understand natural gas, oil and power markets and to swiftly remedy market rule violations and abuse of market power, the Commission created the new Office of Market Oversight and Investigations (OMOI). In August 2002, OMOI became a formal, functioning office within the Commission, reporting directly to the Commissioners. OMOI serves as an early warning system to alert the Commission when market problems develop, and allows the Commission to analyze and address any problems more quickly. OMOI has begun an aggressive program of outreach to a wide variety of entities including: other federal, state and provincial regulatory agencies, state consumer advocates, industry participants, academic institutions and think tanks, financial institutions (such as ratings agencies), and Market Monitoring Units (MMUs) at Regional Transmission Organizations (RTOs) and Independent System Operators.

III. INITIATIVES IN THE ELECTRIC ENERGY MARKET

The Commission has begun or continued work on numerous efforts to improve the performance, transparency and oversight of the wholesale electricity markets. These efforts, aimed at ensuring that electric energy customers receive adequate supplies at reasonable prices, include the following.

Proposed Rulemaking on Standard Market Design—On July 31, 2002, the Commission issued proposed rules on a standard market design for wholesale electric en-

ergy markets, including a comprehensive plan for mitigating market power and market manipulation. The proposed rules are intended to provide certainty to all market participants, encourage new infrastructure investment, promote fair competition and prevent a repeat of the mistakes made previously in California. The proposed rules would remedy remaining undue discrimination in the use of the Nation's interstate transmission grid and also provide a solid platform to ensure that wholesale markets produce just and reasonable rates for customers.

Experience in the United States and abroad has shown that successful power markets have certain core features in common. These include an independent grid operator; a single transmission tariff; a long-term bilateral contract market; an available short-term spot market with transparent prices; regional transmission planning; locational price signals; transmission rights; and, appropriate mitigation rules to protect against the exercise of market power.

This platform of market features works in hydro-based systems like Scandinavia, South America and New Zealand. It works in areas where generation may be distant from population centers as well as areas with highly networked transmission grids. It works with thermal- and stability-limited systems. It respects treaties, contracts, and various forms of state regulation. It is essentially what has already been developed in both the more mature power markets in the Northeast, mid-Atlantic, Midwest and Texas, as well as in those markets developing in the West and South.

Importantly, this platform leaves plenty of room for regional variation. In our RTO dockets, we concluded that certain functions are needed to make wholesale power markets work, but they need not be done the same in every part of the country. These functions include, for example, transmission planning, resource adequacy, mitigation techniques, and RTO governance.

A platform based on these core features includes a strong customer protection plan. It checks generation market power through mitigated prices when necessary. It solves transmission market power through structural separation between transmission owners and generators. It fully protects existing wholesale contracts and native load service. On the infrastructure side, it encourages and eases entry of new generation into the market, facilitates new transmission construction, and promotes demand-side bidding as a check on supplier market power.

The Commission has engaged in extensive public outreach both prior to the issuance of the proposal and since that time. We continue to listen to all constituencies in developing final rules. The Commission anticipates issuing, and obtaining public comment on, a white paper reflecting our reaction to the over 1,000 filed comments and 300+ meetings we have held since last August. Due to their necessary breadth, the proposed rules have received much attention. Getting these rules right, and thus increasing the benefits to customers from competitive bulk power markets, is a priority for the Commission.

Proposed Policy Statement on Rate Incentives for Transmission Independence and Expansion—On January 15, 2003, the Commission issued a proposed policy statement to allow a higher return on equity when a utility participates in an RTO, sells its RTO-operated transmission asset to an independent company, or pursues additional measures that promote efficient operation and expansion of the transmission grid. Under the proposal, a utility's return on equity could be increased by 50 basis points for joining a Commission-approved RTO, 150 basis points for selling RTO-operated transmission assets to an independent company and 100 basis points for investing in new transmission facilities found appropriate pursuant to an RTO planning process. This proposed policy would further the Commission's goal of achieving a robust infrastructure for the future and bringing lower prices and cost savings to all customers. The proposed policy would help encourage needed investment in transmission infrastructure and improve grid performance. Comments are due early this month. This policy supports, and is consistent with, the transmission tax incentives and other language in the proposed legislation.

Information Filing Requirements—Improving market transparency requires detailed reporting on transactions. On April 25, 2002, the Commission issued a final rule (Order No. 2001) to enhance public access to information on public utility services and sales by requiring public utilities to electronically file quarterly reports. This final rule is intended to equalize reporting requirements for traditional utilities and power marketers, making information more easily available to the public and helping to streamline compliance with the filing requirements of FPA section 205. The data contained in the new Electric Quarterly Report will provide greater price transparency, promote competition, enhance confidence in the fairness of the markets and provide a better means to detect and discourage discriminatory practices.

Proposed Rulemakings on Standardized Generator Interconnections—The Commission recently has undertaken two rulemakings to standardize agreements and procedures for generators seeking to interconnect and participate in the wholesale mar-

ket. The first applies to large generators (i.e., those producing over 20 megawatts) and was the subject of proposed rules issued April 24, 2002. The second applies to small generators (i.e., those producing no more than 20 megawatts), and was the subject of an advanced notice of proposed rulemaking issued August 16, 2002. Each rulemaking will produce a set of standard generator interconnection procedures, which describe the procedural steps for studying and securing a requested interconnection, and a standard generator interconnection agreement for use by interconnection providers and customers. The Commission expects that these rulemakings will help ensure that reliability needs will be met, provide greater certainty to generators wishing to participate in the wholesale market, and, importantly, shorten the time needed to get a project brought on line.

Policy on Conditioning Public Utilities' Issuances of Securities—To prevent public utilities from borrowing substantial amounts of money and diverting the proceeds to finance non-utility businesses, the Commission issued an order on February 21, 2003, announcing a policy placing conditions on all new issuances of secured and unsecured debt authorized by the Commission under FPA section 204. These conditions state, for example, that a public utility seeking authorization to issue debt secured by utility assets must use the proceeds of the debt for only utility purposes. Similarly, if the assets securing such debt are divested or "spun off," the debt must "follow" the asset and be divested or "spun off" as well.

At its core, the policy ensures that any encumbrance of utility assets is used for utility purposes. This policy should ensure that future issuances of debt are compatible with the public interest and will not impair a public utility's ability to perform its duties and provide appropriate ratepayer protection. These concerns also lead me to believe that FERC should have authority under the Natural Gas Act similar to FPA section 204.

IV. PENDING CALIFORNIA-RELATED PROCEEDINGS

In addition to the initiatives described above, there are several proceedings related to the Western energy crisis in 2000-01 currently pending before the Commission. These proceedings are discussed below.

On February 13, 2002, in Docket No. PA02-2-000, the Commission formally announced a fact-finding investigation into whether any entity had manipulated electric energy or natural gas prices in the West since January 1, 2000. In conducting this investigation, Commission staff has coordinated closely with staff from the Department of Justice, the Securities and Exchange Commission, the Commodity Futures Trading Commission, and the Department of Labor. On August 13, 2002, Commission staff released an initial report of its investigation. Based on the staff report, the Commission initiated formal enforcement proceedings under FPA Section 206 regarding possible misconduct by a number of utilities. These proceedings are pending before administrative law judges.

A public written report dealing with all aspects of this staff investigation is on schedule to be released later this month. The Commission will consider all relevant evidence from this investigation once we receive the final report. The Commission also has set up a process which has allowed the parties in the California proceedings to conduct discovery on market manipulation in the same time period. Parties submitted additional evidence and proposed new and/or modified findings of fact on March 3, 2003. Reply submissions are due on March 20, 2003.

With respect to the California refund proceeding for calculating the amount of overcharges from October 2000 through June 2001, the Administrative Law Judge (ALJ) issued his proposed findings in December 2002. The Commission is currently reviewing the ALJ's proposed findings.

The Commission is also currently reviewing the recommendations and proposed findings issued by an ALJ regarding whether rates charged for spot market bilateral sales in the Pacific Northwest for the period December 2000 through June 2001 were unjust and unreasonable. Also, in recent weeks, the Commission has received several decisions by ALJs on complaints seeking to modify long-term contracts for the sale of wholesale power in California or the West. Finally, the Commission is reviewing an ALJ's decision on whether El Paso Natural Gas Company and its affiliates exercised market power in order to drive up natural gas prices at the California border in 2000-01.

The Commission will act on all of these matters soon. Then, customers can receive all appropriate refunds, utilities can have regulatory certainty and all of us can focus on the important goal of preventing this from ever happening again.

V. INITIATIVES IN THE NATURAL GAS MARKET

As with the electric energy markets, the Commission has launched numerous initiatives designed to improve the performance, transparency and oversight of the natural gas markets. These initiatives include the following.

Liquified Natural Gas (LNG) Facilities—To help meet the Nation's increasing demand for natural gas, the Commission in December 2002 charted a new course for the treatment of LNG facilities. The Commission allowed the Hackberry LNG facility in Lake Charles, Louisiana, to provide terminalling services without a FERC tariff and rate schedules, similar to the approach used for natural gas production facilities. The Commission retains authority over all siting and environmental aspects of onshore LNG facilities. We anticipate that the new policy will stimulate the development of new LNG terminals by accommodating various business models and will ultimately result in increased gas supplies in the United States. Since issuing the Hackberry decision, the Commission has been in various stages of discussions and application processing with about ten companies pursuing some 20 different LNG import terminal locations with a total potential daily send-out of about 12 Bcf. This amount is at least twice the projected capacity of an Alaskan gas pipeline.

Emergency Reconstruction of Pipelines—The Commission has proposed rules on emergency reconstruction of interstate natural gas facilities when immediate action is required to restore natural gas service due to a sudden, unanticipated natural event or a deliberate effort to disrupt natural gas service. The Commission is currently reviewing comments received in February 2003.

Reporting on Natural Gas Data—As part of its fact-finding investigation on electric energy and natural gas prices in the West since January 1, 2000, Commission staff gathered information that raised doubts about the accuracy of information reported in many wholesale natural gas price indices. Current industry practice is for the trade press to gather price information by polling traders. The markets cannot function efficiently without accurate wholesale price information. Although the industry and the trade press are now taking steps to improve the dependability of the natural gas price indices, it is unclear whether these steps are sufficient to restore customer, investor and counterparty confidence.

Quicker Processing of Proposals to Build or Expand Pipelines—The Commission has improved the efficiency of its pipeline certificate process, and we have a number of initiatives underway to achieve even greater streamlining. During the period beginning in January 2001, the Commission authorized just under 16 Billion cubic feet per day (Bcfd) of new pipeline capacity, raising total daily deliverability to 131 Bcfd. Of these additions, over 50 percent is earmarked for electric generation, with the greatest growth in that sector occurring in the Southeast and West. On average, these certificate applications took about 200 days to process, a marked improvement over the average turn-around time of nearly 300 days some years ago.

While our current inventory of pending projects is relatively low compared to the recent past, we anticipate increasing activity in the future. In preparation, we are pursuing several streamlining initiatives that combine early identification and resolution of issues, concurrent consideration by other agencies and increased opportunities for stakeholder involvement. One such initiative is the National Environmental Policy Act (NEPA) Pre-Filing Process, which entails a more interactive NEPA process well in advance of the application being filed, with earlier, more direct involvement by FERC staff, other agencies and landowners, resulting in an overall time savings to obtain a certificate.

Also, in accordance with the President's National Energy Policy, which among other things calls for actions to expedite energy-related projects, the Commission and nine other federal agencies (the Departments of the Army, Agriculture, Commerce, Energy, the Interior, Transportation, the Environmental Protection Agency, the Advisory Council on Historic Preservation, and the Council on Environmental Quality) in August 2002 signed an interagency agreement, providing that the Commission will be the lead agency for environmental review of interstate natural gas pipelines under the Natural Gas Act, that there will be early interagency communication to determine schedules, identify issues, and share information, that alternative routes and mitigation measures will be developed jointly, and that necessary permits will be issued jointly. The agencies completed an implementation plan for the agreement in November 2002, and have established a working group, chaired by the Commission, to oversee implementation.

VI. INITIATIVES REGARDING HYDROELECTRIC LICENSING

The licensing of non-federal hydroelectric projects under Part I of the FPA is the Commission's original mission, and still a vital aspect of the Commission's efforts to ensure workable, competitive energy markets. My fellow Commissioners and I are

well aware of the need to ensure that our licensing processes are in tune with the need of today's markets for regulatory certainty and more efficient decisionmaking on this important part of the Nation's energy mix. In keeping with these considerations, the Commission on February 20, 2003, issued a notice of proposed rulemaking presenting a comprehensive plan that will result in more efficient and timely processing of hydroelectric licenses while also balancing stakeholder interests and improving the quality of decisionmaking.

The proposal, referred to as the ''integrated'' process, would become the Commission's primary licensing process, with the existing alternative licensing process (ALP) and the traditional process remaining as options for applicants in certain situations.

The highlights of the proposed rule are:

- increased assistance by Commission staff to potential applicants and stakeholders during the development of license applications;
- greater coordination among the Commission and federal and state agencies with mandatory conditioning authority;
- carrying out the Commission's environmental scoping process in conjunction with the applicant's pre-filing consultation;
- increased public participation in the pre-filing consultation process;
- establishing schedules and deadlines for all participants, including Commission staff;
- development of a Commission-approved study plan by the applicant, with informal resolution to study disagreements, followed by mandatory, binding study dispute resolution, if necessary;
- elimination of the need for post-application study requests; and
- creation of a new Commission Tribal Liaison, to be the point of contact for Native Americans' concerns regardless of the proceeding or issue.

In addition, the traditional licensing process would be modified by increasing public participation, and by establishing mandatory, binding dispute resolution for necessary studies.

Before issuing the proposed rule, Commission staff held regional forums around the country, as well as drafting sessions in Washington, D.C., to discuss the licensing process with stakeholders and to collaboratively draft regulatory language. We plan to obtain further public input through regional workshops to be held around the country in March and April 2003 to discuss stakeholder reaction to the proposed rule. A four-day drafting session is scheduled in April in Washington to draft language for the final rule.

VII. COMMENTS ON THE DRAFT LEGISLATION

The draft legislation addresses a wide range of energy issues confronting our Nation. I will focus on the issues affecting FERC's responsibilities. On these issues, the draft legislation takes a good approach. I would suggest a few modifications and some additional provisions, as described below. If the Committee wishes, I would be happy to provide, in writing after the hearing, a detailed technical analysis of the legislative language.

Section 7081, *Market Transparency Rules*—This section would require FERC to issue rules establishing an electronic information system, accessible by the public, specifying the availability and price of wholesale power and transmission services. I support this section because more transparency is needed in energy markets and customers should have access to the broadest range of useful market information.

I note that this section refers to ''markets subject to the Commission's jurisdiction,'' but does not explicitly mention natural gas markets. I suggest modifying this section to clarify the Commission's authority to obtain information on natural gas prices (since these are an important factor in wholesale power prices), or that a separate section be added to the legislation clarifying FERC's authority under the NGA to obtain such information for purposes of price discovery.

Section 7084, *Enforcement*—This section would significantly increase the penalties available under the FPA. I have long supported increasing these penalties, and believe the increases proposed here are appropriate. I recommend including similar penalties under the NGA.

Section 7091, *Refund Effective Date*—This section would eliminate the 60-day wait at the beginning of the refund period under the FPA, so that refunds would be allowed from the date a complaint is filed, instead of only 60 days later. I support this change, and also recommend including a similar provision in the NGA.

Section 7101, *Mergers and Other Dispositions*—This section would repeal FPA section 203, which requires Commission approval of most mergers and other dispositions involving public utilities. In light of the proposed PUHCA repeal, repealing

section 203 without including the public interest review standard in another agency's specific duties may not be good policy. The Commission deals with the electric industry on a daily basis and much more closely than do the federal antitrust agencies. Thus, the Commission is better able to identify and remedy any harmful effects of mergers and other dispositions and to ensure that customers' rates are not adversely affected. Our efforts do not duplicate those actually being performed today by other merger reviewing agencies. The Commission has used its section 203 authority as intended by Congress, and appropriately, to ensure that mergers and other dispositions are consistent with the public interest.

Sections 2001-14, *Alaska Natural Gas Pipeline*—Over the last several years, there has been much renewed interest, in both the private and public sectors, in the development of the transportation infrastructure needed to bring Alaskan natural gas, including supplies from Alaska's North Slope, to markets in the Lower 48 states. The importance of Alaskan natural gas supplies is obvious; indeed, it is impossible to envision the 30-35 Tcf annual domestic market that the Department of Energy has estimated may exist by 2020 without Alaskan natural gas. Although there are currently no applications before the Commission regarding an Alaska natural gas transportation project, the need for Alaskan natural gas in the Lower 48 market is only going to increase.

We will make every effort to process and act upon any applications for Alaska gas transportation projects as efficiently as possible, working with the applicants, other federal and state agencies, Native Americans, shippers, end users, and other interested parties, to ensure timely, reasonable decisions. Over the past two years, the Commission staff has participated in the Interagency Alaska Natural Gas Task Force, along with representatives of the Departments of Energy, State, Interior, and Transportation, in order to prepare, to the extent possible, for streamlined government action on an application for an Alaska gas pipeline.

I strongly support the goals of this legislation, which provides a statutory framework for the expedited approval, construction, and initial operation of an Alaska natural gas transportation project. The bill helpfully resolves some significant questions with respect to potential projects. There are some matters that may benefit from additional clarification, such as the extent to which the Commission would need to interact with the proposed Federal Coordinator as it reviews and acts on any certificate application. I would be happy to provide the Committee with more detailed comments on this and other provisions of this Subtitle.

I can assure you that any application ultimately filed with the Commission, will be reviewed thoroughly, promptly, and fairly, with the public interest firmly in mind, and with a clear understanding of how important Alaska natural gas is to our Nation's long-term energy security. With respect to the Alaska Natural Gas Pipeline project, in particular, I would observe that this enormous project is of such national significance that Congress may want to consider focused financial support in any legislation.

VIII. CONCLUSION

Events of the past three years have demonstrated the critical role that energy plays in our Nation's economic well-being. I appreciate the opportunity to contribute to your debate on the best ways to ensure that this crucial industry continues to support the many demands placed on it by our citizens, and I will be happy to answer any questions you may have.

Mr. BARTON. Thank the chairman. We have inadvertently seated Commissioner Brownell and Commissioner Massey out of order. Mr. Massey is actually senior to Mrs. Brownell.

So we are going to give Mr. Massey an opportunity to speak first, if he wishes to. Would you like to speak before Commissioner Brownell?

Mr. MASSEY. However you would like to handle it, Mr. Chairman.

Mr. BARTON. Well, you are senior, and this was not intentional, we just screwed up, to be honest about it and we want—since you are the senior member, we are going to recognize you for 5 minutes and then we will go to Mrs. Brownell to be the clean up hitter.

STATEMENT OF HON. WILLIAM L. MASSEY

Mr. MASSEY. Thank you, Mr. Chairman and members of the subcommittee for this opportunity to testify about the important energy policy questions that face both this subcommittee and the Federal Energy Regulatory Commission.

There are high prices in energy markets as the much colder than normal winter of 2003, lingers, and demand for natural gas remains high.

Natural gas prices in both the production and market areas are sharply higher than normal, and unusually volatile. The commission must take a hard look at the cause of these dramatic price spikes.

Higher natural gas prices have caused a sharp spike in electricity prices as well in a number of markets. These events are rippling through the U.S. economy, impacting industrial users, businesses and residential consumers.

In addition, the western energy crisis, coupled with the collapse of Enron, have left their wake within the energy industry.

Investor and lender confidence has been shaken by these events by a declining national economy, by indictments of energy traders, by accounting irregularities, downgrades by rating agencies and continuing investigations by the FERC, the CFTC, SEC and the Justice Department.

These investigations are important and necessary and must leave no stone unturned. Refunds must be made for customers that paid unjust and unreasonable prices.

And those found to have manipulated the market, should be punished. Nevertheless, all of these events have severely eroded capital availability for critical infrastructure projects, and I am concerned about that.

In these times it is particularly important for the commission to promote clear market rules and structure, reasonable and stable regulation of energy transmission and comprehensive market monitoring.

The commission must conduct thorough and forceful investigations and oversight to ferret out abuses and our remedies must be tough-minded and appropriate.

In his testimony, Chairman Wood provides a thorough outline of the initiatives underway at the commission that are aimed at reforming electricity and natural gas markets to ensure just and reasonable prices and customer benefits.

I share his vision of well-functioning markets with regulators playing an important role in determining market structure, prohibiting discrimination, enforcing transparent market rules and engaging in vigilant oversight and monitoring.

In the electricity title of the draft I agree with the call to form regional transmission organizations. The proposal to provide the commission with back up authority for transmission sighting is an excellent idea.

I support the authorization to develop an electronic information system regarding price and availability of services in the market, and the prohibition of round trip trading.

I urge you to extend these provisions to natural gas markets as well. Increasing the level of civil penalties the commission may impose is a welcome addition to the tools we have to police markets.

I recommend that the commission be given direct authority to mitigate market power in jurisdictional markets. Removing the 60 day delay and the refund effective date for complaints provides additional customer protection and I support it.

I cannot support repealing the commission's merger review authority under the Federal Power Act. Recent gas price volatility is of great concern to me.

I am deeply concerned about the impact of these high prices on customers. The commission would be better able to evaluate natural gas price spikes if there were more reliable price transparency.

I would amend section 7081 to extend its information availability provisions to natural gas markets. Likewise, I would amend the proposed section 7084, to provide the commission with authority to impose civil penalties for violations of the Natural Gas Act, an authority the commission now lacks.

I fully support measures to facilitate natural gas supply projects, such as our light-handed regulation of LNG and efforts to streamline processing of natural gas infrastructure projects.

Thank you, Mr. Chairman, I look forward to answering any questions.

[The prepared statement of Hon. William L. Massey follows:]

PREPARED STATEMENT OF HON. WILLIAM L. MASSEY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and members of the Subcommittee on Energy and Air Quality, thank you for the opportunity to provide testimony about the important energy policy issues facing both this subcommittee and the Federal Energy Regulatory Commission.

There are high prices in energy markets as the much colder than normal winter of 2003 lingers and demand for natural gas remains high. Natural gas prices both in the production and market areas are sharply higher than normal and unusually volatile. Members of Congress have asked the Commission to investigate the cause of these dramatic price spikes. Higher natural gas prices have caused a sharp spike in electricity prices as well in a number of markets. These events are rippling through the U.S. economy, impacting industrial users, businesses and residential consumers.

In addition, the western energy crisis, coupled with the collapse of Enron, have left their wake within the energy industry. Investor and lender confidence has been shaken by these events, by a declining national economy, indictments of energy traders, accounting irregularities, downgrades by rating agencies, and continuing investigations by the FERC, CFTC, SEC and Justice Department. These investigations are important and necessary, and must leave no stone unturned. Nevertheless, all of these events have an impact on investor and lender confidence and have severely eroded capital availability for the energy industry.

In these times, it is particularly important for the Commission to promote clear market rules and structure, reasonable and stable regulation of energy transmission, and comprehensive market monitoring. The Commission must conduct thorough and forceful investigations and oversight to ferret out abuses.

In his testimony, Chairman Wood provides a thorough outline of the initiatives underway at the Commission that are aimed at reforming electricity and natural gas markets to ensure just and reasonable prices and customer benefits. I would like to applaud Chairman Wood's leadership. I share his vision of well functioning markets with regulators playing an important role in determining market structure, prohibiting discrimination, enforcing transparent market rules, and engaging in vigilant oversight and monitoring. In the interest of brevity, I would like to associate myself with his excellent testimony.

I will comment on particular issues raised by Chairman Barton's draft legislation and by the subcommittee in its letter of invitation to testify.

I. ELECTRICITY ISSUES

The development of competitive efficient wholesale electricity markets is a highly desirable goal. This is primarily a federal responsibility, and achieving this goal will benefit our nation's consumers and economy. There are, however, a number of barriers to the creation of robust markets, including grid operation influenced by merchant interests and a patchwork of markets and rules governing the grid. Almost a third of the grid is not subject directly to the FERC's open access and nondiscrimination requirements. Necessary grid expansion in not keeping pace with the requirements of robust wholesale markets. This means that cheaper power cannot always reach the customers who want it. The lack of uniformity in generation interconnection standards among regions and utilities poses unnecessary barriers to entry by generators that could provide cheaper power for consumers. Demand responsiveness could act as a brake on price run ups, yet is generally absent from electricity markets. Vibrant markets require a reliable trading platform, yet there are no legally enforceable reliability standards.

Ensuring just and reasonable prices must be addressed far differently as we move to competitive markets than under the monopoly structure. It is more complex now. The basic nature of our regulatory tasks is changing. We are moving away from reviewing cost-based prices charged by individual sellers and toward ensuring good performance by markets.

Transmission infrastructure improvement rulemaking

Section 7011 of the discussion draft submitted by Chairman Barton requires the Commission to adopt rules providing for incentive-based and performance-based transmission rates. I support such a policy direction. The Commission has already taken a step in this direction with our proposed policy on incentive transmission rates that provides enhanced returns on equity for transmission assets that are operated independently from market participants and for new infrastructure investment. Transmission will remain a monopoly service in restructured markets and will need to be regulated, but a performance-based rate approach, while presenting its own significant challenges, shows promise as a way to reward efficient behavior while protecting customers.

Section 7011 also requires the Commission to adopt rules allowing participant funding for new transmission investment if it is requested by an RTO or other Commission-approved transmission organization. I support this policy direction. I have strongly supported the participant funding provision in the Commission's Standard Market Design proposal. It allows participant funding where there is a locational pricing regime in place and the grid is managed by an entity that is independent of market participants.

Transmission Siting

Although the Commission is responsible for well functioning electricity markets, it has no authority to site the electric transmission facilities that are necessary for such markets to thrive and produce consumer benefits. Existing law leaves siting entirely to state and local authorities. This contrasts sharply with section 7 of the Natural Gas Act, which authorizes the Commission to site and grant eminent domain for the construction of interstate gas pipeline facilities. Exercising that authority, the Commission balances local concerns with the need for new pipeline capacity to support evolving markets.

The transmission grid is the critical superhighway for electricity commerce, but it is becoming congested because of the new uses for which it was not designed. Transmission expansion has not kept pace with changes in the interstate electricity marketplace. Adequate grid facilities are essential to robust wholesale power markets. I am confident that transmission will be built in sufficient quantities if siting authority is rationalized, appropriate price signals and independent regional grid operation are put in place, and adequate cost recovery mechanisms and risk-based rates of return are allowed.

Proposed section 7012 provides the Commission with backstop siting authority to ensure that the necessary transmission facilities are built in areas designated as an "interstate congestion area" by the Secretary of Energy, and grants authority for states to form interstate compacts for regional siting coordination. This provision appears to provide appropriate respect for the siting prerogatives of the states and recognizes the regional nature of today's electricity markets. The provision has my support.

One Set of Transmission Rules

All interstate transmission should be provided under one set of open access rules. That means subjecting the transmission facilities of municipal electric agencies,

rural cooperatives, the Tennessee Valley Authority, and the Power Marketing Administrations to the Commission's open access rules. These entities control a substantial share of the nation's electricity transmission grid. Their current non-jurisdictional status has resulted in a patchwork of rules that may hinder seamless electricity markets. Markets require an open non-discriminatory transmission network in order to flourish.

Section 7021 of the discussion draft would allow the Commission to require open access service under a comparability standard by entities that are currently not covered under our open access rules. I support the thrust of this provision.

Regional Transmission Organizations

The Commission has made substantial progress in forming the Regional Transmission Organizations that are critical to the competitive market place. I firmly believe that large RTOs consistent with FERC's vision in Order No. 2000 are absolutely essential for the smooth functioning of electricity markets. RTOs will eliminate the conflicting incentives vertically integrated firms still have in providing access. RTOs will streamline interconnection standards and help get new generation into the market. RTOs will improve transmission pricing, regional planning, congestion management, and produce consistent market rules. We know for a fact that resources will trade into the market that is most favorable to them. Trade should be based on true economics, not the idiosyncracies of differing market rules across the region.

I interpret section 7022 of the discussion draft as a clear declaration by the Congress that these institutions are in the public interest and should be formed. It is my hope that such a clear message from Congress will speed the formation of these critical institutions in all regions of the nation. But I believe even stronger action may be appropriate. I recommend that the Congress clarify existing law to authorize the Commission to require the formation of RTOs and to shape their configuration. Well structured Regional Transmission Organizations are necessary platforms on which to build efficient electricity markets. The full benefits of RTOs to the marketplace will not be realized, however, if they do not form in a timely manner, if they are not truly independent of merchant interests, or if they are not shaped to capture market efficiencies and reliability benefits.

Reliability

Section 7031 of the discussion draft would provide for an Electric Reliability Organization that is independent of market participants, to develop and enforce mandatory reliability standards subject to Commission oversight. I support this provision. We need mandatory reliability standards. Vibrant markets must be based upon a reliable trading platform. Yet, under existing law there are no legally enforceable reliability standards. The North American Electric Reliability Council (NERC) does an excellent job preserving reliability, but compliance with its rules is voluntary. A voluntary system is likely to break down in a competitive electricity industry. Mandatory reliability rules are critical to evolving competitive markets.

Demand Responsiveness

Markets need demand responsiveness to price. This is a standard means of ensuring good resource allocation decisions and moderating prices in well-functioning markets, but it is generally absent from electricity markets. When prices for other commodities get high, consumers can usually respond by buying less, thereby acting as a brake on price run-ups. Without the ability of end use consumers to respond to price, there is virtually no limit on the price suppliers can fetch in shortage conditions. Consumers see the exorbitant bill only after the fact. This does not make for a well functioning market.

Instilling demand responsiveness into electricity markets requires two conditions: first, significant numbers of customers must be able to see prices before they consume, and second, they must have reasonable means to adjust consumption in response to those prices. Accomplishing both of these on a widespread scale will require technical innovation. A modest demand response, however, can make a significant difference in moderating price where the supply curve is steep.

Section 7061 of the discussion draft sets out requirements for real-time pricing and time of use metering and communications. I support these provisions as necessary first steps toward increasing demand responsiveness in electricity markets. I regard these provisions as a message from the Congress that instilling a significant measure of demand responsiveness into electricity markets is in the public interest. I recommend that legislation strongly encourage FERC and state commissions to cooperate in designing markets that include demand responsiveness. This would help to ensure just and reasonable wholesale prices and would be an effective market power mitigation measure.

PURPA purchase obligation

Section 7062 of the discussion draft would remove the purchase obligation on the part of utilities for power from a QF facility if the QF has access to independently administered day ahead and real time markets, if the utility is a member of an RTO, or if the Commission otherwise finds the QF has access to a competitive market for electricity. I support the policy direction of this section.

Market transparency rules

Section 7081 of the discussion draft requires an electronic information system, under the Commission's oversight, that provides information regarding the availability and price of wholesale energy and transmission services. I support this measure as providing additional transparency to energy markets. Transparency is absolutely necessary for good market decisions and to protect against manipulation and other abuses. I recommend that Congress broaden the coverage of this section to include natural gas markets as well. Natural gas markets would certainly benefit from transparency, and natural gas is an increasingly important input to electricity production.

Section 7081 also prohibits what has come to be known as round trip trading. I strongly support this prohibition, and recommend that Congress also extend this prohibition to natural gas trading.

Civil Penalties and Enforcement

Section 7084 of the discussion draft significantly increases the penalties available to the Commission. I support this provision. If the Commission is to be the "cop on the beat" of competitive markets, we must have the tools needed to ensure good behavior. Refunds alone are not a sufficient deterrent against bad behavior. The consequences of engaging in prohibited behavior must be severe enough to act as a deterrent.

I believe additional tools are needed for the Commission to ensure that markets are structured so that the benefits of competition will inure to consumers. The FERC, with its broad interstate view, must have adequate authority to ensure that market power does not squelch the very competition we are attempting to facilitate. However, the Commission now has only indirect conditioning authority to remedy market power. This is clearly inadequate. Therefore, I recommend legislation that would give the Commission the direct authority to remedy market power in wholesale markets, and also in retail markets if asked by a state commission that lacks adequate authority. For example, such authority would allow the Commission to order structural remedies directly, such as divestiture, needed to mitigate market power.

Refunds

Section 7091 of the discussion draft would expand the refund protection under section 206 of the Federal Power Act by eliminating the 60-day delay in the refund effective date. I support this provision but would recommend additional protections. As we have seen from past experience, when market structure and market rules are flawed, or when suppliers act in an anticompetitive manner, electricity prices can quickly rise to exorbitant levels. During the time that it takes to detect the market flaws or misbehavior and to file a complaint, unjust and unreasonable rates are charged. The Federal Power Act states that such rates are absolutely unlawful. Yet, the weight of court precedent strongly suggest that retroactive refunds are impermissible. I recommend clear statutory language that would allow the Commission to order refunds for past periods if the rates charged are determined to be unjust and unreasonable. Limitations may be appropriate on how far back in time the Commission can order refunds.

Review of Mergers

Section 7101 of the discussion draft repeals the Commission's authority to review mergers. I do not support this provision. As we strive to move toward competitive markets and light-handed regulation, the Commission's ability to remedy market power is increasingly important. Market power is likely to exist in the electric industry for a while. It is unreasonable to expect an industry that has operated under a heavily regulated monopoly structure for 100 years suddenly to shed all pockets of market power. An agency such as the FERC with a broad interstate view must have adequate authority to ensure that market power does not squelch the very competition the Commission is attempting to facilitate.

The Commission's authority over mergers is important. While mergers can produce efficiencies, they can also increase both horizontal and vertical market power. The Commission is particularly well suited to evaluate proposed mergers involving electric utilities. The Commission's detailed experience with electricity mar-

kets and its unique technical expertise can provide critical insights into a merger's competitive effects. In addition, the Commission's duty to protect the public interest is broader than the focus of the antitrust agencies and thus allows us to better protect consumers from other possible effects of a merger, such as unreasonable costs. As the architect of Order No. 888 and Order No. 2000 (the RTO rule), the Commission must retain the authority to condition a merger to ensure consistency with broader policy goals. And unlike the antitrust agencies, the Commission's merger procedures allow public intervention and participation in proceedings critical to the restructuring of this vital national industry.

For these reasons, I would not support any weakening of the Commission's merger authority. Indeed, to ensure that mergers do not undercut our competitive goals, I recommend that the Commission's authority over electricity mergers be strengthened in a number of ways. The Commission should be given direct authority to review mergers that involve generation facilities. The Commission has been upheld in its interpretation of the Federal Power Act as excluding generation facilities per se from our direct authority. It is important that all significant consolidations in electricity markets be subject to Commission review. For the same reason, the Commission should be given direct authority to review consolidations involving holding companies.

I am also concerned that significant vertical mergers can be outside of our merger review authority. Under section 203 of the FPA, our merger jurisdiction is triggered if there is a change in control of jurisdictional assets, such as transmission facilities. Consequently, consolidations can lie outside of the Commission's jurisdiction depending on the way they are structured. For example, a merger of a large fuel supplier and a public utility would not be subject to Commission review if the utility acquires the fuel supplier, because there would be no change in control of the jurisdictional assets of the utility. If the merger transaction were structured the other way, i.e., the fuel supplier acquiring the utility, it would be subject to Commission review. Such vertical consolidations can have significant anticompetitive effects on electricity markets. Those potential adverse effects do not depend on how merger transactions are structured, and thus our jurisdiction should not depend on how transactions are structured. Therefore, I recommend that the Commission be given authority to review all consolidations involving electricity market participants, however structured.

II. NATURAL GAS ISSUES

Gas Price Volatility

We have been following with great interest and concern the sharply higher and volatile natural gas prices over the last couple of weeks. The sustained cold weather brought prices at the Henry Hub up to the $4 to $5 range early in the winter, and prices have risen steadily as the winter weather has persisted without much letup. In recent days, there have been large price increases that we have not seen in some time. Since February 21, prices at the Henry Hub have ranged from a low of $6.73 to a high of $18.60 on February 25. It is vitally important that the Commission investigate this phenomenon to get a clear understanding as to what is driving this volatility and to determine whether these price spikes are a dramatic response to normal seasonal cycles, or other forces are at work.

This winter has been one of the coldest in years in the Northeast, Mid-Atlantic and Midwest states. By some reports, it has been 29 percent colder in these regions than last year, and demand has increased accordingly. Late winter storage is being drawn down more rapidly than was expected, and cold weather has led to short-term freeze-offs of some sources of supply. As a result of these factors, a couple of major interstate pipelines last week instituted operational flow orders, which reduce shippers' contractual rights to draw gas from storage. Adding to the anxiety is the fact that the weather experts believe that the winter heating season will continue at least for several more weeks.

High natural gas prices have sharply increased the price of electricity in wholesale markets. Thus, consumers of both natural gas and electricity likely will feel the impact of this price volatility. The Commission must investigate the causes of the price run-up. I am deeply concerned about the impact of these prices on residential consumers, businesses and industrial users.

Adequacy of Natural Gas Supply

Natural gas exploration and production activity, as reflected in the number of gas drilling rigs, has increased over time, and will no doubt increase more in response to these powerful price signals. Yet, it takes time to develop a gas well—up to 18

months from new drilling until gas finally flows to market. This puts more pressure on the existing pipeline infrastructure, including storage, to meet winter demands.

The Commission recently announced a new policy of light-handed regulation for LNG import facilities. The Commission was persuaded that its traditional open access requirement for LNG terminals would stifle investment in these critical energy supply projects. Hence, the Commission's new policy will allow such projects to be developed on a proprietary basis. This regulatory approach represents the prevailing view that these terminals are more akin to production facilities than to interstate pipeline facilities and thus warrant less regulatory scrutiny.

Adequacy of Natural Gas Infrastructure

The Commission has also taken steps to streamline its approval process for new pipeline infrastructure. It is axiomatic that where pipeline infrastructure is constrained, prices will rise as capacity markets tighten. Basin differential price data lead to the conclusion that perhaps several regions of the country are now short of natural gas transmission capacity: the Rockies, the New York metropolitan area and other parts of the Northeast, the Mid-Atlantic Coast, the Southeast and Florida.

Traditionally, the pipeline industry has responded to price signals and contracted with shippers to support capacity expansions, but the deteriorating health of the industry and sharply reduced capital availability is a cause for concern. I note with concern that there are only a few significant pipeline construction applications now pending at the Commission. Our Office of Energy Projects tells me that there are 11 major pipeline certificate applications pending Commission approval, totaling 4.0 Bcf/day in new capacity and covering about 783 miles of new pipeline. By way of comparison, early in the year 2001, the Commission had under consideration project proposals for 7.3 Bcf/day of new capacity and over 2,200 miles of additional pipeline.

Clearly, constrained areas are more prone to price spikes and to market manipulation than are non-constrained areas. This puts a premium on the Commission's ability to process expeditiously applications for approval of new infrastructure additions, while balancing the need for full participation by affected parties in the NEPA process. Our track record is solid and getting better. From 2001 to the present, the Commission has certificated 4,814 miles of new pipeline infrastructure, with a total capacity of 15.8 Bcf/day. The Commission remains committed to responding promptly to facilitate the approval of necessary infrastructure projects. A vibrant market demands a solid infrastructure foundation.

The draft legislation contains a major initiative that would encourage the development of natural gas supplies in Alaska for delivery both in that state and the lower forty-eight states. The recent natural gas price spikes underscore the need to attach new sources of production. Alaskan gas supplies would bolster our domestic resource base and will be an essential part of the nation's energy future. Our agency is prepared to process an Alaskan pipeline project application expeditiously. I stand ready to consider any proposal or proposals that are filed.

Shaken Confidence in Price Discovery Methods

It is clear that market participants must have timely access to accurate information about prevailing prices. Price discovery, the ability to access this price information, helps customers determine the price they should pay for the service or commodity, helps sellers determine and recover their investment, and allocates resources to the customers who value them most. Over the last twenty years, the trade press has created natural gas price indices through the polling of market participants. The quality of the indices depends on the integrity of the information collected and the number of active traders who report. Accurate and credible price indices for natural gas are the foundation for natural gas and electric transactions nationwide. Unfortunately, the false reporting of price and volume information has shaken confidence in these indices. The potential fallout includes the nullification of existing contracts pegged to indices, and the reluctance of parties to enter into new index-based contracts.

Accurate price indices are also required by pipeline tariffs. At a January 15 Commission meeting, Commission staff pointed to three areas of pipeline tariffs that refer to market price data: cash-out provisions, penalties and basis differentials. Most major pipelines have cash-out mechanisms that allow them to resolve system imbalances. Accurate price information is essential if cash-out mechanisms are to account for and minimize pipeline imbalances. The Commission has approved some pipeline penalty provisions based on market indices to deter shipper misconduct that can threaten system reliability. Finally, many negotiated rate transactions peg the transportation rate to the basis differentials between two or more price index trading points.

Given the prevalence of price index information in pipeline tariffs and contracts, it is imperative that there be trustworthy indices. As a first step, the Commission will probably adopt minimum standards for the natural gas price indices used in pipeline tariffs or new contracts. We will sponsor a technical conference this spring to explore price index issues and various proposed remedies.

The Commission is also analyzing natural gas price index issues in its massive ongoing Western market manipulation investigation. This investigation has already found significant manipulation of published price indices that were used by traders, pipelines, and power generators. These indices also had been used by the Commission in establishing a formula for determining refunds of overcharges arising from the dysfunctional electric western power markets. FERC staff has recommended that the Commission modify the refund formula to eliminate any reliance on manipulated indices. Hundreds of millions of dollars, perhaps billions of dollars, are at stake in that huge refund proceeding. This only underscores that reliable price discovery methods are an imperative in well-functioning natural gas and electric markets.

In addition to developing minimum standards for natural gas price indices, some have suggested that the Commission take even more aggressive actions. Some have suggested that the Commission gather and report price data. I have an open mind about how to achieve price transparency and facilitate price discovery. However, it is critical that the Commission be prepared to take whatever action is necessary to restore confidence in the natural gas price indices that undergird natural gas pipeline tariffs and negotiated rate contracts.

Section 7081 of the discussion draft amends the Federal Power Act to promote price transparency. FERC is directed to establish an electronic information system. As I said earlier, I fully support this provision and recommend that it be modified to apply explicitly to natural gas markets as well.

Penalties and Refund Effective Date

Section 7084 of the discussion draft should be modified to provide penalties for prohibited behavior under the Natural Gas Act.

I also recommend that the Natural Gas Act be amended to include the refund effective date provisions of Section 7091 (with the further modification I recommended earlier).

III. HYDROELECTRIC LICENSING ISSUES

The Commission has recently proposed a rulemaking to streamline the hydroelectric licensing process to provide more efficient decision making. A new process, an integrated process, is proposed to facilitate increased assistance by Commission staff early in the process and to promote greater coordination among federal and state agencies.

The proposed amendments of section 3001 of the discussion draft outline a process to ensure that viable alternative conditions are given adequate consideration in the licensing process. These amendments are worthy of serious consideration by the subcommittee.

This concludes my testimony. I stand ready to answer questions and to assist the Subcommittee in any way. Thank you for this opportunity to testify.

Mr. BARTON. Thank you. Before I recognize Commissioner Brownell, Congresswoman Capps has 12 students visiting her from Santa Barbara from the Congregation of B'nai B'rith. We want to welcome you.

And if you would like to sit at the lower dais, down here, you will improve the intelligence of both sides of the aisle. And it will be a little bit easier on your knees.

Let us welcome the students from Congresswoman Capps' Congregation. You may not ask questions, though. As soon as they get seated we will recognize Commissioner Brownell. And it is okay to sit on the Republican side. You are not going to be excommunicated.

And if you have cameras, feel free to have somebody take pictures of you doing this. We now would like to welcome Commissioner Brownell. And are you a 5-minute statement or a 6-minute statement?

Ms. BROWNELL. Mr. Chairman, with all due respect, and consistent with the inclusionary policy of outreach that the FERC has undertaken in the last year, we would actually love to hear from the students, because we think that they could add value to the discussion.

Mr. BARTON. Well, I wish Commissioner, the phantom Commissioner, Mr. Kelliher, were here. He's in confirmation purgatory over in the Senate. We wish there were four of you here instead of just three.

Ms. BROWNELL. And we certainly await his arrival as well.

Mr. BARTON. All right, you are recognize for 5 minutes.

STATEMENT OF HON. NORA MEAD BROWNELL

Ms. BROWNELL. Thank you. I am pleased to be here today, Mr. Chairman, Mr. Vice Chairman, committee members, to discuss the future of our energy sector in this country.

I certainly join in my colleagues' statements, but I would just like to make a few additions. A couple of weeks ago a major analyst from Merrill Lynch had this headline in his morning commentary: "Energy sector better than bad." And that was supposed to be the good news. Indeed, we have seen over $200 billion in market cap loss.

We see congestion and associated prices increasing. We see no real innovation or investment in technology. We see an increase in power quality disturbances. Power quality disturbances that are having an effect on products and on company's ability to compete.

We see market dysfunction and customers paying huge prices that they should not have paid.

We see increased concerns about fuel supply and distribution. The picture is quite stark. There may be no visible crisis, but there is a slow and silent erosion of the strength of this energy sector in our country.

And there is a cost, sadly, it is largely hidden. And Mr. Boucher, the nicest thing that has been said about us recently is that we are imaginative.

But we need to be more than imaginative. We need to be innovative. We need to be committed. And we need to be focused and courageous to deal with the crisis that we face today.

The principles that drew us to initiate the restructuring 10 years ago still hold true. But sadly, we have learned some hard lessons.

Markets just don't happen, they need guidance, transparency and structural change. Markets are vulnerable in transition, we need to complete the task.

Markets must have oversight with swift and certain justice, and above all, customers must be confident that their needs will be met.

We have begun to transform ourselves at the FERC, as you see in all of our testimony, to address those issues. But I am pleased that this bill and the work that will go forward, indeed, address critical issues to make markets work.

It addresses accountability for us, for market participants, for the reliability organizations on which we rely.

It addresses economic signals. Economic signals to build infrastructure, which we so critically need. Economic signals to incent new technologies, including renewable technologies.

It sends the right economic signals to discipline the marketplace. It creates structures that will allow us to manage the marketplace more effectively and with greater accountability.

So I look forward to working with you because I think the economic and moral imperative is essential. I hope that we can address these issues quickly with deliberation, but with closure and certainty.

We need to move forward. Thank you.

[The prepared statement of Hon. Nora Mead Brownell follows:]

PREPARED STATEMENT OF HON. NORA MEAD BROWNELL, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

I. INTRODUCTION

Thank you for the opportunity to share my thoughts. Chairman Wood's testimony summarizes the full range of initiatives we are undertaking at the Federal Energy Regulatory Commission (FERC), and I fully support his comments on those efforts. I would like to offer observations about the state of the energy sector in general and about some of the initiatives outlined in Chairman Wood's testimony. My comments on these initiatives will address how I believe they support the transformation of wholesale energy markets for long-term customer benefit and how the FERC is making internal reforms to adjust to changes in the market place. Finally, with your indulgence, I would like to provide comment on particular portions of the discussion draft provided on February 28, 2003. Of course, I am happy to answer any questions the Subcommittee might have.

II. STATE OF THE ENERGY SECTOR

The state of the energy sector in this country is, at best, precarious:

- Power quality disturbances grow—disrupting production lines and calling into question the ability of the energy sector to serve a growing digital economy, adding to customers' costs for goods and services and driving jobs and business from our cities and towns;
- Customers have a profound lack of confidence in corporate America, public policy makers, and regulators;
- Lack of meaningful and transparent prices has led to inefficient generator siting decisions, creating access and transmission problems;
- Increasingly illiquid markets affect forward prices; and
- Questionable trading and reporting practices continue to surface.

Moreover, we are experiencing a capital crisis in the energy sector. Over $200 billion of market capitalization has been lost. Uncertainty in the energy sector generated by the lack of clear, understandable, enforceable rules, the California energy crisis, the collapse of Enron, allegations of false reporting, criminal indictments, the closing of trading operations, and federal investigations have all undermined investor confidence. Credit ratings have been downgraded, access to capital at reasonable rates has been limited or cut-off. The result has been a lack of capital available for greatly needed investment in infrastructure to reliably deliver energy that this country so desperately needs. The near-term impact of this lack of investment is cost to customers in terms of congestion, security, and missed opportunity. Longer-term, the lack of investment threatens the very future of our economy.

While the electric and natural gas sectors are intertwined, the natural gas sector has fared better. For example, stock prices for electric utilities declined over 40 percent in 2002 compared to 25 percent in natural gas pipelines; electric generators' prices declined 80 percent compared to a 5 percent increase for oil and gas producers. I attribute this to a more mature natural gas market with clear, standardized rules. The natural gas marketplace has shown itself to be remarkably robust and I believe that the issues facing the natural gas market are manageable over time.

I applaud the efforts of this Committee to address these very important and difficult issues and bring together a coherent and consistent energy policy for this nation's future. We at FERC are doing what we can to address the problems facing us in the energy sector. I would like to focus now on three particular initiatives:

1) restructuring wholesale electricity markets; 2) improving efficiency in processing applications for pipeline and hydroelectric projects; and 3) increasing market monitoring.

III. RESTRUCTURING WHOLESALE ELECTRICITY MARKETS

The FERC has been working actively to restructure the wholesale electricity sector into the vibrant, competitive marketplace that customers deserve. As we do so, I have been guided by five core principles:

First, customers must benefit. Restructuring markets toward a competitive outcome should be a value-added proposition. We are not abandoning what works, we are making it better. That has been the competitive advantage of the U.S. economy.

Second, the FERC must ensure independent operation of the nation's transmission highway. Such independence is essential to meeting Congress' directive in the Federal Power Act of nondiscriminatory access to the interstate grid.

Third, the FERC must promote the development of a robust and reliable infrastructure that supports the dispatch of generation on a least-cost basis. Until all wholesale generators can compete fairly on an economic basis, customers will continue to be deprived of potential savings.

Fourth, the FERC must ensure transparency in the electricity markets. A market cannot run efficiently unless the rules are clear and there is adequate opportunity for price discovery. We can't assume this without an independent system operator and full access to information

Fifth, the FERC must ensure adequate customer protection against unjust and unreasonable rates. This begins with a well-functioning wholesale electricity market and also requires vigilant market monitoring at all times and mitigation whenever appropriate.

My decisions to support consideration of modifications to our affiliate rule, creation of the new Office of Market Oversight and Investigations, issuance of Order No. 2001 requiring detailed reporting on transactions, development of standardized procedures for generator interconnections, and aggressive investigation of the causes of the Western energy crisis were all in furtherance of these five principles. However, I continue to believe that creation of Regional Transmission Organizations (RTOs) is the single most effective way of achieving these five goals simultaneously.

RTOs that are fully independent of market participants can ensure non-discriminatory operation of the transmission facilities under their control. RTOs have FERC-approved market monitors, implement FERC-approved market mitigation plans, and conduct long-range planning all for the protection of customers. RTOs can perform economic dispatch over large geographic areas that will ensure the selection of least-cost generators. Finally, RTOs can offer organized markets and one-stop shopping that reduce transaction costs, provide transparent market rules and allow the opportunity for price discovery.

I am pleased to announce that the majority of public utilities now seem to recognize the value of RTOs—almost every transmission-owning public utility has announced its intention to join a specific RTO. The FERC recently granted RTO status to the Midwest ISO and PJM Interconnection, and has several other RTO filings pending.

The standard market design rulemaking has been an invaluable source of information as the FERC works through the RTO filings. The wealth of comments we have received on the proposed standard market design rule has given us a much greater understanding of how to create a commercial platform within RTOs that will ensure the maximum benefits for customers. Regional differences should and are being accommodated in RTOs. Nevertheless, market platforms must be consistent in order to ensure equity, eliminate barriers to entry, reduce transaction costs, and create an environment where gaming is limited, if not eliminated. The platform must also ensure that the most appropriate solution, whether transmission, generation or demand-side, is implemented. As I continue my work at the FERC on wholesale electricity matters, I commit to you that I will retain a focus on the five principles I have articulated here.

IV. IMPROVING EFFICIENCY IN PROCESSING ENERGY PROJECT APPLICATIONS

The FERC has responsibility for authorizing the construction and operation of interstate natural gas pipelines and hydroelectric projects. We have been improving our processes for handling project applications so that our processes do not impede market development, and may in fact advance infrastructure.

Revisions to the pipeline certification processes have resulted in reduced processing time from an average of 273 days in 1995 to 195 days today. In 2001, the FERC certificated 16 Bcf per day of new capacity.

More recently, the FERC, after hearing complaints for years about the inefficiency of the licensing process for hydroelectric projects, has proposed changes to the hydroelectric licensing regulations. Hydroelectric projects are a critical component of this nation's energy infrastructure, and inefficiencies in FERC's relicensing process add unnecessary costs and uncertainties to the detriment of consumers. The proposed rule would create a new process in which the current duplicative, sequential environmental analyses conducted separately by the license applicant, the FERC, and the other agencies is replaced with a single "integrated" environmental analysis.

This proposal was the result of work not only by FERC staff but by all stakeholders: individual licensees, small and large from all over the country; non-governmental organizations (NGOs), including the National Hydropower Association, the Hydropower Reform Coalition, and individual environmental and recreation groups; the U.S. Departments of the Interior, Agriculture, and Commerce; State agencies; and Indian tribes. In fact, the proposed rule draws heavily from proposals developed by two very different groups—the National Review Group, a coalition of licensees and NGOs, and the Interagency Hydropower Committee, a federal interagency working group—and reflects a remarkable degree of consensus. We estimate that the proposed rule would reduce the average time it takes to complete the licensing process by 30 months—cutting down 47 months of preparation and processing time to 17 months. Further, we estimate that the proposed process would reduce the cost of licensing for a project under 5 megawatts by $150,000 and for a project greater than 5 megawatts by $690,000.

V. MARKET MONITORING

The FERC's other relatively recent initiative has been on market monitoring and investigations. Much has been said over the historic failure of market monitoring and without revisiting history, I believe we now recognize that market monitoring must:

- Be the responsibility of everyone;
- Be a continuous proactive process anticipating trends, understanding market dynamics and inter-dependencies;
- Have dedicated resources;
- Develop effective ongoing communications with regional market monitors and state commissioners;
- Clearly understand financial markets and customer needs;
- Co-ordinate effectively with sister agencies; and
- Analyze, inquire and investigate.

I am pleased to report that we have made substantive changes in FERC's market monitoring with the reformation of the Office of Market Oversight and Investigation (OMOI). OMOI is charged with the above objectives and with nearly a full staff complement is well on its way toward meeting them. Are we where we would like to be? No, but for large portions of the country we are confident we are close. Significantly and importantly, these areas include where we have had independent system operators, transparency, organized markets, and regional monitors. In other areas of the country that lack independent grid operators, developed market rules, and independent market monitors with access to information, I am less confident of our ability to monitor markets for the exercise of transmission or generation market power, discriminatory practices or manipulation.

OMOI is not only gaining experience with monitoring, but also in responding to market conditions in a responsible manner. We have recently analyzed gas price indices and continue to monitor the situation. We will work with industry as they respond to problems with gas indices. Not every inquiry calls for an investigation; I believe that OMOI should have a panoply of tools in its tool-box to deal with different stages and degrees of development.

VI. COMMENTS ON DISCUSSION DRAFT

I appreciate the opportunity to offer the following thoughts on specific provisions on the discussion draft.

Section 7101—Repeal of Section 203

Section 7101 would repeal Section 203 of the Federal Power Act and, thus, leave review of mergers and other dispositions of public utility facilities to the Department of Justice and the Federal Trade Commission. While I support coordination of federal agency review of proposed utility mergers to ensure that such reviews are not duplicative or overly time-consuming, I do not believe it is appropriate to eliminate FERC review. The FERC has knowledge of the electric utility industry that

the federal antitrust agencies do not, and FERC review is necessary to ensure that mergers and other dispositions are consistent with the public interest. The FERC has years of expertise with Section 203 matters and such matters may affect the ability of the FERC to ensure just and reasonable rates and terms and conditions of service as required under the Federal Power Act. I believe merger reviews must be disciplined and focused. They are not shopping opportunities to extract concessions on issues that add cost not value.

Title II—Alaska Natural Gas Pipeline

This title streamlines the FERC's issuance of a certificate of public convenience and necessity authorizing the construction of an Alaska natural gas transportation by recognizing the need for such a project, setting aggressive time lines for the completion of environmental reviews, and designating the FERC as lead agency for compliance with the National Environmental Policy Act and for coordination with and among federal agencies. Ensuring adequate pipeline infrastructure to deliver natural gas supplies is critical to the security, health and prosperity of this nation. For several years now there has been interest in the development of the transportation infrastructure needed to bring Alaskan natural gas to markets in the lower 48 states, and yet, for many reasons, there have been no requests for certification filed with the FERC. I fully support inter-agency cooperation and the streamlining of processes where possible and can assure you that any applications ultimately filed with the FERC for an Alaska natural gas transportation project will be reviewed thoroughly, promptly, and fairly with recognition of the importance of Alaska natural gas to our nation's long-term energy security.

Title III—Hydroelectric Relicensing

The discussion draft would provide applicants for hydroelectric licenses the opportunity to propose alternatives to the mandatory conditions and fishway prescriptions developed by federal resource management agencies. The Secretary of such an agency would then be required to adopt the alternative if he concluded, based on substantial evidence and giving equal consideration to a wide range of factors, that the alternative provided adequate protection of natural resources and was either less costly or would result in improved electricity generation. I believe this provision is one reasonable approach to recognizing the expertise of the resource management agencies while still ensuring that such agencies perform an appropriate balancing of interests when developing mandatory conditions and fishway prescriptions, just as the FERC is required to do when developing its license conditions.

Section 7011—Transmission Infrastructure Improvement Rulemaking

This section would require the FERC to develop regulations on incentive- and performance-based rates to encourage transmission investment. An improved transmission infrastructure is critical to the success of this nation's electricity markets. I support incentive- and performance-based rates for transmission investment and note that the FERC has recently issued a proposal on incentive pricing for transmission expansion. This section would also require that the regulations provide for participant funding of transmission upgrades upon the request of an RTO or other FERC-approved transmission organization. I support the concept of participant funding of transmission upgrades provided that an independent transmission organization, which can ensure nondiscriminatory access and rate treatment, is operating and planning expansions of the grid, and this provision appears to meet that standard.

Section 7012—Siting of Interstate Electrical Transmission Facilities

I support granting the FERC backstop authority to site interstate transmission lines. As I have stated previously to this Subcommittee, state-by-state siting of such transmission superhighways is an anachronism that impedes transmission investment and slows transmission construction. This section, which grants the FERC such authority to site transmission in Department of Energy-designated "interstate congestion areas" where states have been unable or unwilling to do so, is one potential approach to this problem. I also believe new models may respond to siting issues in a way that recognizes state concerns while accepting the reality that electricity planning and operations are regional in nature.

Section 7021—Open Access Transmission by Certain Utilities

This section would grant the FERC the authority to require all transmitting utilities (not just those that constitute "public utilities" under the Federal Power Act) to offer open access transmission service, unless they sell no more than 4 million megawatts of electricity per year. I support the intent of this provision to ensure a properly functioning and transparent transmission grid, and understand the con-

cerns of parties not now subject to open access. We must work to ensure that their rights are protected.

Section 7041—Public Utility Holding Company Act (PUHCA)

I support the repeal of PUHCA. PUHCA was necessary to address abuses that existed a half-century ago. However, that statute has not only outlived its usefulness, it is actually thwarting needed development of our electricity resources by subjecting registered utility holding companies to heavy-handed regulation of ordinary business activities and to outdated requirements that they operate "integrated" and contiguous systems. One of PUHCA's perverse effects is that it causes foreign companies to buy here and U.S. companies to invest overseas. Nevertheless, I appreciate the concerns of those, like the rural electric cooperatives, who have opposed elimination of certain safeguards that PUHCA provides against market power. The FERC is aware of the concerns of the cooperatives and of the problems with market power in general, and we are engaged in an overhaul of our efforts at market monitoring and market power protection. I believe that the discussion draft strikes an appropriate balance by replacing PUHCA with increased access by the FERC and state regulators to certain books and records.

Section 7062—Public Utility Regulatory Policies Act (PURPA)

I support the draft's prospective elimination of the forced sale provision of PURPA. In my view, the discussion draft appropriately recognizes the vital role of organized markets in facilitating sales while providing appropriate transitions rules to recognize the rights and obligations of parties. PURPA was enacted out of concern over dependence on oil for electric generation. Now, a quarter of a century later, when a gas-fired generator can be on-line in less than two years, and many advances are being made in distributed generation, PURPA's subsidies for certain types of generation are no longer appropriate.

Section 7084—Enforcement

The FERC must have an expanded role in monitoring for, and mitigating, market power abuse. The enabling statutes of the Securities and Exchange Commission and the Federal Communications Commission provide for a range of enforcement measures, such as civil penalties. I believe that providing FERC with similar authority would send a powerful message to electricity market participants that we take violations of the Federal Power Act just as seriously. Therefore, I support the draft's increase in the level of penalties available under the Federal Power Act.

Section 7091—Refund Effective Date

I support allowing refunds from the date a complaint is filed, as opposed to 60 days after the filing. This proposed change will better protect customers.

VII. CONCLUSION

I appreciate the enormous commitment of time, energy, and leadership that the Chairman and the other members of this Subcommittee have made to address the issues facing our energy markets. I thank you for the opportunity to share my thoughts with you, and look forward to continuing to work with you on these matters.

Mr. BARTON. Thank you. The Chair is now going to begin the questioning period. The Chair wants to announce that the order of the questions is in order to seniority as of, when the gavel was tapped and in order of appearance after the gavel was tapped.

Now that is kind of confusing, but we checked with both staffs and we think we have it properly. If you deferred, you get an additional 3 minutes. Some of you only used one or 2 minutes, so we are going to have a very, separately timed question period, which is good.

So the Chair would recognize himself for 5 minutes, since I did take a 5-minute opening statement. Chairman Wood, I am told that in the last several weeks, the Commonwealth of Virginia passed a State law that prevented a private utility from joining an RTO until a date certain.

Could you comment on that and would you also give us your comments on how you think that affects the ability to create the RTOs that most people think need to be created?

Mr. WOOD. A little background on that, Chairman Barton. There are two large regional transmission organization, one that is serving where we are today and then on over to really the entire midwest of the country up to Saskatchewan, Manitoba down to Oklahoma, Texas panhandle, all the way back over to Indiana.

That is the Midwest Independent System Operator, MISO and PJM. The AEP Company, out of Ohio, a 7-State company, of which part of it is in Virginia, is really at the cross wires between those two RTOs.

Those RTOs came forward last summer with a plan to integrate their markets into one large energy market where a customer or a supplier could really have a one-stop shop, kind of transparent, uniform approach toward business rules, software, a lot of the stuff that we are looking at in the standard marketing design, they are moving ahead and doing it voluntarily.

The utilities, the stakeholders, the State commissioners in that region are a real model for kind of, you know, working together across State boundaries to make this market work and deliver significant benefits. The cost benefit study from that integrated energy market was quite pronounced. I think something, I remember it being north of, let's see, $7 billion over the next 10 years.

That was a cost benefit study done in July of this past year. So that was really moving forward to have that integrated energy market on the ground and operating by October 2004.

A lot of time lines to meet, very important. In the past 2 months this, my new home State legislature passed a bill which I do not believe the Governor has yet signed, that would, in fact, not allow AEP to join this RTO as it had planned to do and as the FERC had already approved it doing back 5 years ago when it had a merger condition in its merger with Central Southwest from our home State.

That they made a commitment to joining an RTO, one, exists, they joined it. They are moving forward on that. And then the State legislature in Virginia passed a bill that basically said you can't join that until after July 2004.

Which is going to really, in fact, make the October 2004, day not happen. So that is unfortunate. The other States in the area have, you know, been concerned about that, including some from some of the different members here have expressed a concern to us at the commissioner's meeting last week.

We are in discussions now trying to determine what is the best way to move forward, but it does show how important it is that when you do have an interstate grid that is in multiple States, and when you have utilities that are spread over multiple States, as we have throughout the country, it is very important to kind of have a uniform regional approach that, in this case, 26 States or 25 States and a couple of provinces are moving forward and one who said no and it, in fact, does stop it for all 26. So that is a little background on that.

Mr. BARTON. Okay. Chairman Meserve, correct me if I am wrong, but nuclear power plants that are already in the grid, when we

have a price spike like we have had in natural gas the last several months, because of the cold winter, do the prices that are generated by nuclear power plants for electricity, do they go up also?

Mr. MESERVE. Mr. Chairman, we don't regulate the power plants in terms of their economic conditions, only their safety conditions.

I believe it varies by the plant as to their economic relationship to the grid. Some plants have long term contracts and their power goes out at agreed upon rates.

And others have an opportunity to sell into the market. But let me emphasize, this is not an area that is subject——

Mr. BARTON. I know that the commission does not regulate it, but what I was hoping you would say is that if we had more nuclear power plants, when we have fuel shortages in other areas, the nuclear power plants generally maintain their price structure because they are regulated at the State level and their prices are not allowed to go up. That is what I would hope you would say.

Mr. MESERVE. Well, let me say that the regulation does vary state-by-state. But let me emphasize that nuclear power plants are base load and at the moment the average cost of production from nuclear power plants is less than that from coal or from natural gas, which are the principal competitors.

Mr. BARTON. That is a better answer. All right. My time is expired and I would recognize the gentleman from Virginia for 5 minutes.

Mr. BOUCHER. Thank you, Mr. Chairman, and thanks to each of the witnesses for the very informative testimony here today.

Mr. McSlarrow, let me begin with you. I have a number of concerns about the electricity provisions that are contained in the draft legislation that has now been circulated, and you addressed a number of the matters.

I was very pleased to read in your prepared testimony that the administration does not favor a repeal of the FERC's merger review authority.

I share your opposition to that provision. I am concerned that particularly when teamed with a repeal of the Public Utility Holding Company Act, which in and of itself will generate a large amount of industry consolidation, that this is really not a very good time to be taking away this key consumer protection by repealing the merger review authority of the FERC.

My view is it is probably going to be more needed in the future that it is even today, particularly if this comprehensive electricity provision passes and PUHCA is repealed.

I wonder if you would like to take the opportunity to comment on the administration's rationale for not supporting the repeal of the FERC's merger review authority?

Mr. MCSLARROW. Well, I can hardly put it better than you just did. There are really two goals. One, is as you put it, consumer protection, and we would like to ensure that someone, and FERC has the authority now and has been doing the job, will judge mergers on their public interest standard.

And No. 2, we want to ensure that we can increase investment into an industry that is, to put it mildly, ailing. And so therefore, we think we ought to repeal PUHCA.

But as you pointed out, if you are going to repeal PUHCA, it is even more important that someone have that kind of regulatory oversight.

Mr. BOUCHER. Thank you. The second question I have for you is on an entirely different topic, but one that you also raised during the course of your testimony.

I share the administration's enthusiasm for the advent of commercially available hydrogen-fueled vehicles. And I want to applaud the administration for making that one of its priorities.

The big challenge that I think we face in realizing commercial availability of fuel cells is the source of hydrogen. And I wonder if you could comment to the subcommittee this morning on where you see the sources of hydrogen being and what specific steps we in the Congress need to take in order to make sure there are reliable hydrogen sources so that we can achieve this commercial availability?

Mr. MCSLARROW. I would be glad to. The good news is that almost everything you can imagine as an energy source is also something that can be made to work to produce hydrogen.

Whether you are talking about renewables, fossil fuels, natural gas, coal, nuclear energy. Across the board, we already know how you do it and how to produce hydrogen. The trick and what the research and development is focused on right now, is how to bring the cost down.

Because, candidly, it is not where it should be in order to competitively produce hydrogen. Last week or maybe the week before, the President announced a new initiative on a coal gasification plant, which we are calling FutureGen.

And it is a very exciting project that we are hoping to have international collaboration on. About a billion dollars and it will be constructed over the next 10 years.

But the idea is to produce or to construct a coal gasification facility that will simultaneously produce electricity and produce hydrogen.

And do so in a way where, because of the mechanics of the plant, any greenhouses gases, and in particular carbon dioxide, come out in a discrete stream that makes it even easier to sequester that carbon.

And so there are huge environmental benefits too, and it will allow us, we hope, to really tap into what is our greatest natural abundance, energy source, coal.

Mr. BOUCHER. Well, thank you very much for that answer. And I enthusiastically endorse that proposal and I would love to have that plant in my congressional district. We will have some discussions, maybe, about that.

I have a number of questions I want to propound to the commissioners from the FERC. And Mr. Chairman, I hope we will have a second round during which we can do that.

Let me, while I have the floor, ask Mr. Meserve a question that intrigues me. Last year, when we have representatives of the nuclear industry here, there was discussion about the possibility of a new generation of nuclear reactors called pebble bed reactors.

I think that there were even plans to build a prototype in South Africa. I have not heard much about that lately. Do you happen to know whether those plans are still active and whether anyone in-

tends to go forward with this new generation of facilities that might lead to the first new construction of a nuclear plant in the U.S.?

Mr. MESERVE. Sir, I did mention very briefly in my testimony that we do have a process for certifying designs, advanced designs. And we have one design for which the review is underway which is an outgrowth of the existing fleet of plants, and six more that are in the discussion phase.

Some of those are quite radically different designs than our current fleet. The pebble bed reactor was one that an American company was interested in, but decided not to pursue because that company concluded that its mission was different and that the pebble bed reactor was not an appropriate business line.

The South Africans are still pursuing the pebble bed idea, and have not yet made any final decisions, but there is great interest in that reactor.

Mr. BOUCHER. And there are designs other than pebble bed that are new and different than what we have today?

Mr. MESERVE. Definitely. There are passively safe designs that people are pursuing.

Mr. BOUCHER. Thank you very much. Thank you, Mr. Chairman.

Mr. BARTON. The gentleman's time has expired. The next on the list is Congresswoman Wilson of New Mexico. She is in a meeting. Then the next would be Mr. Buyer of Indiana for 7 minutes.

All right, then on to the next would be, on our side, Mr., he is not here? No. Mr. Norwood for 8 minutes. Oh, wait, wait, Mr. Whitfield is here.

Mr. Whitfield, did you reserve at the beginning? So, Mr. Whitfield for 8 minutes.

Mr. WHITFIELD. Thank you. Mr. Norwood was getting ready to take advantage of me. Mr. McSlarrow, I think all of us are very much aware that new refineries have not been built in the U.S. in some time, and I would like to ask you what do you consider the main reasons that new refineries have not been built?

Mr. MCSLARROW. As you point out, the last major refinery that was built in this country was built in 1976, in Garyville, Louisiana.

The last major expansion took place in 1983, and that was actually the peak of our refinery capacity, about 18.5 million barrels a day, and we are under 17 today.

There are a lot of factors. There is no question that this is an industry where a huge capital investment up front is required.

The refining margins are not very great, typically. The regulatory regimes that govern refinery operations are critically important.

When the administration did a review about refinery capacity, as part of a national energy policy, we discovered that most of what we were getting, now this is anecdotal, but most of what we were getting from investors and talking through how we expand capacity, made very clear that no one was willing to step forward for the huge capital costs up front with environmental rules that really could, in some ways, cripple the ability to expand capacity.

And so what you have seen over the last, really, 10, 15 years, is rather than build new plants, there have been incremental additions to capacity of existing ones.

But there is no question that in the future demand is going to outstrip our refinery capacity and more and more we are going to import, not just crude oil from foreign sources, we are going to import increasingly refined products from abroad, which is going to be, I think, probably a real challenge.

Because it is hard enough for our own refineries to figure out the boutique fuels problems and all those associated challenges.

And one wonders how the foreign suppliers are going to meet that.

Mr. WHITFIELD. In your testimony you talked about the fact that no grass root facilities are expected to be built. Now, were you referring to refineries when you said that?

Mr. MCSLARROW. Yes, sir.

Mr. WHITFIELD. Okay. Does the Department of Energy have any strategic plan or suggestions on ways to provide incentives to try to build more refineries?

Mr. MCSLARROW. The, it is not directed at refineries, per se. But there is no question that we believe that a more sensible regulatory environment, whether it is at the State or Federal level, to ensure that we are meeting environmental protection goals, principally, is one that at least, as I said before, the investors tell us is what they need to see before they have the certainty they require before they make the investment.

Now that is an across the board problem. And it affects more than just refineries. But that principally is the best way for us to move forward. And in fact EPA has made proposals along those lines.

Mr. WHITFIELD. Okay. I might just make one comment also. Kentucky is a relatively large coal State and I think it is imperative that when we consider a national energy policy that coal play a vital role in that.

And I know we are going to be taking up maybe clean air reauthorization this year, and I think we need to keep that in mind.

I would also say that as a part of the energy bill that passed the House and went to conference with the Senate, there were provisions in there, through the Department of Energy, with grants regarding clean coal technology, which I think we need to continue to do.

And I might add that Congressman Boucher and Shimkus and others of us are introducing a bill within the week that would provide additional R&D funds for developing newer clean coal technology and tax credits for the use of clean coal technology in producing electricity.

I think that it is imperative that we remember that we do have over a 200 year supply of coal, and I hope that the Department of Energy will certainly keep that in mind as we move forward.

I would also express my concerns, I guess this would be relating more to Mr. Wood, about the proposed rule for standard market design.

And in the discussions that I have had with retail customers as well as the public utility people in Kentucky—Kentucky is one of those fortunate States that does have very low rates.

In this proposed SMD rule you are taking away the jurisdiction of State regulators and placing it all in Washington. And I would

like for you to just elaborate briefly on why you think that that is the best way to go at this time?

Mr. WOOD. Thank you, Mr. Whitfield. The commission actually has done something much lesser than that. And it has, as the Federal Power Act allows, the jurisdiction over both transmission and interstate commerce and over wholesale sales of power.

And so those two things together really define the energy markets. We are not asserting to regulate the retail rates or the retail service of customers in any state.

Quite frankly, our jurisdiction is not even close to that. But we do think it is important that all the transmission be looked at together so that it can be most efficiently utilized.

Mr. WHITFIELD. I was familiar that you were not doing the retail, and the transmission is specifically what we are concerned about.

Mr. WOOD. Yes, sir. Yes, sir.

Mr. WHITFIELD. Can you tell me what is wrong with the regulatory approach that Kentucky has right now about transmission?

Mr. WOOD. I think what we have got, what we envision is that each State will continue to regulate as they have done for many years.

That the interstate uses of transmission, which are, the electrons don't stop at the border of Virginia or Kentucky or any other state. They move in interstate commerce.

And so what some of the concerns that have happened, as we have seen competition try to take root in our country over the past 10 years since Congress passed the 1992 Policy Act, is that there is a, kind of a second tier class of service.

You have got the transmission that is used for local service being treated one way. And the transmission that is being used for service between utilities, neighboring utilities, both within a State and across the State boundaries, at a growing inferior grade of service.

And so we are really trying to bring up the second grade, not bring down the first grade, but bring up the second grade so that transmission service for all can really tie together the region.

I think Kentucky, as you mentioned, and I think as we have seen with gas prices over the recent weeks, as Mr. McSlarrow testified, coal is going to be an important resource for this country for many years to come.

Mr. WHITFIELD. But you know we have always maintained that the native load electric customers should have the preferential use of these transmission systems.

Your proposed regulation is moving the opposite direction of that, and it is a dramatic change.

Mr. WOOD. Well, to be clearer about that from our perspective, what we want to do is ensure that that preference is maintained through the allocation of the rights to use the system on day one.

Clearly that is something that the State commissions, including Mr. Huelsmann, who is chairman of the Kentucky commission, and made a clear point to us that they want to make sure that the use of that system today is the same as it is tomorrow.

And we don't have an issue with that. I think it is just a question of then what happens the day after tomorrow? Will there be investment in the grid? Will there be sufficient signals being sent to generators to build in the right spot?

This is an issue we have got more to the south of Kentucky, but generators right now are not building in the right spots, if they are building at all.

And really investing in the overall grid, that is the kind of platform that we are setting. It is not really to rejumble what we have got today, but to take what we have got today and set clear rules for going forward so that there are clear signals about where investment is needed, where it is not needed. Where people need to build.

Mr. BARTON. Okay, the gentleman's time has expired. Commissioner Wood has Senate potential. You give great long answers. They are good but long. We want to thank our students for coming by and hope they gained from it.

Unlike the rest of us, they get to leave early. As soon as the clear the room, we will recognize Mr. Allen. Congresswoman Capps, do you want to say anything to your students before they exit the premises? Okay. The Chair would recognize the gentleman from Maine for 6 minutes.

Mr. ALLEN. Thank you, Mr. Chairman. This question is really for Mr. McSlarrow and also Mr. Wood. I understand that ISO New England has successfully launched a standard market design on March 1.

And in New England we have really been moving toward a market-driven utility system for some years, but it has included significant and varied oversight by regulators.

But what has not seemed to happen is, has not seemed to lead to a reduction in the price of electricity. I sat with a company yesterday who said the affect of deregulation for them in Maine was a 30 percent increase in the price of electricity.

Can you, first question, can you explain what you think has happened, to what extent has the price not gone down and what kinds of factors do you think are responsible?

And then a second question, I will give it to you now, unrelated to that. It has to do with the draft bill. And as I read the transmission provisions, it seems to say that States that say no to a transmission project that the Secretary of Energy considers vital to solve interstate congestion areas, will lose their right to say no in the future.

That is it looks as if that section, and I am not sure which of you could speak to this, it looks as though that section essentially strips States of their right to determine where to place transmission lines.

Two unrelated questions. Either one, however you want to begin.

Mr. MCSLARROW. First, on the New England ISO. I don't know the specifics about the data, and I would have to get back to you on that.

I will say this. What is generally true in the analyses that we have conducted is that competition, wholesale competition has led to lower prices, and that is true in every region in the country.

What is also the case, is that in most of the country it has been a partial move toward wholesale competition. And so I think that the answer is that the successes that we have already seen lead us to believe that regional markets, properly constructed, ought to lead to lower prices.

But I don't think that is something that we can make a judgment about today. On the siting authority, I believe that you are correct.

The administration has supported the idea of granting FERC a last resort back stop authority, as we call it, in those cases where the Department of Energy has identified what we call national interest bottlenecks.

And I would imagine there would only be a handful really that would rise to that level in the country. And then it would establish a process that would look first, and hopefully in almost every circumstance, to States and multi-state entities working together to figure out the transmission.

But that if you had a situation at the end of the day, after an extended period of time, where a transmission line that was a national interest transmission line, that was critical to reliability nationally, that FERC would ultimately have that authority to site that line.

As I read the draft it looked very much like that and we are very supportive of that principle.

Mr. ALLEN. Was that provision inserted to deal with any past experience, any problem that you have had?

Mr. MCSLARROW. There are a number of, I can't cite them to you today. We did an analysis called the Transmission Grid Study, which identified some, and I would be happy to send that to your staff.

Mr. ALLEN. I would appreciate it. Chairman Wood?

Mr. WOOD. As to the first issue, Mr. Allen, the, I was with the Maine commissioners 2 weeks ago, two of them, they are from all three parties, so it is a nice balanced commission.

My general impression is they are pretty pleased with how the more competitive market has worked to benefit customers up there.

I think the changes in electric prices may be tied back to the fuel that is used. There is certainly some oil-burning plants that are mostly now moving over to gas. A tremendous amount of new investment in gas-fired plants, which due to the fortunate discovery of gas off of Nova Scotia, has made Maine a lot like some of the States around the Gulf of Mexico, pretty fortunate to be close to.

But what has resulted is a lot of generation is built there. It is trapped behind transmission, so it can't really get out. So there are some issues there.

But that has generally resulted in a pretty glutted market. And so your supply is well in excess of your demand there. So I think it is driven by the fundamental, the cost of the underlying fuel.

And with oil, of course, at $37 a barrel and gas up high due to the cold winter, I do think that I would be surprised if a customer saw a bill lower this year than last.

But I think it would have been true under a regulated environment as well. I am not that expert on the, I don't really have much more to add on the transmission issue, that Kyle didn't already cover.

So in light of my admonition, I will just be quiet.

Mr. ALLEN. Thank you very much. I yield back, Mr. Chairman.

Mr. BARTON. Thank you. The gentleman from Georgia. Mr. Norwood is recognized for 8 minutes.

Mr. NORWOOD. Thank you very much, Mr. Chairman. I want to thank you for this hearing. It is critical in my mind that this country have a national energy policy and I thank you for your discussion draft, first round of the first bill.

I have to say that I am more than a little peeved that as many important things as there are that we need to deal with, with a National Energy Bill, I end up coming back every time talking about the same thing.

One of the most contentious parts of the bill, which is the electricity title. And it is time to legislatively put that to bed, and quit waiting on the Federal Government and the executive branch to write rules and regulations.

Either we do it or they do it. And if we omit anything from our bill, they are happy to do it through rule and regulation.

Let me go to where I always go. Pat, same old subject. Incidentally, I noticed your comments on native load that came back to Mr. Whitfield.

You implied, at least, from what you said, you thought that was a good thing, and it certainly is State law in many cases where a local utility really has to take care of their local customers first.

Be good enough to write me a letter as to why your commission keeps referring to that as discrimination. You know, that just sort of sets folks up when they first start.

It appears to me, and I know that you have said to me that you have a desire to correct the inefficiencies in order to ensure reliability and maximum efficiency across the electrician transmission grid.

You have said that directly to me in our office. And what I have concluded over the last year or so, not so much about what you have said, but sort of the actions, your actions and the committee's actions.

If I catch on to this at all, it appears to me you want to Federalize the transmission grid and control costs because, in your view, that is the only way that you are going to ensure reliability and maximize efficiency.

Now I didn't come to that conclusion overnight. This has been going on, as you know, for a good while. But that is where I think you are, regardless of what is being said.

That seems to me is to what your commission wants to do. We will take over. We can do it best. How can we possibly be efficient unless we do it from Washington, and by the way, we will control the prices in the process for that.

Now, those of us from the southeast, that causes us problems. And I want to back this up with just a little history and see if you can remember some of our previous encounters.

When we met here in the committee in December 2001, you and I had a discussion about, new language to me, supply margin assessment, known as SMA. Which basically the purpose of which is to force a few companies and mandate a few companies into RTOs. Do you remember that carrying on we had in December?

Mr. WOOD. I do.

Mr. NORWOOD. You know we weren't on the same page, as you may recall. In fact, we disagreed a lot that day. And it seems to

me that the SMA, this supply margin assessment, has sort of disappeared.

At least it seems to have been pulled back or at least it certainly hasn't been implemented. But those of use who are on constant alert for what might come from you guys next, know that it is still out there.

I asked you what affect an SMA might have on the electric rate of my constituents. And I do have interest in that. I know it may surprise you, but I do.

And you told me that no study had ever been performed to determine what affect an SMA would have on our constituents. And, I am sure you recall, I took great issue with you on that subject.

Now, stay with me just a minute because I am trying to make a point of where we have been. Let us fast forward just a little bit to last fall.

My staff comes to me and says that now the commission has decided since they aren't going to use SMAs, that there is a notice of proposed rulemaking about an SMD. That reminds me that maybe you didn't give up on the SMAs, you just want to force everybody into a mandatory RTO.

Now just so you don't take this personally, because I don't want you to, I despise, at every level, heavy handed tactics of a Federal agency, which show little or no regard for the respect of the legitimate, repeated, over and over, Mr. Chairman, repeated concerns of an entire region of the country.

It doesn't matter to me whether you call this darn thing an SMA or a QRP or an SMD, I have got a big problem with you trying to affect proposals that affect my electric rates in Georgia, my constituents that I don't think are going to be very positive at all.

I think that you can, if you are not very careful, that you are going to compromise the reliability of transmission that we do have.

Now I am sorry everybody doesn't have reliable transmission. I am sorry everybody doesn't have rates that you think they ought to have. But do you know what? We are not unhappy about ours.

And we are going to be real unhappy with anybody who messes with the reliability of the rates in the southeast and the prices in the southeast.

Do you agree that southeasterners, from the Carolinas to Louisiana, enjoy the delivery of low cost, reliable electricity?

Mr. WOOD. Yes, sir, I think it could be lower.

Mr. NORWOOD. Say again?

Mr. WOOD. I think it could be lower. There was a study done by——

Mr. NORWOOD. But do you agree that we already enjoy pretty good rates and great reliability?

Mr. WOOD. I think the rates are good and the reliability is good, yes, sir.

Mr. NORWOOD. Me too. Do you know how many States, State commissions and Governors that have opposed your standard market design?

Mr. WOOD. Yes, sir, and I have visited with the head of that group in Kentucky right after that resolution came out.

Mr. NORWOOD. Well, so that means something to you that all of them seem to be against that. Mr. Chairman, with unanimous consent, I would like to submit this letter of February 21, a letter to Chairman Wood from the Southeastern Association of Regulatory Utility Commissioners about standard market design.

Mr. BARTON. We would have to show it to the minority, but I am sure that they will clear it and we will put it in the record.

Mr. NORWOOD. I hope they will. I suspect some of them would, anyway.

Mr. BARTON. All right.

[The letter follows:]

SOUTHEASTERN ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

February 21, 2003

INSERT OFFSET FOLIOS 1 TO 9 HERE

Mr. NORWOOD. The point here is you are aggravating a pretty large section of the country. What specific—what do we got, 27 second. Pat, we will continue this in round two, if we could.

Mr. BARTON. If the gentleman will yield, Mr. Boucher says he has seen the letter and thinks it is a good letter. So without objection, it is going to be put in the record.

Mr. NORWOOD. Thank you, Mr. Boucher.

Mr. BOUCHER. Well, I didn't say it was a good letter. I said it was okay to put it in the record. Let me modify that comment slightly.

Mr. BARTON. All right.

Mr. NORWOOD. That is a long letter, have you read it all? Well, it appears to be over. Just try not to forget any of that so we can pick right back up.

Mr. BARTON. All right. The Chair recognizes Mr. Waxman for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman. I listened carefully Mr. Norwood's comments and I wanted to indicate that in our part of the country we also have some concerns about the SMD, and perhaps we can talk this through and work together, because I think we share that issue.

Mr. NORWOOD. I hope they will highlight this, Henry, we have agreed on something.

Mr. WAXMAN. Mr. McSlarrow, I would like to ask you about Subtitle B of Title V of the majority's draft legislation. This provision is entitled Freedom Car and Hydrogen Fuel Program.

Is it accurate that this is the hydrogen program the President spoke of in the State of the Union Address?

Mr. MCSLARROW. Yes, sir.

Mr. WAXMAN. And the Energy Information Administration's annual energy outlook only makes predictions about oil demand as far out as 2020. EIA predicts that by 2020, the Nation's oil consumption will grow by as much as 9 million barrels per day.

Is there anything in the President's hydrogen proposal that will decrease oil consumption by the U.S. before 2020, and if so, by how much?

Mr. MCSLARROW. Yes, there is. Even though, of course, the really exciting focus of the hydrogen initiative is on the hydrogen fuel cell vehicles themselves.

The truth is the funding proposal that we have sent Congress, that will be $1.7 billion over the next 5 years, envisions a need to work on near term technologies.

Particularly alternative fuel vehicles, hybrid vehicles, electric——

Mr. WAXMAN. Excuse me, I really want to get very, very specific, because I have so little time and a lot of questions.

Is there anything that you can point to that will decrease oil consumption by the U.S. before 2020?

Mr. MCSLARROW. The greater use of hybrid and alternative vehicles, which I am saying that we are pushing, would do it.

We are proposing a tax credit in the President's budget for greater use of hybrid and fuel cell vehicles. That will do it.

Mr. WAXMAN. The President has said, under his hydrogen plan, we can reduce our demand for oil by over 11 million barrels per day by the year 2040. You testified to this affect as well.

To put the President's statement in context, how much oil does this prediction assume we will consume in 2040?

Mr. MCSLARROW. I will have to get back to you on that.

Mr. WAXMAN. Okay, I would like the record held open for that. And what CAFE standard does the administration assume is in place between now and 2040 in making this projection?

Mr. MCSLARROW. The analysis the EIA has done doesn't assume a CAFE standard, but as you know, the NHTSA has actually recently proposed an increase in fuel economy for light duty trucks.

Mr. WAXMAN. So is there an assumption that that would be the standard in projecting the——

Mr. MCSLARROW. If it is finalized it will be, but I don't think the assumptions that go into it assume a fuel economy standard, so hopefully the savings will be even greater.

Mr. WAXMAN. So the assumptions assume a CAFE standard at the present level?

Mr. MCSLARROW. I believe so.

Mr. WAXMAN. The draft legislation states that the program's goal is to enable a decision by auto makers no later than the year 2015, to offer safe, affordable and technically viable hydrogen fuel cell vehicles into commerce.

I am concerned that under the President's proposal, the U.S. would provide hundreds of millions of dollars to the auto industry year after year and they could simply decide in 2015, that they don't want to make these vehicles.

Is that accurate? Under the President's proposal could the auto makers simply decide that they don't want to produce these vehicles. Could oil companies decide they simply don't want to install the infrastructure necessary to supply hydrogen?

Mr. MCSLARROW. The truth of the matter is that today these companies are spending billions of dollars in investment. Now they can always walk away from it, that is true.

There is no guarantees in any initiative like this. But the money that we are spending is on R&D that will have its own rewards, with or without the oil or energy or automobile companies.

Mr. WAXMAN. The taxpayers are going to be putting in hundreds of millions of dollars. I would hope there would be some guarantee of a return on their investment.

If Congress had applied this approach to CAFE, the Clean Air Act, the Clean Water Act, or other important policies, in all likelihood we would never have made the progress we have already seen.

Chairman Wood, I would like to ask you about the Reliant transcripts that FERC recently released. These transcripts revealed that as early as June 2000, Reliant managers, traders and plant operators all worked together to shut down power plants in a deliberate effort to increase market prices, and in fact, they did increase market prices.

The transcripts are clearly outrageous. I am concerned that FERC has only released 2 days of transcripts when market manipulations could have gone on for months or even longer.

I am also disturbed that Reliant wants to blame the Clean Air Act for shutting down their power plants. Will you seek and release the rest of Reliant transcripts for 2000 and 2001?

Mr. WOOD. We have, yes, when the filings from the California parties came in Monday we began processes to declassify all the documents that we have in our investigation, and that were provided by the parties.

Under our rules, that takes a couple of weeks, but yes, sir, we will have that out.

Mr. WAXMAN. Thank you very much. Mr. Chairman, my time has expired.

Mr. BARTON. The gentleman's time has expired. We would recognize Mr. Burr for 8 minutes.

Mr. BURR. Thank you, chairman. Let me take this opportunity to welcome all of our panelists. I was in the ante room listening to the questions as they came through.

And when Mr. Norwood asked you, Mr. Wood, about the SMD as it related to south, I think you started to respond to him that there was a study that was done.

And in that study there was a scenario that basically said that if everything were perfect, including participatory funding, that there might be as much as a 1-percent savings to those areas in the south.

And I guess my question to you was, in that answer to him, were you also going to say that there were eight scenarios in addition to the one that showed no savings or a cost to the south, on that same study?

Mr. WOOD. I was actually not going to say that. I think the study, the eight scenarios are in fact ones that I think are very unlikely to be the scenarios that go forward.

So the one they modeled, in fact that's a good reason why you model, is to find out what market characteristics should we have in the south so that customers can get the greatest benefit from efficiently dispatched markets.

Mr. BURR. Well, I am sure everybody should go out and read that study, because they may come to a different conclusion as to which one of the nine scenarios is in fact closer to the reality of what the market place might look like.

Let me ask you also, I think this was clear and I am not sure in your testimony, but certainly in responses to questions that I have asked you before.

Can you ever envision that there is a point in time where FERC would ask for expanded jurisdiction on international sites that companies, that through mergers, where you would have jurisdiction to regulate those international points?

Mr. WOOD. I don't think we would ask for that, sir. I think, as you heard, our plate is full. But, you know, there may be a move somewhere from the SEC or from the investor community to have a regulatory view of that.

Mr. BURR. But you don't see FERC's expansion overseas to be an effort that you are supporting or encouraging and suggesting?

Mr. WOOD. I think our expansion of recent months has got me in enough hot water, so I think I will leave it at that.

Mr. BURR. Let me ask Mr. McSlarrow, as DOE. Do you ever see a point where the Department of Energy would actually suggest that FERC have this jurisdiction outside of the country?

Mr. MCSLARROW. No, I don't.

Mr. BURR. Would DOE's position on the current merger authority of FERC be that it is sufficient and they would not expect or ask for further merger authority than the current provisions that are provided?

Mr. MCSLARROW. I believe it is sufficient. And, as I testified earlier, we would encourage keeping it.

Mr. BURR. Let me, once again, thank the witnesses for their willingness to be here today. It seems like this is always an important annual thing for us to get into and I hope that I will encourage all members to go back and remember the answers and the questions that we have gone through today.

But I would also encourage those who sit at the witness table, to go back and read the questions and the answers and let us all remember it for the next 12 months.

I thank you, once again, and Mr. Chairman, I yield back.

Mr. BARTON. Does the gentleman yield back?

Mr. BURR. Yes.

Mr. BARTON. Oh, my. Mrs. Capps is recognized for 6 minutes.

Ms. CAPPS. Thank you, Mr. Chairman. Mr. Wood, Chairman Wood, I would like to follow up on my colleague, Mr. Waxman's query of you regarding the disclosure of information.

You said that FERC would declassify documents from the California parties. And I want to ask are these all the documents that FERC has that might show market manipulation?

And if I could read you just a statement from a local newspaper, the Ventura County Star, one of my papers, a columnist this morning has a piece under the title, "A Snake Under Every Rock, U.S. Keeps Evidence of Price Gouging Secret."

Mr. Tim Hurt says. "Every Californian who pays a utility bill has been ripped off. An agency of the Federal Government has in its hands evidence that identifies who did it and how. For now, however, that evidence remains a secret." I was a co-signer with Mr. Waxman of a letter and to make you understand that there are many of us who really do feel our constituents are deserving of more information.

So I want to press for answers to this long, sordid chapter in energy history in California that is still being paid for by the State.

And is there more. What can we expect from you?

Mr. WOOD. Well, first of all, since having spent a lot of time before this committee, one of the main reasons I was interested in this job was to clean up that mess.

Ms. CAPPS. Thank you very much.

Mr. WOOD. I think it was a disastrous chapter in energy history of recent years and not only hurt your State and a number of others out west, particularly.

Ms. CAPPS. Yes.

Mr. WOOD. But significantly, about the efficiency and workability of markets. The information, there are two kind of pots of information I think that are before the commission that are both done under a, were information that were collected under protective orders.

One was a process we began a year ago in February 2002, to investigate the manipulation in the power markets and in the gas markets out west in 2000-2001.

Much information has been collected in that process, including information with other agencies, the Securities and Exchange Commission, Department of Justice, CFTC, are the principle ones, there are a few others.

They have been doing joint depositions, etcetera, with those agencies and they are pursuing their own remedies that they have under their laws. Some of which are ongoing.

So it is important as we go through our declassification of the data that we have collected, which is separate from the data that came in Monday, from the California——

Ms. CAPPS. Right.

Mr. WOOD. [continuing] there is significant overlap from my initial read. It is a lot, but from what I can tell there is a lot of overlap.

But there are some issues that both, that both sets of evidence have brought in that don't overlap. It is important for us to make sure that on the ongoing prosecutions, particularly of a criminal nature, that we make sure that that type of information is retained by the Department of Justice, for example.

And that it is not basically put out there yet so that the trials are thwarted. Other than that, however, we have begun our process that is required under our rules to undo a protective order, to contact the parties to let them know this specific information is going to be released. To hear back from them why they would protest that. In fact, they may not. They may want the full story out and hope that they do. And that is going through our process, which is relatively abbreviated.

And I think in the next couple of weeks, 3 weeks, perhaps, we will have that from both camps.

Ms. CAPPS. And thank you, because now I understand that you will let us know, not only what you are going to share, but also kind of a time line so that people can expect that, granted that in the beginning you needed to protect some of the information with interdepartmental issues, but now we can expect such and such and such and on a time line.

But now I have a further question, and that pushes it back. In addition to disclosure, and as a part of disclosure, then Californians are going to want to know what you are going to do with this information and the knowledge of the wrongdoing that is there.

Part of your task, on our behalf, is to gather the data, and you certainly have a lot of it. And we now, we have got certain phrases that just really hurt as we understand how we were manipulated as a state.

And it is the taxpayers that have been manipulated. FERC has an obligation to ensure that rates are just and reasonable.

And when flagrant abuses just receive a slap on the wrist and have to pay a fine, but with the amounts being what they are, it is hardly a penalty.

And these companies are allowed to go right on, it doesn't help the confidence that we seek. And also we want redress. I mean we have a State with a huge budget problem in California now.

Some of it is other issues, but a lot of it is because of the burden that was placed upon the State as a governing agency, but also citizens in the abuse of power that these companies put upon us.

Can you be specific about what sanctions you can impose. How can we know that FERC really has a regulating arm to it?

Mr. WOOD. Well, we do have, and that is, I think, you have probably heard from all three of us, we could use some more penalty authority. And the Senator for your State has put that forward, as well.

But we do have some existing remedies which we will pursue to the maximum extent that we can.

Ms. CAPPS. So you want some guidance from us——

Mr. WOOD. Actually we just need increased authority under both the Gas Act and Power Act to have greater penalty authority than we do today.

We can get, we can get the refunds——

Ms. CAPPS. And one final question. Oh, I am sorry.

Mr. WOOD. We can get the refunds, we can required disgorgement of profits from past activities that violated the law or the rules. And we will do that. That is what we are set up in the proceeding to go back an identify where violations happen and force a disgorgement of the profits from those transactions.

That is the most we can do. We cannot assess additional penalties for punitive or of a nature like that. We can, and have considered, yanking certificates, basically saying you are not in business anymore.

Ms. CAPPS. Can you do that?

Mr. WOOD. Yes. And that is certainly——

Ms. CAPPS. Will you do that?

Mr. WOOD. We will. If merited by the facts, we will do that. We have got, in fact, from our August report, which was an interim report to the public, set up, I believe, four or five proceedings from parties that we found earlier on that had violated the rules.

And that was one of the remedies we put forth in the trial before the Judges was to basically yank or amend significantly their certificates for operating.

But that is, those are really the two. Disgorgement of profits, i.e., refunds, or yank the certificates.

Ms. CAPPS. And revoking market rates would have helped as well.

Mr. BARTON. The gentlelady's time has expired. The Chair would recognize the gentleman from Illinois, Mr. Shimkus, for 8 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman, I have four different items that I want to try to get covered in the time I have available.

First of all, just a point for the Deputy Secretary McSlarrow. The Clean Coal Institute at SIU, Carbondale, does a tremendous amount of work in clean coal technologies and DOE is a major partner in that and I want to encourage you to continue in that vein.

I toured the facility last week and I guess what amazed me was the ability to, the initial separation of the coal and the microscopic analysis of what is actually good to be used and what is not to be good.

And early separation might address a lot of the problems. And also the, I mean there is just a lot of good research done there.

The other thing they brought about was in the hydrogen debate, I was on tv with my colleague, Tom Allen, early this morning for

the chairman. And the people who were on prior to it, I think it was Shell Hydrogen.

And I don't know the automobile maker, but they are announcing today at a Shell Gas Station that they are going to place a hydrogen fueling pump there and have a hydrogen cars in, running around in DC.

So, this is not a farfetched proposal. This is around the corner and we think it really addresses a lot of the concerns. Hydrogen cars also need fuel. And fuel will come from a lot of different locations.

There is some neat research, again, going on at SIU University, Southern Illinois University at Carbondale at the Clean Coal Institute where, of course, coal could be a major, the major commodity for hydrogen production.

So I want to encourage that research and development and that partnership with the University. The second thing, well another thing, I do appreciate the chairman's draft.

It moves us forward and we are going to move an energy bill and there is some contentious issues. But the chairman is showing leadership and we are going to move on it.

So any comments we can have from all the stakeholders is going to be, we are all going to appreciate. This great debate on the standard market design I think is important.

There are transmission constraints across the country. Illinois is a perfect example of a State that over produces, but because of some transmission issues cannot get the overproduced energy to other States.

A good case study is the power line from Chicago to Wisconsin that is, it has been constrained for years. There has to be, this is interstate commerce. And it is commerce going across State lines.

So somehow we need to bring the parties together to get commerce flowing and there has to be a good cop on the beat. So I want to applaud this debate.

I am looking forward to the white paper in April. And I would encourage all the stakeholders to take a good look at that.

Maybe there is less to be feared in that proposal once it gets published than what we are hearing right now. So I want to encourage that addition.

Now for Secretary McSlarrow, this is another issue. The Department of Energy was sued by environmental groups over the Federal Government's failure to meet the goals in EPAct. And I have a long, since my memo to Congress, my first bill that I passed, signed into law, dealt with EPAct.

And our ability for alternative fueled vehicles to reduce our dependence on foreign oil. A Judge ended up ruling against the Federal Government and with the environmental community.

In essence saying we are not meeting the law requirements. The Judge gave DOE dates to which they were supposed to submit reports on the progress that the Federal Government was making and whether or not to include private and municipal fleets in the EPAct program.

Can you give me an idea of where DOE stands on these issues?

Mr. MCSLARROW. Certainly. My recollection is that the district court ordered that we produce a notice of proposed rulemaking by February 27. We did, under EPAct.

The determination that was before us was whether or not to extend a mandate on fleet requirements to local governments and private fleets, or as we did actually choose in the notice of proposed rulemaking, to make a determination that that was not necessary because in the Department's view doing so would not appreciably contribute to the goal of replacement fuel vehicles.

And that should be in the Federal Register today or tomorrow.

Mr. SHIMKUS. And we will take a look at that. We, I have been involved, along with Congressman McCarthy, on the soy diesel issue. And again, that first piece of legislation, by giving a 50 percent tax credit, really increased the use of biodiesel from what was then a 500,000 gallons to almost near 25 million gallons of use.

So I think the increase in the use of the product has a great affect on the legislation. If we were able to get that increase in demand based upon the 50 percent tax credit, do you expect that we would have similar numbers if we would move to 100 percent tax credit, as was debated in the last energy bill, and may be addressed in this energy bill somewhere down the line?

Mr. MCSLARROW. I am not prepared at this time to say what the difference would be between 50 and 100 percent. Intuitively, it strikes me that the problem we have is the infrastructure and surrounding in terms of availability.

But as you know, the administration has been very supportive and we have enjoyed working with you on promoting these kinds of products because we think it is vital that they be part of the energy mix in the future.

Mr. SHIMKUS. And I would just say, for just the sake of our discussions, that the infrastructure needs for biodiesel is very limited.

And we actually have biodiesel pumps now in major gas stations and diesel stations across Illinois. The mixing is simple. So there is no large capital outlay.

And we have seen a great use by governmental fleets and the like using the tax credit to fuel their vehicles on biodiesel.

And so I would like you to also look at the benefits on how you affect the EPAct problem by the 100 percent credit, as this debate moves forward.

And with that, Mr. Chairman, I have addressed my four issues and I yield back the balance of my time, Mr. Chairman. Not bad, 45 seconds left.

Mr. BARTON. The gentleman yields back his time. The Chair would recognize Mr. John of Louisiana for 5 minutes.

Mr. JOHN. Thank you, Mr. Chairman. As I said in my opening statement, I think that now is really a critical time in this country, in this Congress, revolving around homeland security.

And obviously a huge piece of the puzzle of homeland security must be energy security. America is so dependent and addicted to fossil fuels.

So I think we cannot speak about homeland security in the same breath or we must speak about it in the same breath with energy security.

So I was listening very intently and curiously to everyone on the panel that was talking about natural gas, in one respect or another.

But I repeatedly heard, whether it was from Commissioner Brownell, who said it is a slow, silent erosion, or Chairman Massey who talked about the reliance and the importance of natural gas; its infrastructure, supply and availability.

The chairman talked about connecting Alaska down to the lower 48s with a natural gas pipeline. I believe that should be part of this bill.

And of course the Under Secretary talked extensively about natural gas and its importance. But what is curious to me is what I said in my opening statement—is that everyone at the table is in agreement that increasing the domestic supply of natural gas today is where we need to go.

And therein lies the problem and the hang up that I have. We are pursuing opening up ANWR for oil and gas, and constructing a pipeline, which I am supporting, have supported, and been on record as supporting.

But I don't understand what makes Alaska so special or a silver bullet standpoint, compared to the eastern Gulf of Mexico.

It doesn't make any sense. I think I know the answer to that. But the election is over. And I really believe that we should look beyond that.

So I ask Mr. McSlarrow, do you believe that we can get natural gas from the eastern Gulf of Mexico into the domestic market before we have built a pipeline from Alaska down?

Mr. MCSLARROW. Certainly.

Mr. JOHN. Yes. So, again, I think I know the answer to that and I am going to continue on that road to continue to talk about, you know, the huge reserves in the Destin Dome.

We have an infrastructure and a pipeline that connects into Tampa, or is building toward there, to supply natural gas which seems to be the fuel of choice in a lot of areas because of its environmental friendliness.

And I am going to continue my quest in making sure that we open up the eastern Gulf of Mexico, because, I mean, obviously, Louisiana is poised and ready, along with Alabama and Mississippi to service that area.

The infrastructure is there today and I think we are missing it as a big part of the big picture. If we know natural gas is part of our solution today, and the demand is going to be through the roof, in the future, then that has to be part of any comprehensive energy plan.

And we will continue to work on that piece. Second, as a plan, we passed an energy bill in the House, as you well know, that did not have an electricity title.

This bill, is a comprehensive energy bill with an electricity title, and is a little bit different from previous legislation.

The chairman, Mr. Barton, had a separate electricity title last year, that we discussed a little bit in this subcommittee. But I am a little bit concerned about this issue. And I am slowly educating myself and having to see how it all fits together.

But what I would like Commissioner Wood to respond to is the issue Chairman Barton alluded to in Virginia and the legislative initiative over there that passed and that is going to prohibit an energy company from joining an RTO.

If we don't continue to work with the States, individual States, I think you are going to see legislatures in Mr. Norwood's State, from what I heard, Mr. Burr's State, and certainly in Louisiana take action.

We are going to continue to have either legal battles or legislative problems and hurdles that we will have to address or we are not going to get anywhere.

So I want to encourage the commission to continue to work with the legislatures in those States that have most at risk. And I yield the balance of my time.

Mr. BARTON. I share the gentleman's frustration and we will work with him on some of those issues. Chairman Meserve of the Nuclear Regulatory Commission has an airplane to catch.

So we are going to release you from duty. Everybody else is smiling and saying they wish they had airplanes to catch too. But we appreciate your service.

This is probably the last time we will have you before our subcommittee and we wish you the very best in your future endeavors.

Mr. MESERVE. Thank you, Mr. Chairman, I very much appreciate that. I very much enjoyed working with you and the committee.

And I would be very pleased to respond to any questions for the record.

Mr. BARTON. We will have questions in writing if members who have not yet asked questions, wish to ask you questions.

Mr. MESERVE. Good, thank you.

Mr. BARTON. Thank you.

Mr. JOHN. May I be recognized, Mr. Chairman?

Mr. BARTON. Mr. John.

Mr. JOHN. Mr. Chairman, I just have a quick request. Since I only, I took up all of my 5 minutes on my own questions, I didn't get an opportunity for any of the panelists to answer any of my questions.

Mr. BARTON. We noticed that.

Mr. JOHN. Okay, so I just gently request maybe some time a little later on?

Mr. BARTON. I think——

Mr. JOHN. For the panel, not for me.

Mr. BARTON. [continuing] we are going to do a second round. We are going to give them a personal convenience break and then do a second round with this group. Mr. Shadegg is recognized for 5 minutes.

Mr. SHADEGG. Thank you, Mr. Chairman, and I appreciate you holding this hearing. I also very much appreciate the attendance of the witnesses.

Mr. Wood, I want to begin by focusing on an issue that you are working on, but I don't know that we are getting anywhere.

Unlike some of the other questioners here today, I strongly favor your efforts, the commission's efforts and the President's efforts to move this industry from a monopoly structure into a competitive market structure.

I think that needs to be done and I think that over time it will produce dramatic cost savings. I know of no place where competition effectively initiated, has not produced cost savings.

Having said that, I guess I must say that at least for me in the west, you are making my life difficult. You have managed to get my public utility, my investor-owned utility and all of the Governors of the west united in their concern about SMD.

All of them, even though they have diverse interests, are saying that SMD does not work. The Western Governors Association has written you and said SMD will not work in the west.

Both the IOUs and public utilities in the west have expressed to me and I presume to you, and I have seen documents that have been sent to you that SMD does not appropriately fit in the west.

I note that it appears, and I think it is pretty well acknowledged that the elements of your standard market design proposal have been extrapolated largely from the Pennsylvania, New Jersey, Maryland area, a very dense market without lengthy transmission lines.

And it seems to me that in their criticism, the western Governors have pointed out that Arizona is quite different. I also note that your own staff has acknowledged that the infrastructure in the west is very different.

For example, on July 17, of this year, I guess of last year, your staff said energy infrastructure in the west, this is a quote, is insufficient relative to projected energy demand, and additional infrastructure as expansions are needed to support a competitive market.

You said recently at a speech you made within the last few weeks, that recognizing the differences, east to west, market to market, that perhaps SMD could be, and the words I am reading from, phased in regionally rather than requiring adoption nationwide at the same time.

My first question of you is have you heard of Edmund Burke and understand his theory on gradualism?

Mr. WOOD. I was an engineering major, so I will say I have heard of him, but I can't——

Mr. SHADEGG. Well, he was not an engineering major, he was a philosopher. And one of this theories was that in bringing about change, particularly social change in society, one ought to look at a model of gradualism, making a change gradually.

And I think I would urge that upon you. I would hate to see rejection of SMD bring about the defeat of competition in the long run in the energy market.

When you said that you thought perhaps it could be phased in over time, one of my concerns would be, that then raises the question, well, would you continue to propose that SMD be adopted as the rule for the country and leave it in your discretion to decide where it gets phased in, or are you open to a proposal under which SMD is adopted for a region of the country where it might work well, and other regions of the country are left to have it phased in for them at a later point in time on a basis other than your discretion?

Mr. WOOD. I think what I meant in that statement that you quoted so accurately, was that there could be different time tables for different parts of the country to be phased in.

I think it depends on the underlying nature of the infrastructure, what the retail regulatory structure is in the markets. Really, where are the markets today.

So, I mean, when we adopted kind of an October 2004, timeframe, at that time all the forming and working regional transmission organizations in the country indicated that they expected to be there by the end of 2004.

So we did not feel like that was really a push to do that. But, I think there is a realization that we have got to work with existing RTOs that are there. The one in Arizona is one we have given conditional approval to.

And the one in the northwest is another. California is existing. But we cannot ignore that problem. I mean, as I mentioned to Ms. Capps, there was a significant bad event that happened out there before we got on the commission, and we would be remiss in our duties if we did not take steps to make sure that that never happened again.

Mr. SHADEGG. I understand that and I greatly appreciate that answer and I think it will be very helpful. Let me ask you one other question. A great deal of the concern in the west and among our corporation commissioners, who have written you about SMD, is they believe they are making progress toward voluntary RTOs already.

One of my questions is what would be objectionable to a structure in the west where you had a voluntary RTO and if it was not functioning to allow true competition giving FERC the authority to impose to, A, investigate it, and B, impose severe penalties if in fact that RTO was not effectively promoting true competition?

Mr. WOOD. Let me make sure I got that. It was a lot of interesting thoughts that I haven't really digested before. The voluntary RTO in the southwest is moving forward.

In fact, the big Salt River project is not under FERC jurisdiction anyway. So they have got to voluntarily join. And without them and without western, WAPA, it is just not going to be an effective grid. That is a big part of the regional grid.

Mr. SHADEGG. SRP is already in, though, they are voluntarily in.

Mr. WOOD. And WAPA hopefully will get there. I mean fundamentally that has got to be the platform on which it is built.

So I think, as I indicated, we already conditionally approved that. What we are really focusing on now is making sure the three in the west actually work well together.

Because the fact there were big dislocations in the market design out there led to a lot of the manipulation that we have pointed out and that we are reviewing now.

So that is really the course making sure that what they look at in the desert southwest works well with the northwest and with the California market.

So I think we can get there. It is awkward because there is no one really in charge out there to make kind of a corrective decision. But I think our work with Governor Hull, who is just the imme-

diate past President of the Governor's Association out there, was a good platform to build on that.

And I expect that we will continue work through the Governors and through the State Commissioners out there——

Mr. BARTON. The gentleman's time——

Mr. SHADEGG. My time has expired. I appreciate the openness and I would like to discuss alternatives as we go forward.

Mr. WOOD. I would be glad to.

Mr. BARTON. All right, we are going to recognize Mr. John, I mean Mr. Doyle, for 5 minutes.

Mr. DOYLE. Thank you, Mr. Chairman.

Mr. BARTON. No, no, Mr. Doyle.

Mr. DOYLE. I know we look a lot alike Mr. Chairman, thank you. Mr. McSlarrow, welcome. I have a question. It is widely recognized in industry that, even in the automotive industry, that the path to transportation fuel cell applications is through stationary fuel cells.

And most of the experts that I have talked to tell me that there are at least two types of stationary fuel cells, solid oxide and molten carbonate, that are commercially deployable in the very near future.

We are talking maybe 2 or 3 years. So my question to you is why are we putting so much money, and I don't necessarily have a problem that you are putting money into the hydrogen program, but why are you putting all this money into that program that we are talking about 15 to 20 years from now.

And at the same time in your 2004, budget, you are cutting by over $16 million the line item for the stationary fuel cells.

You know, it seems to me that if we want to get these vehicles on the road sooner rather than later, and start saving all of this oil that we talk about saving by getting these cars on the road, why aren't we putting more resources into the technologies that are going to be commercially deployable in the next couple of years, rather than picking winners and losers.

You know, I am just curious what your thought is on that?

Mr. MCSLARROW. No, it is a tough question. And the interesting thing is it is precisely because things are so nearly deployable that we will move money away from that.

It is a philosophical choice the administration has made. And we do it across the board. But we are, as you said, making great success from solid oxide fuel cells.

We think they have a big future in terms of the stationary sites. But across the board we have made a commitment to investing in long-term R&D where the risks are going to be the greatest and potentially the reward will also be the greatest.

We think that is the appropriate way to direct the R&D. So the nearer our technology comes to actually going to commercialization, the more likely you are to see that we are going to shift resources to another place.

Mr. DOYLE. Listen, I am a great supporter of funding long term R&D too, I think that is very important. It just seems to me that if the goal here is energy independence, and that seems to be, you know, a front burner issue now because of all that is going on around the world.

And, you know, we are getting ready to try to drill oil up in Alaska because we have got to be energy independent because we are in a crisis right now.

Why, you know, if we are in a crisis and we can deploy a technology that is environmental sound, safe, and doesn't pollute and could save us hundreds of millions or barrels of oil, and we are 2 to 3 years away from doing that, why are we cutting the funding to that?

It just doesn't make any sense in the world. And I would just ask you to go back to DOE and talk with your people there.

These programs, stationary fuel cells, have been historically underfunded. And this is a real area that has promise in the next couple of years.

I mean, heck, this could even happen during the Bush Administration. What did I say, 3 years? Maybe not. But it could happen soon, and I don't know why the President wouldn't want to see something happen on his watch than 15 or 20 years down the road when we don't know who is going to be President then.

I understand this philosophy as you get close to commercialization, you start to pull the money back. That is fine under normal times and when everybody is fat and happy.

That is not where we are at right now. We are in a crisis right now. The President keeps telling the American people we are in a crisis, we have to become energy independent so we are not being held hostage in the Middle East all the time.

And I would just ask you, go back to DOE and put some more money in these stationary fuel cells. It is just the good, right thing to do for the country and we are in a crisis.

So I want to bring that to your attention and we will leave it at that. To the FERC commissioners, welcome. I just have one question, and maybe you can all take a shot at that.

But we know there is strong support at FERC for formation of the RTOs, and that a significant portion of the country is currently being serviced by these entities.

One of the concerns I have, as we move into RTOs, is that we preserve and in fact enhance the future ability of non-traditional generation sources easy access to connect to the grid through these RTOs.

For instance, I am thinking of the advances we are making in fuel cell technology and the growth of combined heat and power systems.

What steps do we need to take legislatively or do you need to do through regulatory action, to ensure that these innovative generation systems will be available to interconnect.

I think Commissioner Massey, that in your testimony you stated that you think the RTO formation will streamline interconnection standards and help get new generation into the market.

When you say this, do you have types of new and developing sources in mind? And I would repeat, that any of you that want to answer this question, what steps can we take in the future to ensure access for these types of generation?

Mr. BARTON. This will have to be your last question.

Mr. DOYLE. You know, I got that right in under the mark.

Mr. BARTON. You all, everybody is really good at right in under the buzzer here.

Mr. DOYLE. Don't forget, more money in those stationary fuel cells, too.

Mr. BARTON. But at least you asked it to Mr. Massey, and I know he will give a shorter answer than Chairman Wood would have given. He says the commission shares your goal.

Mr. DOYLE. It is a right wing conspiracy, Massey. There you go. Give this guy a microphone.

Mr. MASSEY. I am not sure, oh, this one is working. Actually the standard market design is also aimed at interconnecting and providing a market for the kinds of resources you are talking about with a day ahead market and locational marginal pricing, which the distributed generation organizations and distributed generators strongly support.

No. 2, we have an interconnection rulemaking underway which would streamline the interconnection processes and rules for small generators.

And we hope to finalize that soon. And I also believe that the RTOs will streamline interconnection because they won't have any incentive to delay the interconnection process.

I believe that they will seek to interconnect these generators as quickly as possible.

Ms. BROWNELL. Can I just add something because Mr. Doyle and I come from the same State where we had an ISO, now an RTO.

And, in fact, what we saw was the introduction of new technologies because market forces could speak, investors knew that they had a fair shot at getting interconnected, and customers expressed, both at the wholesale and the retail level, some choice in being innovative.

We saw the growth of wind farms in Pennsylvania. So I think that is a classic working laboratory, albeit, perhaps, based on regional differences, the very fact that there are wholesale markets where choices can be expressed and investors can have confidence in the equity of the rules, will attract just the very kinds of innovation that you are talking about. And has. We know that.

Mr. BARTON. All right, the gentleman's time has expired. The Chair recognizes the gentlelady from New Mexico, Mrs. Wilson, for 8 minutes.

Mrs. WILSON. Thank you, Mr. Chairman. I wanted to thank all of you for joining us today. I am also one of those that believes we need a balanced long term energy policy for the country that includes both increases in production and an emphasis on conservation and new technologies.

There are some things that I wanted to focus on as far as questions are concerned. I wanted to associate myself with Mr. Shadegg's comments about the standard market design, as a western legislator.

And Mr. Wood, I wonder if you could expand a little bit on which elements of this standard market design are most important to you, so that we can figure out how we can work with you to alter the approach that FERC is taking here?

Mr. WOOD. Actually, let me see if I can make that simple, because I did put that in my testimony, Representative Wilson.

The, and I will just call reference to that, if you want to look it up later. On Page 7 at the bottom. But I will just go in those, independent grid operator, single tariff. In other words, everybody plays by the same rule.

A long term bilateral contract market, which is not imposed, it just is what it is. A voluntary short term spot market with transparency.

Regional transmission planning, so it is bigger than just one utility looking after its plan. Locational price signals and transmission, basically property rights, so people have a defined property right.

And appropriate mitigation so that you don't have repeats of what happened out west. Those would be the eight, kind of the core eight that I have been talking about in recent public——

Mrs. WILSON. Of your core eight, which ones are the core of the core eight. I mean that is a pretty long list. What is the most important to you? What are the top things we are talking about here?

Mr. WOOD. The independent operator, which is the RTO, which is what has been proposed in your home state. The spot markets.

Mrs. WILSON. Okay.

Mr. WOOD. The transmission rights.

Mrs. WILSON. That is three.

Mr. WOOD. And the market monitoring.

Mrs. WILSON. Thank you. Mr. McSlarrow, I wonder if you could summarize the position of the Department of Energy and efforts you have underway to reinvigorate the nuclear power generation capacity in this country? And I wonder if you could expand on that a little.

Mr. MCSLARROW. I would be glad to. As you know, nuclear energy provides about 20 percent of our electricity generation.

From the President's National Energy Plan forward, we have made very clear working with you and others that we believe that nuclear energy is important and has to be part of the energy mix for the future.

Now we are approaching that several different ways, because there is no question that nuclear energy brings with it its own challenges.

One of those, obviously, is what do you do about nuclear waste. Now Congress has answered that and moved us down the road a good bit by the suitability and determination and then the selection of Yucca Mountain.

And we are going to have to move forward with the license application. Another is what does it take to convince those people, investors, principally, to front the capital necessary to build these kinds of projects so that we don't have the kind of horrific examples with Shoreham and WAPA and other classic cases that happened in the last 30 years.

And so we are working with the NRC and Chairman Meserve to move forward with what we call early site permitting processes designed to speed up and provide more certainty with the regulatory process.

In addition, we are trying to focus on the future of nuclear energy in terms of advanced fuel cycle and advanced reactor concepts.

And I know you are personally very familiar with all of this, but briefly, one of the things we are doing is a collaboration called Gen-

eration IV, which is a collaboration with nine other foreign countries on future reactor types.

And then, most recently in the 2004 budget request from the President, we have asked for $63 million for a program we call advanced fuel cycle initiatives.

And that is designed to produce technology that will allow us to reduce the waste in the first instance, reduce its toxicity and also to make any of the waste from nuclear energy more proliferation resistant.

And so if you attack all of those things, waste, proliferation, investor certainty, we believe you can get to a point whereby 2010, which is another program we have, we can actually build our first nuclear plant in a long time.

Because, as I said, it is, we believe it is vital for our future.

Mrs. WILSON. Thank you. Mr. Wood, I have a question about the gas price indices. As you know, there has been recent information that the data that is given by the companies that do submit data is false or manipulated.

And there are companies that rely on those indices in their contracts to set prices, and I think you also use them for some pipeline tariffs.

Mr. WOOD. Yes, ma'am.

Mrs. WILSON. What is the solution to this? What are you looking at for getting a more reliable index or what are your answers?

Mr. WOOD. We have had a couple of workshops lately focused on actually other issues and this issue has crept into it as well.

We got a report from the Committee of Chief Risk Officers, which is a group of energy industry, you know, executives that were trying to figure out the best way to get past the mess that the financial books are in right now.

And, among other things, looking at accounting fixes. But one of the issues that they have focused on and proposed some solutions to last week, was the gas index and how that ought to be dealt with.

On the other hand, the current providers of those indices are a number trade journals, publications. They have also proposed revisions to their own collection methodologies.

At the end of the day, though, there is a question. If everybody doesn't have to play, in providing data, how do you know you are really getting the right universe of information to report an accurate price.

You know, by and large everybody that wants to trade AT&T stock, trades it through the New York Stock Exchange or one of the publicly traded exchanges and you have got that range and that average on the information from everybody.

We have nothing like that in the gas industry. We have got more like that in the electric industry, but it is pretty new. It is something that we just installed last year.

We don't have authority to do this fix on the gas side. We are going to have a conference, we have announced that we are doing one in April, once we get past all the California dockets and the important things we have to resolve there, to focus on this answer.

So if I could maybe beg off a month and give you a good answer after we hear from the industry what, and the parties and the customers, what is really the smart thing to do.

But it needs probably a little bit more attention.

Mrs. WILSON. Okay, thank you. And finally, Mr. McSlarrow, and this is not something you can probably answer here, but I would like to see the answer probably as a follow up to our discussion here today.

I understand the department is changing its criteria for the EnergyStar windows program. And I wonder if the department could provide me with the criteria the department will be using as it makes a selection between the two proposals.

And if you could take that back and get us an answer, I would appreciate it.

Mr. MCSLARROW. I would be glad to.

Mrs. WILSON. Thank you, Mr. Chairman.

Mr. BARTON. Mr. Markey, you are recognized now.

Mr. MARKEY. Thank you, Mr. Chairman.

Mr. BARTON. For 4 minutes and 1 more minute to go over.

Mr. MARKEY. Thank you, Mr. Chairman. First I would like to congratulate the Nuclear Regulatory Commission. They may not have an emergency evacuation plan for around nuclear power plants, but the definitely had one to get out of this committee to escape the full questioning and I want to congratulate them. Mr. McSlarrow——

Mr. MCSLARROW. They left me holding the bag.

Mr. MARKEY. You have got the cleanest face here, Mr. McSlarrow. Today's Washington Post reports that some in the administration, as well as some in South Korea and Japan, have decided to give up on trying to stop North Korea from getting nuclear weapons.

Except the fact that they are definitely going to have dozens of nuclear weapons instead of possibly having one or two, and focus instead on trying to prevent North Korea from transferring nuclear technology to other countries.

Mr. McSlarrow, I received a letter from Secretary Abraham yesterday, responding to a letter which I sent him in October.

In this letter the Secretary acknowledged that in May 2001, he extended authorization for 5 years to Westinghouse to transfer nuclear technology to North Korea. This is in May 2001.

He reveals in the letter that, "to date approximately 3,200 technical documents have been reviewed for export control concerns. Of these, roughly 3,100 were approved for release to North Korea, with the stipulation that they only be transferred when needed and the balance denied.

"Roughly 300 documents have been transferred to North Korea." The Secretary then goes on to say, again, "recent actions taken by North Korea clearly violate its international non-proliferation obligations."

The administration is now considering appropriate courses of action, possibly to include suspension or revocation of the May 2001 Bush Administration authorization to transfer nuclear technology to North Korea.

First, Mr. McSlarrow, how long have you been considering the cancellation of this nuclear agreement between the Bush Administration and North Korea?

Mr. MCSLARROW. The—I can't give you a precise date. It is as long as everybody is aware by reading the papers when this crisis first erupted on the front pages is about when discussion took place within the administration as to what the appropriate steps are.

And we are trying to pursue this through multilateral, diplomatic negotiations.

Mr. MARKEY. So did you begin reconsideration of this agreement immediately after learning of the secret or confirmation by the North Koreans of their secret nuclear weapons program?

Mr. MCSLARROW. We did. But there is also less there than meets the eye Congressman. I mean this is not nuclear technology in the sense that most people would understand it.

This is licensing and safety procedures. We have always followed a policy of not transferring nuclear technology and we are following that policy and we won't make a——

Mr. MARKEY. But this is an agreement to transfer to two nuclear power reactors to North Korea.

Mr. MCSLARROW. Correct.

Mr. MARKEY. And my question is why haven't you already revoked the authorization to sell two nuclear power plants to North Korea? What are you waiting for?

Mr. MCSLARROW. We are waiting for, to allow the process to unfold.

Mr. MARKEY. What else do they have to do before you would revoke the sale of two nuclear power plants to a homicidal sociopath?

Mr. MCSLARROW. Well, there is not transfer taking place right now, so revoking it or suspending is irrelevant to that point.

What is relevant is the Secretary of State is trying to pursue this diplomatically and I am not going to say, at least in an open session, of what the steps are——

Mr. MARKEY. I don't think, no, the Secretary of State is not advancing this diplomatically. The Secretary of State has yet to take this to the United Nations. It is 6 months.

The Chinese and the Japanese and the South Koreans are basically holding our coat, you know, while we do this alone. And they have not done anything diplomatically. What is holding up the Department of Energy from canceling this agreement, Mr. McSlarrow?

Mr. MCSLARROW. We are not going to make a decision without consulting with the rest of the administration. This is a very delicate issue with North Korea.

Mr. MARKEY. This is very——

Mr. MCSLARROW. As I know you are very well aware.

Mr. MARKEY. This is very scary.

Mr. MCSLARROW. We did actually go to the United Nations. We asked the International Atomic Energy Agency to go to the United Nations Security Council, which they did.

They referred it to experts. But we are pursuing it in multilateral ways.

Mr. MARKEY. I think you are holding this up to reserve the right to still transfer the two nuclear power plants to North Korea. That is what I think the Bush Administration is going to do.

I think if this was happening in Iraq, and you were still considering sending two nuclear power plants to Saddam Hussein, you would charge those who supported it with appeasement.

I am not saying that here, but what I am saying is that this is a very serious issue. It is sending the wrong signal around the world that we are not, with all this evidence about Kim Jong-il, not just canceling these two nuclear power plants.

And I don't care if Westinghouse wants it, I don't care who wants it. There is something more important than private commerce. And it should just be ended.

And we should square up our policy in North Korea with Iraq, or else the rest of the world is going to think that we are hypocritical on this nuclear issue.

And it is just time for us to end it, once and for all. And Bush Administration has to take the lead now.

Mr. BARTON. The gentleman's time—I agree with the gentleman from Massachusetts. I want to associate myself with what you said. I will give the Deputy Secretary a chance to respond and then we are going to go Mr. Otter.

Mr. MCSLARROW. It is a factual dispute. When this first erupted and news of what we found out about the uranium enrichment program took place we halted the oil shipments to North Korea. No meaningful work is being done on the light water reactors.

You can quibble with whether or not the agreed frame work that was agreed to by the Clinton Administration was good policy or not.

The fact is when we found out what was going on in North Korea, things have changed, nothing is happening except a diplomatic initiative to figure out a resolution.

And we are not at the end of that process yet.

Mr. MARKEY. Does the State Department oppose cancellation?

Mr. MCSLARROW. No decision has been made on that.

Mr. MARKEY. They don't oppose cancellation?

Mr. MCSLARROW. No decision has been made.

Mr. BARTON. We are going to have to continue this at a later—we have got two more members on the Republican side. We have got a series of three votes that are going to start in the next 20 minutes.

I am going to ask these two gentleman to do their questions and then I am going to give the panel a chance to have a very brief personal convenience break.

We will start a second round if we can start it before the series of votes. But if we have to go vote, then I am going to have to release the panel, because we won't be back over here until after 2 o'clock, and we have an entire second panel with seven witnesses.

So, I know that is a little convoluted. If we are quick, we can get some second questions in, if these two gentleman ask their questions in 5 minutes or less.

I will recognize Mr. Otter for 5 minutes and then Mr. Issa for 5 minutes.

Mr. OTTER. Well, thank you, Mr. Chairman, and I appreciate Mr. McSlarrow and the commission for being here today and responding to our inquiry.

I would like to get back to the genesis which provided the opportunity, I guess, the reasons for us to be here today. And let us go back to the energy crisis of 2000.

And primarily, where it really focused, the greatest distortion was on the west coast, the southwest coast, if you will, which caused ripples everywhere else.

Coming from the pacific northwest, I saw some things happening in the lower southwest that were—I can say California—thank you, Mr. Issa.

The lower southwest that were very disturbing because they were running under the guise of deregulation. And, in fact, although I am new to this committee, I am not new to the issue, because we held several hearings in the Government Reform Committee over regulatory agencies.

And what we found was basically that California had released the wholesale price but set the retail price. And then were alarmed or disturbed that there wasn't any conservation in the process.

Had they released, do either one of you gentleman or anybody on the panel, know of any study that was conducted by either the Department of Energy or FERC, to find out how much conservation would have in deed taken place had the market place allowed to work its magic and floated to a level which would have got a certain amount of conservation.

And how much conservation would of we in fact gotten in California?

Mr. WOOD. It wasn't a FERC-initiated study, but the subsequent summer which was, of 2001, which is when California did implement a number of conservation measures, actually is a number of non-governmental types were reviewing that.

But I think the data are pretty clear. I mean if there is a clear price signal in basically either a carrot or a stick, but one of them, that there is a pretty clear response. A flat rate clearly I think your point is correct.

The flat rate just continuing as usual does not send a signal to a customer as my natural gas bill sent a signal to me last night to really watch and conserve and cut down the thermostat or up as it may be.

Mr. OTTER. Well, one of the concerns, obviously, that I have is how much additional information, or I guess I should say regulatory authority that FERC is asking for through either your own agency or through the Department of Energy.

And it seems like we are asking to override the States. We are asking to override regional producers, investor-owned producers of energy.

We are asking to even municipal energy producers. And yet, we haven't gone back and said we are never going to engage in this kind of market manipulation.

If there was ever any serious market manipulation that was engaged in, as far as I am concerned, the reason we gave relief to those who may have engaged in that later on was the fact that we

released the wholesale price and set the retail price, therefore allowing, not allowing the market place itself to work.

But I notice that you didn't ask for any regulatory authority over allowing folks to do that, which I think was the very genesis of the problem in the first place.

Let me just run through several very serious questions that we would have in the pacific northwest and in particular Idaho.

Obviously the transmission contracts under the transmission authority and organizations that you are asking for, concern me because it appears that all of our long term transmission contracts that we are already engaged in, are no longer going to be allowable under the new rule. Am I wrong?

Mr. WOOD. The existing contracts, in fact, we have already approved in the context of RTO West, which is a filing of Idaho Power and others that the existing contracts can either choose to convert to the new service or stay with the old service until the contract runs out.

So that was actually, yes, sir, we have approved that in an order about, in the fall.

Mr. OTTER. So if we have got a 20 year contract on transmission——

Mr. WOOD. Then that stays and we work around that.

Mr. OTTER. Then how would you provide for the standard market?

Mr. WOOD. Well, it is harder. It is just a long transition. But we, as we did in the gas industry, it was the view of us that we do not need to abrogate existing contracts to make this work.

That we work through it over a longer period of time.

Mr. OTTER. Well, my time is about out and I appreciate your response. But, I just want you to know that in my country, in Idaho, almost everything that we produce in Idaho is a value-added product.

And every value-added product has a large contingent of energy in it. Either driving brand new technology or driving natural resources into a form that the world wants to consume. And so energy is, not just important in our lifestyle, it is important in our economy.

It is important to our ability to produce, whether it is on the farm or in the factory. And our ability to live no matter where that is. Thank you, Mr. Chairman, I yield back.

Mr. BARTON. The gentleman yields back. We recognize Mr. Strickland of Ohio for 8 minutes.

Mr. STRICKLAND. Thank you, Mr. Chairman. Mr. Chairman, I have a question that I was wanting to direct toward Chairman Meserve and I was wondering if I could submit that? I will get back to that.

Mr. McSlarrow, if the papers are right, and if we are prepared to accept North Korea as a nuclear power and basically move on from there, it seems fairly outrageous to me that we would accept that without first of all engaging in bilateral discussions with this country to see if we could prevent that awful conclusion from becoming a reality.

But I want to thank you for issuing the Department of Energy's Physician's Panel Rule for the Energy Employees Occupation Illness Compensation Program Act.

From hearings held in this committee and others, we know that workers were placed in harms way at many of DOE sites under the pressures of the cold war. And at least we can provide some assistance for these workers who have been harmed.

I am pleased that the Department included many recommendations from the bipartisan congressional group on both sides of the Capitol.

But today the Energy Department has received approximately 14,000 requests for assistance under DOE's program for claims related to State worker compensation or Subtitle D of the law.

Your staff indicates that a mere seven claims have been processed through the Physician's Panel in the 6 months since the Physician's Rule was issued.

That is seven claims in 2½ years since the bill became law. By comparison, the Department of Labor has been tasked with reviewing claims for cancer, beryllium disease and silicosis, under this same program.

And to date the Department of Labor has received over 39,000 claims, recommended decisions on over 16,000 claims and issued $483 million in payments to 6,700 claimants since July 2001.

In deed, DOL began paying claims 9 days after the deadline for accepting claims and processed and paid thousands of claims in the first 6 months.

And the question that I have is how long will it take for DOE to work through its backlog of claims?

Mr. MCSLARROW. First, let me just be clear. The policy of the United States is for nuclear weapons free Korean peninsula. I don't believe everything I read in the papers, and that hasn't changed.

Second, I appreciate your question about the Physician's Panel and the law and appreciate your leadership on all of that.

First, I do want to at least claim some credit. DOL could not have processed its claims, as you well know, without DOE having gathered the records in the first instance.

We did that, it was the first phase of the program. And we think it is great that they are doing a terrific job on that.

The Rule for our part, that we are monitoring, as you know, did not go final until September 2002. We have barely gotten it off the ground, that's correct.

But the good news is that we are now at a point of processing claims where we gather all the records about a given site or location or contractor.

The hard case is the first one. Once you do it then you start moving right through it and the rejections, I can't give you a final date, I will try to give you one for the record.

But I do know that in short order, going from seven or 14, is actually what I think we are at today, we are going to be going through hundreds a week.

Mr. STRICKLAND. Just a follow up, if I may. It is my understanding that DOE has contracted out the claims processing to a private entity called SEA. How have they been unable to move these claims very quickly, as we know.

I further understand that SEA still doesn't have final claims processing procedures written up and available to claimants. And I am just asking, would you be willing to take a hard look at this to see if SEA is going to be able to do this in an appropriate, expeditious manner?

And, if not, take appropriate action?

Mr. MCSLARROW. I would be glad to.

Mr. STRICKLAND. Mr. Chairman, you weren't paying attention to me earlier, but I had asked if I could submit a question to Mr. Meserve since he had to leave.

Mr. BARTON. Without objection.

Mr. STRICKLAND. Thank you so much. And I yield back my time, sir.

Mr. BARTON. The Chair thanks you for yielding back your time. The Chair would recognize Mr. Issa for 5 minutes.

Mr. ISSA. Thank you, Mr. Chairman. Chairman Wood, I guess, although this is a FERC general question, it probably falls to your broad shoulders primarily.

As my colleague alluded to in non-specific terms, perhaps not fully understanding that California goes considerably north of some portions of Idaho, maybe he doesn't believe so, but in either case the pacific coast, dominated by the State of California, did experience market opportunism or market manipulation.

But that is open for some debate. But there is no question that suppliers of energy took full advantage of the opportunity to get exorbitant rates from the people of California.

And as my colleague, again, loosely alluded to, it was our own damn fault for having a system that just didn't make any sense.

and then when we discovered that is was dysfunctional, we didn't do anything about it for a very long time. Now the part that is open to debate going forward. When we are looking back at 2000-2001, I understand that you are in the process of figuring out the amount of unfair compensation that was received.

And I would like you to explain for myself, for the record, and hopefully for the people of California, because I think it is very important, the difference between our State administration, the Governor's interpretation of what we are entitled to in the way or repay and your interpretation.

And I will just be simplistic for a moment. Our Governor believes that everything over and above the rock bottom rate that you would have paid if you had long term contracts and you hadn't deregulated and what was actually paid, is the amount that the State of California is entitled to.

That is my interpretation. And then I would like you to explain how you are going to arrive at whatever figure you are going to arrive at based on the criteria of something else as to what the wholesale price should have been fairly.

Mr. WOOD. When we, last year, voted a mitigation plan in place to keep the, basically set the price where a competitive market would have set it. That became the bench mark.

Wherever the competitive market, working on supply and demand, had set the price. So you look at what plants would have run. What does it cost to run the most, the marginal plant that is setting the price.

And that is, a big part of that price is what was the gas price at the time. So that is really a very key driver here, and just kind of keep that thought out there.

What we have done, and it took longer than we had hoped, but it took a while to calculate that amount because you are looking at every hour, actually every 10 minute segment of an hour over an 8-month period in the California market with, you know, numerous power plants and power customers and the like.

The difference between what was charged in that hour and what this formula would calculate is really where we have gone forth and sent the calculators off to do.

That, in fact, came back with a number, that is before the commission for review now as to whether it was right or wrong or high or low or just right on, of $1.8 billion.

There was a question raised about the use of the gas price in that number. And if a different gas price is used, that number could change notably.

One of the, I think, largest issues that we have already ruled under our law, we can't do, is to go back before the date that the complaint was filed and do this same calculation going backwards.

And I think that is just an issue where our Federal Power Act is pretty clear that a refund obligation can start as early as 60 days after a complaint is filed.

Now the Chairman's mark goes back and gets rid of the 60 days so that you haven't lost those 2 months, going forward.

But the law we have got to work with today does make that, going back, and I think that is probably a big part of the difference between where the Governor and some of the State officials have talked about on refunds and what the commission has done on the same issue is the building to go backward.

Mr. ISSA. I appreciate that. And I think that will help the people of California understand how a fair price was realized. One quick follow up question or separate question.

The use of public lands for transmission lines in California. Can you briefly State the administration's position and how we and the Congress, when delineating potential lines should approach that?

Mr. MCSLARROW. Our position is that the Federal Government has to do its fair share. We can't, on the one hand, talk about the need for more transmission capacity and just expect to go in the west where there is such huge areas under Federal ownership that somehow it is going to get around that.

I know the Department of Interior and the land management agencies themselves, working with DOE and FERC and some others who have some signing authority, whether it is for gas pipelines or electricity transmission grids, have been working together to try to streamline ensuring that we can make those available.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. BARTON. We have a vote, three votes on the floor. We are going to recognize Mr. Wynn for 5 minutes, and then we are going to recess.

And then we will ask you folks to come back. Can you all come back about 2:15? Anybody that has tremendous heartburn? I don't think the second round of questions are going to take that long.

We do have another panel after you. So, I recognize Mr. Wynn for 5 minutes. Then we are going to recess until 2:15, and begin our second round of questions at 2:15.

So Mr. Wynn is recognized for the last question period of the first round.

Mr. WYNN. Thank you, Mr. Chairman. Mr., excuse me, Secretary McSlarrow. Right now our strategic——

Mr. BARTON. Mr. Wynn has 8 minutes. You have 8 minutes.

Mr. WYNN. Thank you, Mr. Chairman. Right now strategic petroleum reserve is down 100 million barrels below capacity.

Is it your expectation that we will be replenishing this in the near future?

Mr. MCSLARROW. Yes. Right after September 11, President Bush directed us to fill the strategic petroleum reserve to its full capacity of 700 million barrels.

We began to do that. It is now at 599 million barrels, it is the highest point ever in its history. Over the last 4 months we have deferred putting oil into the petroleum reserve because of the crisis in Venezuela in order to ensure that we minimize any additional price pressure on crude and on gasoline and home heating oil.

But it is our full intention to get back on track and fill the reserve by the end of 2005 to the full capacity of 700.

Mr. WYNN. By the end of 2005.

Mr. MCSLARROW. Yes, sir.

Mr. WYNN. So that anticipates a likely increase as a result of our activities in Iraq?

Mr. MCSLARROW. It is impossible to anticipate what is going to happen there. What I do know is that by deferring the oil that was supposed to go in the last 3 months, we actually get a premium, is that we get more oil later.

So we should still be on track.

Mr. WYNN. Okay. The other issue you talked about was the hydrogen vehicle and again our dependency on foreign oil. And the target that I seem to hear you saying is 2020, based on the very modest investment of $1.7 billion the President is recommending.

I guess my question is somewhat rhetorical, but why can't we put more money into this if it is in fact a priority.

And why can't we move that up with a major commitment to make it in 2010 rather than 2020, given the fact that after Iraq we are likely to see a much more volatile situation with respect to foreign oil and given the instability in Venezuela?

Mr. MCSLARROW. Originally when our department studied what it would take to produce a hydrogen economy, if you will, the road map showed us, even with high expenditures, not being able to accomplish these same kinds of decisions that you were just referencing until like 2035 or 2040.

The Secretary and the President came back to our analysts and said tell us how fast you can move this up and then tell us how much it will cost?

The answer came back that we could make a commercialization decision by 2015, with the idea of mass penetration by 2020.

And it turns out, working with the scientists who have been working on this, this is one of those things that you just can't spend more money and speed it up.

There are things that are sequential in nature that prevents——

Mr. WYNN. So that is the administration's position that additional funding would not change the timeframe?

Mr. MCSLARROW. Not based on what we know right now. Obviously, if we find out differently down the road, we would be interested in trying to move up the schedule.

Mr. WYNN. All right. Is there, let's see, Mr. Wood. Do you support the reliability language introduced in Barton-Tauzin?

Mr. WOOD. Yes, sir, I think that language looks fine.

Mr. WYNN. Okay. And the other question, and any of the three commissioners may want to respond to this. It says, it proposes three conditions for PURPA relief.

And I don't understand, because they all seem to be relying on a competitive market, how a competitive market addresses a problem of expanding utilization of renewable energy.

It seems to me, and I could be way off the mark, but it seems to me that just the opposite would be the case. If the renewables were more expensive and less profitable that there would be a competitive dis-incentive to use renewables.

So maybe I am looking at this wrong, but could you explain how those three provisions in Barton-Tauzin would work?

Mr. WOOD. All right, this is in Section 7062(m)1(a). The first is, I think to cut to the chase, I think the issue is that, and I remember this amendment from last year, Senator Carper, I think, introduced it on the Senate side.

I am pretty sure this is language that mirrors that. Is that if there is a sufficiently competitive market to sell into, then the requirement from the 1978 law that the only person to sell to at that point was the local utility, so they had to take the power, is that the competitive market is enough.

Now if there is a resource, such as maybe some renewable resources or others, may be more expensive, then the clearing price of the market, I think that would be a problem.

I think there would be perhaps an inability to profitably generate that power. I don't honestly think that in most of the competitive markets there is an open retail State, there is a lot of customers who are interested in renewable power.

I am not sure that that would work out in reality to be a problem, but theoretically, I think, you know, it could be.

Mr. WYNN. So the plan would be for you to make a determination with regard to the competitiveness of the market place.

And if you found competitiveness, you are saying that you would then allow PURPA relief. Is that——

Mr. WOOD. That is what the provision says, yes, sir. That we have got to make one of these three findings, not all three together.

You have either got a real market to sell into or something that resembles that or an RTO. Which would be hopefully a competitive market to sell into.

So I think A, B or C, really, basically is the same thing. Do you have an alternative or alternatives to sell to other than the utility that you have been selling to for 20 years?

And if the answer to that is yes, then the PURPA relief would happen.

Mr. WYNN. All you need is one alternative? I mean do you make a determination of——

Mr. WOOD. It actually does say competitive market, so it doesn't just say you have got one other one, but do you have a competitive market. Which, in, I think, our understanding, would be certainly more than one alternative.

Mr. WYNN. All right. I relinquish the balance of my time. Thank you very much.

Ms. BROWNELL. Mr. Wynn, could I just add that we are about wholesale choice, but in Pennsylvania where we had retail choice, 20 percent of the customers who exercised that choice chose green power, often at a higher price.

Mr. WYNN. Now when you say green power, are you referring to clean coal or are you referring to renewables?

Ms. BROWNELL. I am referring to renewables.

Mr. WYNN. Okay, all right, thank you.

Mr. PICKERING [presiding]. Thank you, we are closing in on the time where we have a vote and we will recess. But I do want to welcome Mr. McSlarrow, an old friend, to the committee. I thank you for your testimony.

I do have a number of questions that I would like to ask the panel and specifically Commissioner Wood, Chairman Wood. As you know, we in the southeast are very concerned about your work on SMD.

I think we have made progress on trying to perfect the wholesale markets. Your efforts and the industry's efforts on regional transmission organizations has made tremendous progress.

But I do caution you, and as you go forward on the SMD, that there is a rule, not only in the market place, but in the political market place, that if you get too far out, it can be overturned.

And we need to be very careful that as you go forward that there is a consensus in my region and in other regions as to how these costs are going to be possibly transferred and what possible economic harm could be done.

I do want to submit to the record some questions. But, Mr. Wood, let me ask—people have talked about the concept of socializing costs when an IPP connects to a transmission grid.

Do you believe that there should be a socialization of cost?

Mr. WOOD. I think it depends on really where the load is serving. I know there has been a concern in the south that a lot of that IPP generated power is being exported from the region so there is nobody benefiting from it being there.

I think we have embraced that, that that should actually not be born by the local ratepayers because they are not getting benefit. But I think it should be focused on where the benefits are.

In many cases across the rest of the country the IPPs are building near where their load is so putting the transmission costs in the pot with everybody else's is not objectionable.

But I understand, from hearing back from a lot of the people you reference, our State colleagues and some of the customer groups down there that they are concerned that the use of that power for export really does benefit someone else and that someone else ought pay the price.

I think we are looking forward to a response from the filing utilities down there, Entergy, Southern and the others in the Seatrans proposal for a voluntary RTO to define exactly how we would determine that beneficiary.

Mr. PICKERING. I have some specific questions about the recent action that you took that could retroactively apply some of the new interconnection policy agreements to the contractual agreements that were reached in my region.

And so I want to understand your thinking as to why you reopened some of those contractual agreements and how you want to look at participant funding.

But we are out of time today, and I will follow up with some questions. I thank you and all of you who have spent a good bit of your day here and for your testimony.

We will recess until 2:15. At that time we will be hearing from the second panel and continuing the—oh, I'm sorry. The second, not the second panel, your second round.

So that will start at 2:15. Thank you very much.

[Whereupon, at 1:48 p.m., the subcommittee recessed, to reconvene 2:19 p.m., the same day.]

Mr. BARTON. If we could have our panel reassemble. We concluded our first round of questions, we are going to start the second round with members present and any members that show up.

As we begin, we are going to recognize the ranking member, Mr. Boucher, for 5 minutes.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. And my thanks also to our witnesses for their willingness to remain with us for what is proving to be a very lengthy day.

Mr. Wood, I would like to take a few moments to discuss with you the standard market design proposed rulemaking which you presently have underway.

It strikes me as a somewhat complex mechanism. I have reviewed it carefully and I have a number of questions about just how the mechanics of it would work.

And let me just raise with you some of the questions that have been brought to my attention and give you an opportunity to respond.

Reference was made earlier, in the course of this hearing, to the action taken by the Virginia General Assembly, that in essence says that investor-owned utilities may not place their transmission in a regional transmission organization for a period, I think, of 1 year from the effective date of that measure. I can tell that what generated that proposal and the concern that gave fuel to it as it was considered in our State's legislature, was the provision in your notice of proposed rulemaking that would say that electric utilities would no longer be in a position to favor their native load.

That they in effect would be placed in a bid in the market for transmission access, in competition, perhaps, with unaffiliated generators. And that the result of their having to bid for access to their own transmission lines, might be an increase in the cost of electricity for consumers, occasioned by an increase in the transmission component of that charge.

And so my question, my first question to you is, how valid is that concern? Do you think there would be opportunities or occasions

where the price of electricity for consumers might increase on account of what I have described?

Or would there be offsetting savings coming from lower generation components for that charge based upon the presumed freer flow of unaffiliated generation into the service territory?

How do you balance that and what do you say to those who have concerns that the price for electricity for consumers will increase because of this provision?

Mr. WOOD. We certainly heard those concerns, Congressman Boucher, in response to the commission's initial proposal. And I expect that we will make very clear how current utilities and current customers can be held harmless on day one.

But what we are really looking after is a longer term plan. And I think it is important to think of the cost that you are paying of generation, inefficient generation, which is what we call congestion, and I just put that as a little small bar on top, and then transmission.

The rate of transmission is set. Generation, the broader the market and the more efficient it is, certainly the pressure is downward on generation is where we expect the bulk of the savings will come.

But this part in here that we are paying today, is for the inefficient dispatch of the power grid because of congestion. Because of the current lack of investment in the grid itself.

And if we can identify that and isolate that out, as our pricing policies would do, and then allow that to be competed down and competed away, either through construction of better sited generation or through demand response.

Or through even renewables, as I heard some of the members mention. Or through new transmission investment. Those kind of things can really get that inefficiency, that cost of congestion whittled down and whittled away.

What we were not clear enough about, and I understand the concerns. And again, the three of us have heard this in excruciating detail. Is we want the ability to preserve what we have today.

And we have committed to doing that in a number of implementation orders of the RTOs, which really is the same, really a broad agenda as the SMD.

The SMD is to give some rational frame work for the RTOs. But, yes, sir, I think we have heard that and we full expect to address that and hopefully address it fully for the people who raise those concerns, because I would have them as well.

Mr. BOUCHER. Did you say there might be some mechanism to hold harmless consumers so that they would not experience price increases as a consequence of this rule going into effect?

Mr. WOOD. Correct. And one of the things that we have indicated that we are looking at, and I think we have put in a couple of orders, but certainly we have talked about informally, that would be in the white paper, is the ability to have that day one cut over of your rights today are this, your rights tomorrow are the same thing if not better.

And then going forward, those rights get in the broad market place with everybody else's.

Mr. BOUCHER. I will await with interest your further illumination on that point. Let me quickly ask one other question. I just

have some doubts about how the mechanism works for the disposition of the receipts from the bid for congestion rights in those instances where congestion exists, who actually gets the money when a bid is made and money is paid for the right of access during times of congestion?

And then secondarily, at the end of 4 years you are proposing that the entire congestion receipt mechanism be eliminated and that there be an auction of the congestion rights.

Who would get the receipts? Upon the completion of that auction, where would that money go?

Mr. WOOD. The receipt, to take the latter question, I expect that we will be looking at the 4 year, it just was kind of an absolute standard.

That we did admittedly indicate after the 4 years we could just keep continuing what we have. But a lot of people just viewed that the 4 years, it would be over with.

But none, notwithstanding that, we anticipate clarifying how the rights will be allocated up front. And I think a lot of the State commissioner colleagues have indicated they would like a role in allocating those up so that the current uses of the grid are maintained.

And I think we are probably pretty comfortable with that. On the other issues, when congestion is——

Mr. BOUCHER. So the answer is for an auction at the end of 4 years of the congestion rights, you are not entirely sure you are going to maintain that structure?

Mr. WOOD. Right. But where we do have auctions, the revenues that are generated at auction are credited back to the customers or the utilities serving the customers that are paying the cost of transmission.

So, in other words, the folks in the area that are paying the access charge to use the grid today. Which are mostly the local utility customers would be credited back with the auction revenues.

Mr. BOUCHER. All right, that is very clear. And the other question?

Mr. WOOD. When you dispatch out of merit, basically you go, this inefficient dispatch of the, because of congestion I am having to turn on the unit here as opposed to this one here which would have been the smarter one.

This is $35, this is $55. That $20 delta is going to be paid for by the person who does not have transmission rights. Just unprotected, unhedged rights. He, that customer will, that required that extra power, will pay that $20 increment to that generator.

So that is how the congestion works. Is to make sure that the person who is causing the congestion is the one who is paying the bill. As opposed to spreading it across the entire grid and making everybody pay, even though they didn't cause congestion.

Mr. BOUCHER. And tell me again who gets that $20?

Mr. WOOD. The generator who has dispatched out a merit, who cost $55 to run as opposed to the market clearing price of $35, that all generators were getting at the time.

Mr. BOUCHER. Okay. Well, thank you. It is a very complex mechanism. I am going to send a letter to you asking for a statement of the problem that you see, on a national basis, that this very complex mechanism is designed to address.

And that will give you an opportunity to describe at some length, exactly why this kind of structure is necessary. Lots of questions remain about it.

I am sure you are going to be hearing them. I am hearing them every day and hopefully we will have further opportunities to discuss this prior to your putting a rulemaking into effect.

And thank you very much, Mr. Wood, and Mr. Chairman, thank you.

Mr. BARTON. I just have one question. Mr. Wood, do you still expect to issue your final rule in April?

Mr. WOOD. No, sir. We are doing a white paper, which is really our first kind of collective response to the comments that we have heard, you know, 1,000 comments. Really we have gotten three rounds of comments on the rule in November, December and February.

And then a number of probably 300 meetings between, that either we have had or the staffs have had with parties that are interested.

So there has been a lot of good debate and actually a lot of refinement on the issue. But the April white paper will be our response to, here is what we said, here is what we have heard, here is where we are today.

Mr. BARTON. So what is your expectation if you issue a rule, a final rule, when would that, when would the earliest that would occur?

Mr. WOOD. I have gotten burned by making that commitment in the past. I certainly think late summer at the earliest.

Mr. BARTON. Okay. The Chair recognizes Mr. Markey for 5 minutes.

Mr. MARKEY. I thank the Chairman very much. Mr. McSlarrow, I just wanted to put on the record that I am very impressed with the confidence the Department of Energy has that they can construct a Star Wars system to knock down incoming ballistic missiles on a couple of minutes notice.

And that they can develop that technology. And I am also very impressed that they have the confidence that they can develop a hydrogen car 15 or 20 years from now. But I am extremely disappointed that they can't figure out how to use off-the-shelf technology today to improve the fuel economy standards of SUVs, and that is an available technology.

The other technologies are speculative at best. They may or may not ever develop, and I would just encourage you to continue to try to move along that front.

Chairman Wood, it is now 3 years since electricity price spikes afflicted California and the pacific northwest. And 3 years ago your predecessor, Chairman Hebert, told this subcommittee that these price spikes were just the result of natural market forces supply and demand.

We now know differently. We now know that Enron, Reliant, El Paso and others were engaged in a wide array of abusive, deceptive and manipulative trading practices that helped drive up prices in the western market.

The FERC staff, State regulators and others have been investigating these manipulations and hopefully these actions will result in refunds being given to those victimized by these frauds.

My concern is that if these refunds are granted, that it will, at best, be a posthumous victory for those utilities and consumers that were harmed.

I think that you need to have stronger regulatory tools in your quiver, than the mere threat of denying market based rates or seeking a refund for unjust, unreasonable and unduly discriminatory or preferential rates.

As I understand it, the Federal Power Act does not have a basic anti-fraud, anti-manipulation provision with civil and criminal penalties.

The gentleman from Michigan and I crafted an amendment last year which we offered in the Energy Conference, which would add such a provision to the Act.

We also introduced this as a free-standing bill. It is based on the anti-fraud provisions and the Federal securities laws.

Would you support that kind of power?

Mr. WOOD. It certainly sounds appropriate, sir. I would have to pull that bill, I don't remember from last year. But, yes, sir, I think, to be sure, one of the items that we are doing now may be challenged later in court if this provision is not included, is to include that in the standard market design rulemaking.

And we have got a list of the seven deadly sins and we are going to basically put that in FERC regulation. But it may be challenged if we don't have sufficient statutory authority for it.

I think we do, but in case we don't, I would certainly appreciate any buttressing from the Congress.

Mr. MARKEY. Commissioner Massey and Commissioner Brownell, do you, would you accept that additional set of powers for you to act in the manipulation and fraud area?

Mr. MASSEY. I would, Congressman, and I think it is an excellent idea.

Mr. MARKEY. Thank you. Commissioner Brownell?

Ms. BROWNELL. I would happily do so. Markets do not work where there is a lack of confidence and a lack of accountability. So I would applaud your efforts in that regard.

Mr. MARKEY. Okay. Now, Chairman Wood, the discussion draft that Chairman Barton circulated last Friday contains a prohibition against round tripping or wash trades. Is this the only type of abuse in trading activity that the FERC staff identified in its investigation into Enron and California electricity markets?

Mr. WOOD. No, sir, there are others. And, again, they are included in our deadly sins in the——

Mr. MARKEY. Do you think, in other words, the point I guess I am getting at is do you believe that all abusive and manipulative trading practices should be prohibited or just that, just the couple that are mentioned?

Mr. WOOD. I think they should be. I think it is important to define clearly, as I think that particular sin was defined pretty clear as to what it is so people know what counts and what doesn't count.

But conceptually, yes, sir.

Mr. MARKEY. Okay. Let me turn to an issue which of great concern to many of us in New England. Recently ISO New England submitted its standard market design proposal to the FERC.

One part of that plan would designate eastern Massachusetts and the Greater Boston area as a designated congestion zone. As a result, electricity generators or marketers in the zone, would be given a safe harbor, allowing them to charge higher prices.

A step which the ISO claims is needed in order to incentivize new generation and transmission. However, we have been building new generation in Massachusetts.

I have two new gas plants coming on line in Everett and I have been told that efforts are being made to relieve transmission constraints in and around Boston.

Here is my concern. Some utilities in my district and some of their customers have expressed a fear that the proposed safe harbor could become a pirate's cove for trading abuses, similar to that which occurred in California.

Specifically the fear that allowing generators to avail themselves of the proposed safe harbor, even in periods where there is no actual congestion.

Can you alleviate my concerns about this, Mr. Chairman?

Mr. BARTON. This will have to be the last question and then we will go to Mr. Waxman.

Mr. MARKEY. Okay, thank you.

Mr. WOOD. Certainly the designated control area, safe harbor issue, is one that is raised before our commission. We have ruled on it.

It is an attempt to identify congestion and make it, you know, focused on the areas where it happens. I do note that just this week the ISO New England filed, just to make sure it had the authority to yank that without having to go through the 60 day process at FERC if they find that it is not working as intended.

Now that is something that they just filed and asked for from us. But I think it is looking at California so they don't have to wait for 30 or 60 days to make changes to their system.

I think in the past week that there has been this new mechanism in place, there hasn't been congestion on the system at all.

So the market clearing price in Maine and Connecticut and Boston and all the areas, congestion or not, have been the same. So I don't think that in the times when it is not congested, that this safe harbor will in fact be and issue at all.

Because I think the market clearing price will be certainly probably below it.

Mr. MARKEY. Shouldn't we be able to get ourselves off the list, if there is not congestion.

Mr. BARTON. Okay, the gentleman's time has expired.

Mr. MARKEY. Thank you.

Mr. BARTON. We have another member that wishes recognition. Mr. Waxman is recognized for 5 more minutes.

Mr. WAXMAN. Thank you, Mr. Chairman. Mr. McSlarrow, I want to follow up on your answers regarding the President's hydrogen program.

First, I would like for you to submit for the record the administration's projections on how much oil the Nation will consume in

2040, and also explain how this projection was calculated and what assumptions about fuel economy and oil production were used.

If we can get that for the record. Just so it is clear on the record, I understood you to say that hydrogen cars, under the President's hydrogen proposal, would not significantly reduce the Nation's oil consumption before 2020, however R&D and tax incentives for new technology would help. Is that right?

Mr. MCSLARROW. What I answered was whether or not there were any other technologies that could reduce it before that time, and I said yes.

The tax credits for hybrid vehicles being one example.

Mr. WAXMAN. Okay. Can you give the committee an estimate of how much projected oil consumption will decrease as a result of these new policies and other alternatives? You can do that for the record, if you don't have it off hand.

Now, you talked about tax incentives. It appears to me that the President's budget is much more committed to luxury SUVs than it is to hybrid vehicles.

For example, a Hummer H2 is reported to get 11 miles per gallon, while a Toyota Prius can achieve over 50 miles to the gallon while meeting the most rigorous air emission standards, without question encouraging the purchase of vehicles such as the Prius over the H2 would help meet the dual goals of clean air and decreased oil dependence.

Unfortunately, the Bush plan increases incentives for vehicles such as the H2 instead of energy efficient vehicles like the Prius.

If the Bush plan were adopted, a small business could deduct the entire price of the $55,000 H2 in the first year it is put into service.

The business could only deduct about one-half of the $20,000 Prius in the first year and the Prius would remain subject to the luxury car tax. Is this an inaccurate summary of the President's tax proposal?

Mr. MCSLARROW. The tax provision that I am familiar with on the hybrid vehicles is fairly straightforward and would not, in my view, drive you toward a vehicle that is a larger consumption vehicle.

I would be glad to give you an analysis of it, in detail, for the record.

Mr. WAXMAN. I would appreciate that and I would like to submit for the record, Mr. Chairman, a recent article from the Wall Street Journal, that discusses how city policy forces around the country are buying significant quantities of hybrid vehicles.

This articles suggests that when the market isn't distorted by tax incentives, there is a good market for hybrid vehicles.

Mr. BARTON. So ordered.

Mr. WAXMAN. As I understand the President's proposal, I think it gives the wrong incentives, but I would be interested in your further analysis.

Has the administration analyzed how its tax proposal might discourage or encourage the purchase of hybrid vehicles by businesses that otherwise would have an economic reason to buy one?

Mr. MCSLARROW. I know we have done an analysis, I don't know the results of it. But, again, we will get that to you.

Mr. WAXMAN. You will get that for us. Okay, thanks. To follow up with you, Mr. Wood, in the last round of my questions you indicated you would lift the protective order in California refund case and make evidence submitted by the California parties available to the public.

As you may know, a bipartisan group of members from California wrote to you yesterday requesting this. However, I am interested in knowing if FERC will also seek and release Reliant transcripts for 2000 and 2001, so that the public can be assured that FERC hasn't missed anything?

Mr. WOOD. I will have to see if that is in the body evidence that we are in the process of declassifying now. If it is, then that would be released.

If not, I will communicate that back to you in writing.

Mr. WAXMAN. Okay, well I would hope it is going to be made public. Because if we are going to have faith in FERC's investigation, I think all the activities ought to take place with public scrutiny.

If there ever were a reason to withdraw market based rate authority, this would seem to be the appropriate situation.

In fact, on July 15—so anyway, I would like that information made public and let us know. But on July 15, 2001, the California PUC petitioned FERC to withdraw the Reliance market based rate authority.

Why did FERC never act on these petitions and why didn't FERC withdraw Reliant's market based rate authority?

Mr. WOOD. We are as, I think a question from Mr. Norwood pointed out, we are in a process of revising our market screen.

It was the supply margin assessment. We put that on hold because there was significant concern if that was the right screen or not.

We have gotten a lot of comments on that in the past years. So there was not just Reliant and some other companies, but probably about 60 companies now that we are waiting to move forward on.

It is a policy issue that we have not resolved as to what standards for——

Mr. WAXMAN. And I am interested in further information for the record. But if this didn't warrant withdrawal of market based rates, I would like you to provide the committee with an example that would warrant such action. Thank you, very much, Mr. Chairman.

Mr. BARTON. The gentleman's time has expired. We are going to release this panel. You all have been more than gracious with your time and your answers, your input and your written testimony.

There may be members that wish to submit written questions for the record and we would hope that you would reply expeditiously to those written questions.

But thank you for your time and you now are excused. Let us welcome, as soon as the first panel vacates the premises, the second panel.

We have Mr. Marvin Fertel with the Nuclear Energy Institute. Mrs. Anna Aurilio with the U.S. Public Interest Research Group.

Mr. Jeff Benjamin with, the Vice President for Licensing and Regulatory Affairs with Exelon. Dr. Edwin Lyman who is the President of the Nuclear Control Institute.

Mr. Steven Nadel, Executive Director for the American Council for an Energy-Efficient Economy. Dr. Malcolm O'Hagan who is the President of National Electrical Manufacturers Association.

And Mr. Alden Meyer who is Director of Government Affairs for the Union of Concerned Scientists. Welcome lady and gentleman.

Your testimony is in the record in its entirety and we are going to start with Mr. Fertel. We will give you 5 minutes and we will just go right down the line, 5 minutes each. And then we will have some questions. Welcome to the committee.

STATEMENTS OF MARVIN S. FERTEL, SENIOR VICE PRESIDENT OF BUSINESS OPERATIONS, NUCLEAR ENERGY INSTITUTE; ANNA AURILIO, LEGISLATIVE DIRECTOR, U.S. PUBLIC INTEREST RESEARCH GROUP; JEFFREY A. BENJAMIN, VICE PRESIDENT, LICENSING AND REGULATORY AFFAIRS, EXELON NUCLEAR; EDWIN S. LYMAN, PRESIDENT, NUCLEAR CONTROL INSTITUTE; STEVEN NADEL, EXECUTIVE DIRECTOR, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY; MALCOLM O'HAGAN, PRESIDENT, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION; AND ALDEN MEYER, DIRECTOR OF GOVERNMENT RELATIONS, UNION OF CONCERNED SCIENTISTS

Mr. FERTEL. Thank you, Mr. Chairman. Chairman Boucher, Ranking Member Boucher, on behalf of Nuclear Energy Institute I commend you for your leadership in both the last Congress and this Congress on pursuing legislation to implement a comprehensive national energy strategy.

I would also like to commend the committee for its leadership last year in supporting the President's decision on the Yucca Mountain repository site, which was a tremendous step forward in energy policy matters.

Today I will offer a few key points on the proposed legislation, but I would be remiss if I did not first comment on the security at our nuclear power plants.

The nuclear industry had extensive and robust security prior to the tragic events of September 11. Since then, the NRC has imposed additional requirements.

And during the past 18 months, the nuclear industry has invested an additional $370 million in security related improvements, including hiring about a third more security officers, bringing our total to about 7,000.

The State of our security was recently demonstrated as part of a study by the Center for Strategic and International Studies that looked at the vulnerability of our Nation's critical infrastructure to terrorist actions.

At the end of that assessment, CSIS recognized the effectiveness of nuclear plant security and acknowledged our plants as the best protected industrial facilities in the Nation.

The legislation passed in the last Congress by this committee and reintroduced in the discussion draft this year, contains a num-

ber of provisions directed at studies and programs the NRC should implement to improve security at commercial nuclear plants.

Given both the enhanced security requirements imposed by the NRC, since September 11, and the extensive requirements for threat and vulnerability analysis contained in the legislation creating the Department of Homeland Security, we conclude that those provisions in Section 4012 are no longer necessary and respectively suggest that they be deleted from the discussion draft.

We will, of course, continue to implement every sensible sound approach as we can for security, drawing on industry resources and enforcement agencies and national defense forces, in what we would expect to be a seamless integration of response to any potential terrorist threats.

Let me turn now to energy policy. Energy drives our Nation's economy and diversity of energy supply and technology, as well as demand side management efficiency and conservation are all necessary.

Nuclear energy is a major part of our Nation's energy diversity, providing electricity for one in every five homes and businesses.

The industry's average capacity factor last year was a record 91.5 percent, the most efficient among all types of power plants.

And when all the data are in, we estimate that total electricity production from nuclear energy last year, will reach 778 billion kilowatt hours, which is another record.

That is more electricity than is used in total by all but three other countries in the world. America's nuclear plants are essential to meeting our air quality policy goals.

Nuclear energy produces no air pollution and in fact will play a major role in helping meet the President's goal for reducing greenhouse gas emissions.

A comprehensive national energy policy should take full advantage of the benefits of nuclear energy. To accomplish this, legislation actions are needed in the following areas.

Congress should, as soon as possible, renew the Price-Anderson Act, and we would propose it be done indefinitely.

It is a proven frame work that has worked for over 45 years. Congress should also move forward and amend the Atomic Energy Act, to remove statutory requirements that are no longer necessary because of changes in time and the responsibilities of other agencies.

To address the infrastructure investment crisis we face as a Nation, we have proposed the Secretary of Energy be authorized to provide financial incentives, such as loans, that would be paid back, to a limited number of nuclear projects.

We have proposed that is probably also true for any large capital investment, like coal plants or transmission lines.

Congress should continue to support nuclear energy research and development programs at DOE, including the Nuclear Energy Research Initiative, the Nuclear Energy Plant Optimization Program and Nuclear Power 2010.

Updated tax treatment should reflect today's business environment. As such, reform of the treatment of decommissioning funds, as proposed in the House version of H.R. 4 that passed last year, should also be reenacted.

And in order to stimulate continued investment in our critical energy infrastructure, the depreciation period of nuclear plants and other large energy related capital projects should be made equitable for with that for other industrial investments.

Finally, Congress should ensure that money paid into the nuclear waste fund by America's consumers is fully available to support the Yucca Mountain project.

We encourage the committee to support the administration's proposal to adjust the nuclear waste fund's discretionary spending cap and to work with the administration on a longer term permanent fix.

In conclusion, America's economic strength depends on a strong, reliable energy supply. Nuclear energy is a vital component of that supply.

Any prudent national energy policy must include provisions for expansion of the nuclear energy industry for the benefit of all Americans. Thank you for your time.

[The prepared statement of Marvin S. Fertel follows:]

PREPARED STATEMENT OF MARVIN S. FERTEL, SENIOR VICE PRESIDENT, NUCLEAR ENERGY INSTITUTE

Chairman Barton, Ranking Member Boucher and distinguished members of the subcommittee, I am Marvin Fertel, senior vice president at the Nuclear Energy Institute (NEI). On behalf of NEI, I would like to commend you for focusing the 108th Congress' attention today on legislation to implement comprehensive national energy policy.

NEI is responsible for developing policy for the U.S. nuclear industry. NEI's 270 corporate and other members represent a broad spectrum of interests, including every U.S. electric company that operates a nuclear power plant. NEI's membership also includes nuclear fuel cycle companies, suppliers, engineering and consulting firms, national research laboratories, manufacturers of radiopharmaceuticals, universities, labor unions and law firms.

The nuclear industry continues to play an important part in addressing the issues that face this country in meeting our energy needs. Nuclear energy already is a vital part of our diverse energy portfolio, producing electricity—safely and cleanly—for one of every five U.S. homes and businesses. Our nation's comprehensive energy policy must ensure an affordable, reliable supply of energy, and nuclear energy provides one of the solutions to several policy challenges that our nation faces. Among these policy challenges are:

- generating reliable and affordable electricity to meet projected increases in consumer demand over the next two decades
- protecting our nation's air and ecological quality through the emission-free generation of electricity at nuclear power plants
- providing secure national energy supplies that are not susceptible to price spikes or disruptions because of global politics.

I will speak to each of these points briefly. Before doing so, however, I feel that I must comment on the readiness of our nation's nuclear energy facilities in the wake of the events of Sept. 11, 2001.

We support to the fullest the president's creation of the Department of Homeland Security, and we commend the leadership of the House of Representatives in supporting his efforts. We believe that a central organization is essential to provide the necessary integration of intelligence information, vulnerability and threat assessment and, ultimately, to assure the availability of necessary government resources to protect our critical infrastructure.

The nuclear industry's goal is to develop a seamless integration of private and public capabilities to protect vital facilities within our country's infrastructure, including nuclear energy facilities. This integration should coordinate response capabilities of industry, state and local entities, national defense and homeland security. The nuclear industry is working diligently with the Nuclear Regulatory Commission and other federal entities to achieve this comprehensive response capability.

Since Sept. 11, 2001, the nuclear energy industry has been on a high state of alert. The defense-in-depth inherent in the robust design of our plants has been re-

assessed and augmented. During the past 18 months, our industry has invested an additional $370 million in security-related improvements, including stronger perimeter security; improved background checks; and tighter access control at our plants. As part of this effort, the nuclear energy industry has added about one-third more security officers, for a total of 7,000 well-trained, heavily armed security officers at 67 sites.

The industry will continue to make these investments and improvements to comply with the Nuclear Regulatory Commission's requirements.

INCREASED NUCLEAR PRODUCTION

With assured security, the industry's 103 operating reactors will continue to provide safe, affordable and reliable electricity for the nation. U.S. nuclear power plants generated a record 778 billion kilowatt-hours of electricity[1] last year and the industry's capacity factor—a measure of efficiency at power plants—was a record 91.5, well above any other type of power plants in the United States. The industry will continue to increase the amount of electricity generated by nuclear power by relicensing current reactors, continuing to improve efficiency and implementing new technology to "uprate" reactors. We also are pursuing major initiatives leading to building advanced nuclear power plants over the next two decades.

Nuclear energy is the second largest source of electricity in the United States. The industry has reached record levels of safety, reliability, efficiency and output in the United States.

Nuclear energy is the least expensive source of baseload power in the United States, with very stable forward pricing. It therefore provides stability to the entire country's electrical supply system and plays an important role in sustaining our nation's economy.

Nuclear energy's contribution to U.S. electricity supply is essential to sustain economic growth, meet the electricity needs of our increasing population, and meet growing U.S. electricity demand for today and the future. The Energy Information Agency anticipates a 1.8 percent electricity growth rate through the next two decades, requiring the addition of 400,000 megawatts of new electricity capacity. The nuclear industry's Vision 2020 strategic plan has set a goal of 50,000 megawatts of additional nuclear generation by 2020, which is required simply to maintain the nation's current level of electricity production from emission-free sources, such as hydropower, nuclear and renewable energy. We must have new sources of energy for economic growth, but we also must maintain our commitment to improving our air quality and our environment. With nuclear energy, we can do both.

To satisfy this growing electricity demand, the nuclear industry is implementing a three-part program:

- maintaining the energy production of existing reactors through license renewal
- expanding output from the existing reactors by continuing to improve efficiency and reliability, and by investing the capital required to increase the capacity of the reactors
- laying the groundwork for construction and operation of new nuclear plants.

Several of America's nuclear generating companies, working with NEI, are implementing a broad-based plan to create the business conditions necessary for construction of new nuclear power plants. The plan includes:

- initiatives to reduce the initial capital cost of new nuclear power plants
- programs to create a stable licensing regime and reduce regulatory uncertainties, including industry programs to demonstrate the new NRC processes for siting and licensing new nuclear plants.

The 1992 Energy Policy Act significantly improved the licensing process for new nuclear plants. All design, safety and site-related issues are resolved with full public participation before capital is invested. The chairman of this subcommittee, Mr. Barton of Texas, was a principal author of this major improvement to the NRC licensing process.

The new approach allows the NRC to:

- "certify" a standardized nuclear power plant design. Certification is a formal rulemaking process. It requires a substantial up-front investment to prepare a reactor design—complete and detailed enough to satisfy the NRC that the design meets all NRC safety standards.
- evaluate and pre-approve a prospective site for a new nuclear plant
- issue a single license to construct and operate a new nuclear plant if a company uses an NRC-certified design and a pre-approved site.

[1] Nuclear Energy Institute estimate for 2002.

Three reactor designs—a 1,300-megawatt advanced boiling water reactor, a 1,300-megawatt pressurized water reactor, and a 600-megawatt pressurized water reactor—have been certified by the NRC. Two advanced boiling water reactors have been built in Japan. Taiwan is building two more. And South Korea is building variants of the large pressurized water reactor. A design for a 1,000-megawatt advanced pressurized water reactor is undergoing certification review, and five other designs are in varying stages of certification.

Private companies would only undertake investments of this size if new nuclear power plants are competitive in the marketplace with other sources of electricity and if there is stability in the regulatory process to license the facilities. Few policy initiatives, however, now exist to stimulate companies to invest in new nuclear plants sooner than they otherwise would. Though the Department of Energy is working with the industry to demonstrate the new plant licensing concepts, larger initiatives do not exist to reduce the investment risk associated with a large capital project, such as the construction of new nuclear power plants.

The policy initiatives necessary to stimulate construction of new nuclear generating capacity include:

- continuation of the Energy Department's "Nuclear Power 2010" initiative, which is a government/industry partnership to pursue two short-term objectives: resolving technical and/or economic issues associated with new nuclear plant designs, and validating the new NRC licensing process—verifying that it works as intended and that it will not place private sector investment at risk. This initiative requires relatively modest federal investment in nuclear energy research and development.
- new authorization for the secretary of energy to provide financial assistance through loans, loan guarantees and lines of credit for a limited number of new nuclear projects
- changes to the tax laws to treat depreciation of investment in critical energy infrastructure—such as nuclear power plants—equitably with other large capital investment projects. Additionally, incentives through investment tax credits may be desirable.

NUCLEAR PLANT SAFETY LAYS GROUNDWORK FOR EXTENDING OPERATIONS

The excellent safety record of U.S. nuclear power plants lays the groundwork for refining regulatory oversight of these plants for extending the federal licenses of the reactors for an additional 20 years, to a total of 60 years of production.

Through the NRC's revised nuclear plant oversight process, regulators now focus their attention on areas that are most significant to safety at the plant, rather than treating all areas as if they were of equal significance to safety.

In addition, America's nuclear energy plants represent the gold standard for industry safety. Working in a nuclear power plant is safer than working in the banking industry, according to safety statistics from the Bureau of Labor Statistics.

In addition, the agency has put in place an efficient process for renewing the licences for today's plants. The average nuclear plant today is about 18 years old, far from the expiration of its original 40-year operating period established in NRC licenses. The 40-year license term reflects both the amortization period generally used by electric utility companies for large capital investments and the licensing approach used for radio stations. However, as some of the plants built in the 1970s approach the end of their original license periods, experience demonstrates clearly that reactors can generate electricity safely much longer than their original 40-year license.

As computer systems, instrumentation and other technologies have advanced, whole systems have been replaced in nuclear power plants. In many of these areas, nuclear power plants are virtually new, and they are safer and more efficient than ever.

Ten U.S. reactors already have been approved for 20-year license renewals, and about half of the nation's 103 nuclear power plants have filed or announced plans to submit license renewal applications to the NRC during the next few years. NEI expects that nearly all of the nation's reactors will eventually apply for license renewal.

USED NUCLEAR FUEL MANAGEMENT

The industry safely manages used nuclear fuel today at nuclear power plant sites. There has never been any health or environmental impact to the public from used nuclear fuel management.

Federal law has mandated the development of a centralized geologic repository for long-term stewardship of used fuel from nuclear power plants and the radioactive

byproducts of the federal government's nuclear programs. The Nuclear Waste Policy Act of 1982 and its 1987 amendments require DOE to locate, build and operate a deep, mined geologic repository for used nuclear fuel. The 1987 amendments designated Yucca Mountain, Nev., as the site to be studied for a potential repository.

President Bush last year approved Yucca Mountain as the site to develop a federal repository and the decision was upheld by the 107th Congress. I want to thank this committee for its leadership in moving the Yucca Mountain resolution in Congress. The next step in that process is the NRC's licensing the repository site and granting construction authorization. DOE expects to file a license application with the NRC by December 2004. It is imperative that DOE meets its milestones for licensing so the repository can be built and operating by 2010.

To pay for the repository, the Nuclear Waste Policy Act established the federal Nuclear Waste Fund. Since 1983, consumers of electricity generated at nuclear power plants have paid a tax of one-tenth of a cent per kilowatt-hour of nuclear-energy-generated electricity they use into the fund, which now totals some $22 billion in payments and interest. More than $6 billion from the Nuclear Waste Fund has been used for scientific and engineering studies.

Congress must ensure that the program is adequately funded through the annual appropriations process. Budget restrictions and processes that unnecessarily prohibit use of the Nuclear Waste Fund for project development must be removed. The nuclear energy industry supports the administration's proposal to adjust the fund's discretionary spending cap. We encourage the committee to support that proposal, but we recognize that a more permanent fix is needed to ensure that funds collected for the waste program are allocated as needed to that project.

NUCLEAR ENERGY'S PROVEN ROLE IN PRESERVING OUR ENVIRONMENT

Nuclear energy is the only large source of electricity that is both emission-free and readily expandable. Its exemplary safety record, outstanding reliability, low operating costs and future price stability make nuclear energy a vital fuel for the future.

Nuclear energy accounts for three-fourths of all U.S. emission-free electricity generation. The Bush administration has established a proposal to cut U.S. greenhouse gas emissions by 18 percent by 2012 through a voluntary approach that is compatible with economic growth. The administration clearly believes that nuclear energy is a key to the plan's success. Secretary of Energy Spencer Abraham recently said of nuclear energy, "It's obvious to me that an energy source capable of supplying a significant proportion of the world's power with no greenhouse gas emissions should be at the center of the debate."

The electric utility industry and DOE have established a voluntary partnership called Power Partners to develop and implement voluntary greenhouse gas reduction activities that will also sustain economic growth. Power Partners' actions are guided by the principles of improved energy efficiency, increased investments in research and development, technological innovation, market-based initiatives, and cost-effective reductions in carbon emissions.

The nuclear energy industry will play a significant role in the Power Partners program. The U.S. nuclear industry can increase its output by about 10,000 megawatts of capacity by 2012, resulting in incremental reductions of 22 million metric tons of carbon equivalent. The additional electricity production at nuclear power plants would come from power uprates, improved productivity and plant restarts.

As a result, the nuclear energy industry could meet one-fifth of the president's goal of reducing greenhouse gas emissions by 18 percent in the next 10 years, building upon the nuclear industry's clean-air accomplishments during the past four decades.

Looking beyond 2012, the nuclear energy industry is prepared to play a major role in sustaining the president's commitment to reduce the greenhouse gas intensity of the U.S. economy, as the industry pursues its goal of building 50,000 megawatts of new nuclear energy capacity in the United States by 2020. This additional 50,000 megawatts would reduce U.S. greenhouse gas emissions by approximately 100 million metric tons of carbon equivalent. At the same time, nuclear energy avoids emissions of sulfur dioxide and nitrogen oxide.

PUBLIC SUPPORT FOR NUCLEAR ENERGY

Protecting our environment and improving U.S. energy security are among the reasons why two out of three Americans favor nuclear energy as one way to generate electricity.

Another reason for the public's steady support for nuclear energy is that the public views nuclear energy as a fuel of the future.

In an October 2002 survey, a record high 73 percent of college graduates registered to vote favored the use of nuclear energy. Those who "strongly support" the use of nuclear energy outnumbered those who "strongly oppose" by an increasingly wide margin—three to one.

Nearly two-thirds of the general public favored nuclear energy, and the gap between those who strongly favor (30 percent) and strongly oppose (15 percent) nuclear energy is the largest that it has been during the past two decades. The trends among the general public over the years have paralleled those among college graduates who are registered to vote—but the more educated and politically active group always has been more favorable toward nuclear energy.

Record numbers of college graduate voters—88 percent—also supported renewing the licenses of nuclear power plants that meet federal standards, and 77 percent strongly agreed we should keep the option to build more nuclear power plants in the future. Fifty-nine percent of college graduate voters and 55 percent of all adults agreed that we should "definitely build more nuclear power plants."

COMPREHENSIVE ENERGY LEGISLATION

NEI believes that diversity of supply and technology are the strength of our electrical system. With regard to nuclear energy's role in a comprehensive energy policy, NEI encourages the committee to support the following recommendations:

Renewal of the Price-Anderson Act. Congress should renew the Price-Anderson Act as soon as possible. The Price-Anderson Act of 1957, signed into law as an amendment to the Atomic Energy Act, provides for payment of public liability claims related to any nuclear incident. It is a proven framework that has worked for nearly 45 years. Given this proven record, Congress should renew it indefinitely. If needed, Congress can reopen the law—as it can any law—at any time if modifications are needed. In addition, Congress can request periodic updates on the status of Price-Anderson Act implementation from the NRC in order to provide a basis for change if necessary.

In its 1998 report to Congress, the Nuclear Regulatory Commission said that the Price-Anderson Act has "proven to be a remarkably successful piece of legislation" that has grown in depth of coverage and that proved its viability in the aftermath of the Three Mile Island accident.

Amendments to the Atomic Energy Act. The Atomic Energy Act should be amended so that the NRC is positioned to meet the energy challenges of the 21st century. Recommended amendments to the law include:

- Removing the statutory requirement that NRC conduct antitrust reviews of applications to build new nuclear plants. This review already is being done by other federal agencies that have the core competencies to perform it.
- Removing the statutory prohibition of foreign ownership of U.S. commercial nuclear power plants. The NRC would have the responsibility to ensure that their actions are not inimical to our national security.
- Ensuring that smaller, modular nuclear reactors are not subjected to inappropriate liability under the Price-Anderson Act's secondary financial protection provision.

The secretary of energy should be authorized to provide financial assistance through loans, loan guarantees and lines of credit to a limited number of new nuclear projects.

Tax treatment updated to reflect today's business conditions and to enable sustained private sector investment in, and large-scale commercial deployment of critical energy infrastructure, particularly large capital projects—such as nuclear projects. Also, reform is needed for tax treatment for decommissioning funds, as in the House version of H.R. 4 that was passed last year.

Authorization for nuclear energy research and development should include:

- Funding for government/industry activities, including the Nuclear Energy Research Initiative, aimed at the development of new reactor technologies; the Nuclear Energy Plant Optimization, focused on the optimization of existing reactors; and the Energy Department's "Nuclear Power 2010" initiative, with an objective of building a new reactor within this decade.
- Authorization to support enhanced university nuclear science and engineering programs to ensure ample nuclear professionals for the future.
- Funding demonstration projects using nuclear energy to produce hydrogen, both at existing nuclear energy plants and through new advanced reactors. NEI urges supporting a demonstration project for using new reactor designs in this

effort at a national laboratory. This would provide a dramatic boost to the president's Clear Skies initiative to promote the use of this clean fuel for the future.

- Providing increased predictability for the introduction of uranium from U.S. government inventories into the commercial marketplace. Market participants must be able to plan prudently for the introduction of this uranium into the market, and to avoid adverse affects on the domestic uranium mining, conversion or enrichment industries.
- Elevating the Office of Nuclear Energy at the Department of Energy to assistant secretary status, thereby assigning the appropriate level of focus to nuclear energy within the nation's energy policy.
- Creating an Office of Used Nuclear Fuel Research within the Energy Department.

CONCLUSION

Nuclear energy provides clean, affordable and reliable electricity to one of every five U.S. homes and business and has been a vital partner in meeting clean-air requirements since passage of the Clean Air Act. As our country's electricity demand continues to rise, nuclear energy will be even more important to American consumers. A prudent national energy policy must include provisions for expansion of the nuclear energy industry. One of the most fundamental elements of America's economic strength is the diversity of energy supply that drives our economy. Nuclear energy is a critical component to preserve our diverse energy supply, to continue to lessen our dependence on volatile foreign energy, and to meet new requirements for emission-free electricity.

Thank you for this opportunity to share the nuclear energy industry's perspective on the important policy issues this subcommittee is considering. NEI encourages the subcommittee to give full consideration to the policy recommendations the industry has outlined in this testimony.

STATEMENT OF ANNA AURILIO

Ms. AURILIO. Good afternoon, Mr. Chairman, Congressman Boucher and others. Thanks for the opportunity to testify.

My name is Anna Aurilio, I am the Legislative Director for the U.S. Public Interest Research Group. We are the national lobbying office for the State PIRGs, which are non-profit, non-partisan, good government, environmental and consumer advocacy groups active across the country.

Now we have a long history in working for clean energy and against dirty energy of which nuclear energy certainly has to be probably the No. 1.

Our vision of the future is a clean energy future. We propose to increase renewable energy production so that it results in a fifth of our energy electricity production by 2020.

We proposed to reduce oil consumption in vehicles by a third, by 2020. We propose to increase consumer protections, not repeal things like PUHCA, so that electricity consumers are protected.

And finally, of course, if we do the renewable energy and energy efficiency policies that we know are possible, we won't have to drill in places like the Arctic National Wildlife Refuge or other special wilderness areas.

Let me focus on nuclear power and the draft legislation which we got on Friday. Our basic position is that nuclear power is unsafe, uneconomic, unreliable and it generates waste for which there is no sound solution.

Unfortunately, this legislation is a recipe for nuclear disaster. It proposes more subsidies, more bail outs. It actually rolls back a two decades long non-proliferation policy, and it fails to address basic and major safety concerns that have been raised both before and after September 11.

Let me go into some specifics. Consumers, myself included. I couldn't believe it when I opened my gas bill this month, were faced with skyrocketing energy bills.

Yet this legislation promotes the most expensive electricity source. I know you have heard different facts and figures about the cost of nuclear power, but you have to strip away the subsidies.

So, first and foremost, for existing nuclear power plants, you need to understand that in almost every State where deregulation has happened, the nuclear power plant owners got their mortgages paid off through stranded cost bail outs.

So any forward going costs that they are proclaiming right now, is because rate payers have already paid. And our estimate is in 11 States alone, rate payers paid an extra $112 billion as a cost of deregulation.

So you have to face reality there in terms of what the actual costs of those nuclear power plants are going forward. There is no reason then to continue to subsidize the existing plants.

Policies like the Price-Anderson Act were intended to be temporary. In 1957, when the legislation was passed, it was supposed to be for 10 years until the industry could stand on its own.

Time for the industry to stand on its own. We are gratified that this legislation at least contains some of the amendments that the House Energy and Commerce Committee put on to address nuclear terrorist threats, address contractor accountability, etcetera.

But, so I am stunned to hear Mr. Fertel say that he doesn't like those because those are about the only provisions we approve of there.

But we see no justification for continuing Price-Anderson anyway. If the nuclear industry is safe, there is no reason to limit the liability of nuclear power plants.

Second, we have also seen a plea for more money to develop new nuclear power plants by 2010. My testimony has footnotes that will drive you to DOE's website where they have commissioned a company called Scully Capital, to look at what it would actually take to build a new nuclear power plant by 2010.

Again, don't believe the numbers that you hear. This is a financial analyst organization that says that the Federal Government would have to create even more subsidies than already exist in order to build new nuclear power plants by 2010.

Including potentially entering into power purchasing agreements at 50 percent or more above market price. This is not an energy source that the Federal Government should be investing in.

Next point. While Americans are being asked to sacrifice to prevent rogue nations from using nuclear weapons, this legislation actually rolls back important non-proliferation policies.

The sections which deal with advanced fuel recycling policies, basically roll back a policy the U.S. has had against extracting plutonium from commercial fuel.

Plutonium is the problem. Getting it out of the commercial spent fuel will make it easier for wrong-doers to get their hands on it. And certainly, as some documents on DOE's website suggest, to start a commercial nuclear fuel cycle, based on plutonium, seems to me the silliest thing I have ever heard in this day and age.

Finally, we have aging nuclear power plants around the country. In Ohio, the Davis-Besse plant, which several people actually referenced in their opening statements, is a clear example of where the Nuclear Regulatory Commission is not adequately regulating.

Where a company begged and kicked and screamed, according to NRC Inspector General transcripts of interviews with NRC employees, and basically convinced the regulators to not shut down the plant for 3 additional months, even though there was very, very convincing evidence that there was something wrong at the plant.

Now I thank God that nothing happened there, but basically there was an eighth of an inch of stainless steel left by the time the plant was finally shut down and checked.

So I think we need to and Congress and this committee in particular, which has oversight of the NRC, needs to do a couple of things.

One is it needs to demand that NRC enforce its own safety regulations. And two, it needs to demand that NRC actually send a report to Congress, every month, like it does on other NRC issues and report on the progress of that enforcement.

I think my time is up, but I just want to make one more plea, which is States rights. A lot of Governors and a lot of folks in the States are realizing that the evacuation plans which are only ten mile evacuation plans, when we know that if there is an accident there could be harm in a greater area than that, are realizing that they are very, very inadequate to protect public safety.

And I think we should give Governor's the rights to, one, veto evacuation plans. Shut down plants if they serve an unreasonable risk. And veto the sighting of any new plants if they are an unreasonable risk to public health and safety. Thank you.

[The prepared statement of Anna Aurilio follows:]

PREPARED STATEMENT OF ANNA AURILIO, LEGISLATIVE DIRECTOR, U.S. PUBLIC INTEREST RESEARCH GROUP

Good morning, my name is Anna Aurilio and I'm the Legislative Director of the U.S. Public Interest Research Group, or U.S. PIRG. U.S. PIRG is the national office for the State PIRGs, which are environmental, good government and consumer advocacy groups active around the country. Thank you for the opportunity to speak today.

The state PIRGs have a long history of working for a clean affordable energy future. Our goal is shift from polluting and dangerous sources of energy such as nuclear and fossil energy to increased energy efficiency and clean renewable energy sources.

Nuclear power is unsafe, unreliable, uneconomic and generates long-lived radioactive wastes for which there is no safe solution. All aspects of the nuclear fuel cycle pose a risk to humans and the environment. It should be phased out as soon as possible and should not be encouraged as a future energy source.

Since the late 1970's, the PIRGs have worked to protect the public from unsafe, expensive nuclear reactors. PIRGs successfully opposed the construction of several nuclear power plants because of cost, safety and nuclear waste concerns. For example, in 1982, litigation by MASSPIRG helped cancel the proposed Pilgrim 2 nuclear power plant. In 1983, NJPIRG helped cancel the proposed Hope Creek nuclear power plant. CoPIRG worked for the creation of the Office of Consumer Counsel (OCC) in 1984. The OCC was key in protecting ratepayers from being burdened with "stranded costs" in the St. Vrain nuclear power plant case.

During the last reauthorization of the Price-Anderson Act, the PIRGs successfully advocated for lower taxpayer liability in case of a nuclear accident. From 1993 through 1995, PIRG helped shift more than $500 million in nuclear and fossil R&D spending to efficiency and renewable programs. During that time, we helped convince Congress to eliminate funding for two extremely expensive advanced reactor programs, the gas-cooled reactor and the breeder reactor known as the Advanced

Liquid Metal Reactor, saving taxpayers at least $5.6 billion. In 2002, the PIRGs helped defeat a nuclear-subsidy laden energy bill in House/Senate conference.

Today I will be addressing nuclear energy issues, especially focusing on policies that should and shouldn't be included in energy legislation. Overall we are dismayed that the draft legislation developed by this subcommittee takes us in the wrong direction. By extending and increasing nuclear subsidies, reversing decades of nuclear non-proliferation policy, and failing to address major safety concerns, this legislation is a recipe for nuclear disaster, not a safe energy future.

Uranium mining threatens public health. Uranium mining and enrichment has caused sickness and death in workers and has generated tons of mining and enrichment wastes, which continue to threaten nearby communities. Current uranium mining practices include "in-situ" leaching, which pollutes precious aquifers in the arid West. We are particularly disappointed to see that the draft legislation circulated by this subcommittee contains a subsidy for "in situ" leach mining (Section 4029). This section authorizes the Department of Energy (DOE) to spend $10 million annually for fiscal years 2004, 2005, 2006 to identify, test and develop "in situ" leach mining technologies. This uranium mining technology, whereby mining companies inject millions of gallons of chemical solutions into the groundwater to extract uranium from the host rock, pollutes groundwater in the West. We are concerned that a three-year, $30 million subsidy will serve to prop up a failing industry that has a terrible environmental track record. We are particularly concerned that this type of subsidy could allow a disputed project in New Mexico to go forward, threatening a pristine water supply for the Crownpoint Navajo Nation.[1]

Nuclear power plants threaten nearby communities. Nuclear power plants are very complex and contain enormous amounts of potential energy in the fuel at the core of the reactor. The most tragic example of the dangers posed by this technology is the 1986 accident at the Chernobyl reactor in the Ukraine. The explosion and core meltdown at Chernobyl released radiation that generated a plume encompassing the entire Northern Hemisphere[2]. Here in the U.S., in addition to the partial core meltdown at Three Mile Island in 1979, which forced the evacuation of nearly one hundred fifty thousand people, there have been four other nuclear accidents in the U.S. involving at least partial core meltdown.[3]

The potential consequences of a serious accident are staggering. A 1982 study by the Sandia National Laboratories found that a serious accident at a U.S. nuclear reactor could cause hundreds to thousands of deaths in the near term.[4] In 1985, in response to a question posed by Representative Markey, an NRC commissioner responded that there was a 45% chance of a severe nuclear accident in the following twenty years.

Nuclear power plants are not secure. The tragic events of September 11, 2001 have raised serious concerns about safety and security at nuclear facilities in this country. Many facilities cannot even meet the current security requirements widely considered to be inadequate. Nearly half have failed to repel small groups of intruders on foot in "force-on-force" exercises conducted by the Nuclear Regulatory Commission. Researchers at Princeton University found that an attack on irradiated fuel stored at nuclear power plants could cause contamination problems 8 to 70 times worse than those caused by the 1986 meltdown at the Chernobyl nuclear power plant.[5]

Even before September 11, we were very concerned about the safety of nuclear reactors currently operating in this country. We are encouraged to see that the draft legislation maintains amendments added by Rep. Markey and Waxman in last year's markup (Sections 4012, 4013). However, these requirements are not enough to guarantee adequate protection from the radiation released in case of terrorist attacks or accident.

For example, Dr. Ed Lyman of the Nuclear Control Institute estimates that a terrorist attack on the Indian Point 3 nuclear power plant resulting in core melting and containment breach would result in an 1500 fold increase in childhood thyroid cancer for children living 35 miles downwind.[6] Despite these and other risks, the Nuclear Regulatory Commission (NRC) has insisted that the NRC does not have to

---

[1] U.S. PIRG, "Polluter Payday", November 2001, p. 33. http://www.newenergyfuture.com/polluter__payday__11__8__01.pdf

[2] OECD Nuclear Energy Agency report *"Chernobyl Ten Years On, Radiological and Health Impact'*, November 1995.

[3] Public Citizen website http://www.citizen.org/Press/pr-cmep84.htm

[4] Union of Concerned Scientists, Nuclear Plant Safety: Will the Luck Run Out? December 15, 1998

[5] http://www.noradiation.org/hazards/spent__fuel__pre-print__1__311.pdf

[6] Statement of Dr. Edwin Lyman, Nuclear Control Institute before the Committee on Environmental Protection, New York City Council, February 28, 2003.

consider the environmental impacts of terrorist attacks on licensing new and existing facilities since the threat is "speculative." Despite studies that show harmful impacts beyond current evacuation zone boundaries, NRC insists on limiting emergency evacuation zones to only 10 miles.

This committee should require that NRC be obligated to consider the risk of a terrorist attack on licensing new facilities and extending the license on existing facilities. The NRC should increase emergency evacuation zones to fifty miles and re-evaluate the adequacy of existing evacuation plans to take into account the threat of attacks. Finally, Congress should restore states' rights and give governors the right to veto the siting or license extension of facilities that pose a significant public safety risk.

NRC does not adequately regulate the ongoing safety of nuclear power plants. There is a consistent pattern and history of lax NRC enforcement and oversight ranging from fire prevention to worker fatigue. The agency is focused on increasing the industry's profitability, not protecting humans and the environment.

We are concerned that utility deregulation and new ownership of reactors may increase risks of accidents because of increased pressure to run the plants closer to the margin. This risk is heightened by the fact that the 103 operating reactors around the country are deteriorating with age more quickly than expected. Even Vice President Cheney acknowledged the aging problem on the television show "Hardball" (March 21, 2001): "[T]oday nuclear power—produces 20 percent of our electricity, but that's going to go down over time—because some of these plants are wearing out." Despite industry's claims that nuclear power is "safe", at least ten existing reactors have experiencing aging-related shutdowns since January 2000.[7] One aging-related problem is reactor embrittlement. Cracks in the reactor vessel caused by constant neutron bombardment could lead to a meltdown. When problems were found, the Nuclear Regulatory Commission (NRC) simply changed the safety margins and allowed the utilities to recalculate their compliance. The recent events at a reactor in Ohio expose a serious problem in NRC's management culture and decision-making.

In November of 2001, the NRC allowed FirstEnergy, the owner of the Davis-Besse plant in Ohio to ignore warning signs, then delay a shutdown for three months. Inspectors found a six-inch hole in the reactor cover that had only millimeters left until it breached the cover. According to interviews with NRC personnel, the agency backed down from issuing a safety-related shutdown order after FirstEnergy argued vigorously against a shutdown at that time because they didn't want bad publicity nor a drop in their financial ratings. At least one NRC employee felt that the company withheld important information about evidence of serious corrosion.[8] The NRC's decision to let the plant operate and rake in profits a few months longer even with evidence of serious problems jeopardized the health and safety of the surrounding communities.

Steam generators are also susceptible to premature degradation. The failure of as few as ten tubes can lead to a reactor meltdown, yet the NRC has inadequate steam generator tube standards. For example, the Indian Point 2 nuclear power plant is located 35 miles north of New York City, along the Hudson River. It had been scheduled for steam generator tube replacement in 1993, yet this never happened thanks to increasingly lax NRC requirements. On February 2, 2000, a tube ruptured, releasing radioactive steam.

We are astonished that the industry and the regulatory agency have been lobbying for an even greater relaxation of safety standards and oversight and limiting the public's access to these processes. This committee should exercise its oversight over NRC's operations. It should demand that the commission fully enforce its own safety regulations and report to Congress monthly on its progress.

Nuclear power is unreliable. Complex and often mis-managed nuclear power plants are subject to frequent fires, leaks and other accidents. For example in 2001, the Nuclear Energy Institute's website boasts that "Increased Nuclear Output Would Satisfy California's Residential Demand."[9] It failed to mention a February 3 fire at the San Onofre Nuclear Generating Station that shut the plant for weeks and was a key factor in rolling blackouts in California.

Nuclear power is uneconomic. Nuclear power would not exist in this country today if it weren't for enormous subsidies paid for by ratepayers and taxpayers. Originally touted as being "too cheap to meter", nuclear power plants are still too

---

[7] Union of Concerned Scientists, "Aging Nuclear Plants and License Renewal," Issue Brief, May 22, 2001

[8] Nuclear Regulatory Commission Inspector General Interviews on Davis-Besse http://www.ucsusa.org/clean__energy/nuclear__safety/page.cfm?pageID=1123

[9] http://www.nei.org/doc.asp?docid=724

expensive for America. The nuclear industry has received the vast majority of energy research and development funding, a special taxpayer-backed insurance policy known as the Price Anderson Act, unjustified electric rates from state regulators, enormous and unwarranted bailouts in state deregulation plans, taxpayer-funded cleanup of uranium enrichment sites plus a giveaway of the Uranium Enrichment Corporation, and an ultimately taxpayer-funded nuclear waste dump. Many of the issues I raise here are described in more detail in the Green Scissors report (www.greenscissors.org) released by U.S. PIRG, Taxpayers for Common Sense and Friends of the Earth.

It is incredible that the nuclear industry shamelessly revises history to pretend that it has transformed itself into a cost effective energy source. This is an industry that is addicted to government handouts, like an addict, it continues to ask for more handouts.

Congress should oppose nuclear research and development funding. According to the Congressional Research Service, nuclear research and development has gotten more than 60%, or $66 billion in energy research and development funding from 1948-1998. Led by Representative Markey, Mark Foley and others, Congress wisely killed funding for the gas-cooled reactor and the breeder reactor, saving taxpayers at least $5.6 billion.

Now proposals to revive research programs to develop these uneconomic and dangerous reactors are creeping into the Department of Energy's budget. We are extremely disappointed that the subcommittee draft legislation includes authorization of nearly $2 billion in commercial nuclear research and development subsidies. These programs are pure corporate welfare for an industry that has never paid its own way. DOE's own studies (referenced in the draft legislation)[10] show that new reactors developed through taxpayer-funded programs such as Generation IV and Nuclear Power 2010 are not cost-competitive. Private utilities are not interested in building new nuclear plants. Despite DOE's squandering taxpayer dollars on the gas-cooled reactor known as the Pebble Bed Modular Reactor, the project's lone U.S. supporter, Exelon has pulled out of the project. This reactor design remains uncompetitive despite the fact that its developers propose cutting costs by not building containment.

DOE commissioned a report by Scully Capital called "Business Case for New Nuclear Power Plants," [11]which concludes that existing taxpayer backed insurance (known as the Price Anderson Act), federal research and development funds and ultimately federally-funded nuclear waste program are not enough to make these new reactors cost-competitive. Instead it recommends a mind-boggling suite of new subsidies including: a federal energy credit program, low interest loans, power purchase agreements (at up to 50% more than market rates!), emissions credits and additional insurance. This report estimates that the federal government would have to spend at least $1.5 to 2.75 billion in subsidies to bring down the capital costs of five new nuclear plants. This estimate does not include any additional subsidies for nuclear waste disposal, siting and permitting the new plants.

Congress should oppose programs, which increase the threat of nuclear proliferation. Plutonium, an element that can only be produced in nuclear reactors, is the material of choice for nuclear weapons. All reactors produce it, but it must be separated from highly radioactive irradiated fuel before it can be used in weapons. This separation process is known as "reprocessing." For at least two decades, the United States has had a policy against reprocessing waste from *commercial* nuclear reactors and not allowing plutonium to be used as fuel in nuclear reactors to prevent the proliferation of weapons-usable material. There are several DOE projects and provisions in the draft legislation that violate this common-sense policy or otherwise increase the risk of nuclear proliferation. At a time when U.S. citizens are asked to sacrifice to reduce the risk of rogue nations deploying nuclear weapons, these programs will make the world an even more dangerous place.

Section 6431, the Advanced Fuel Recycling Program specifically reverses the decades-long U.S. policy against reprocessing commercial nuclear waste. It advocates reprocessing commercial nuclear fuel and using several types of reactors, including breeder reactors, to allegedly reduce the volume and toxicity of the waste. Nuclear "breeder reactors" can be configured to produce plutonium. Congress wisely killed the U.S. breeder reactor program in 1994, citing economic and non-proliferation concerns. The breeder reactor supporters ignore the dismal failure of France's breeder reactor program and the chance of a reactor explosion if the coolant (usually highly reactive sodium) leaks.

---

[10] http://www.nuclear.gov/nerac/ntdroadmapvolume1.pdf
[11] http://www.nuclear.gov/home/bc/businesscase.html

A January 2003 report, entitled "Report to Congress on Advanced Fuel Cycle Initiative: The Future Path for Advanced Spent Fuel Treatment and Transmutation Research, admits that this costly program will not obviate the need for a geologic repository. Further it contradicts itself with regard to nuclear non-proliferation. First, it claims that the program can "destroy" plutonium thus reducing the risks of this material falling into the wrong hands.[12] On the same page, however, it touts the potential for a commercial nuclear fuel cycle based on the plutonium separated from existing irradiated fuel—a program that would dramatically increase the risk of weapons materials falling into the wrong hands by putting separated plutonium into commercial nuclear reactors!

Congress should phase out the Price Anderson Act. We oppose extension of the Price Anderson Act, which expired in August 2002, and then was reauthorized for one year in the recently passed Omnibus Appropriations bill. This insurance program is an unwarranted taxpayer subsidy to the nuclear industry that has no parallel in any other industry. This law, passed in 1957 and amended in 1988 provides taxpayer-funded insurance for the nuclear industry in the event of an accident. In case of an accident at a nuclear power plant, the industry gets a guarantee of limited liability while the public gets no guarantee of full compensation. This confers a substantial annual subsidy to the nuclear industry in terms of foregone insurance premiums. The Price-Anderson Act also provides blanket indemnity to Department of Energy contractors, even in cases of intentional misconduct and gross negligence. While we are encouraged by some of the House-passed provisions that would: re-evaluate nuclear security measures, require consultation with the Department of Homeland Security and allow for civil penalties in the case of intentional misconduct by a DOE contractor, this committee should reject Title IV, Subtitle A which reauthorizes the Price Anderson Act. Not only does this section reauthorize the Act for an additional fifteen years, it allows new, untested "modular" reactors to pay less money in case of an accident. If nuclear power is as "safe" as its proponents claim, there is no need for a limit on industry liability.

Protect citizens from unjustified rate increases and bailouts at the state level. We oppose the draft legislation's repeal of the Public Utility Holding Company Act of 1935, one of the only laws still on the books that protects electricity consumers. In analyzing current electricity problems, it is important to recognize the magnitude of the ratepayer subsidies enjoyed by this industry and the role these subsidies have played in blocking competition and propping up economically marginal nuclear power plants.

In the 1980's, the PIRGs successfully blocked unjustified rate increases for nuclear power mismanagement. As states across the country restructured their electricity markets, the promise to consumers was that these changes would provide competition among electricity providers. Instead, utilities lobbied, and for the most part received, an unjustified ratepayer-funded bailout of their uneconomic investments, usually nuclear power plants. The PIRGs, free market, and other consumer and environmental groups in several states fought back against these requests for "stranded cost" recovery. We argued that these bailouts were unjustified and unfair to consumers and would hamper efforts to shift towards clean energy. According to a report released in 1998 with the Safe Energy Communication Council entitled "Ratepayer Robbery" we estimated these bailouts could total more than $112 billion for just eleven states. There is strong evidence that without these bailouts, almost half of the nuclear power plants would have shut down. Instead, aging plants have been given a new lease on life, are in some cases, still shielded from market forces. Some have been sold at rock-bottom prices to new owners who have every incentive to run them close to the margin. Instead of repealing electricity consumer protection laws, the subcommittee should strengthen consumer protections and block the continued bailout of the nuclear industry through "stranded cost" provisions.

Curb taxpayer costs for nuclear waste and index the fee to inflation. The nuclear industry is the only industry that we are aware of which has a government program to guarantee disposal of lethal waste. We agree with the industry that the DOE has mismanaged the program. However, our solution is stop spending money on the program and insure that enough money is collected now to adequately cover future costs of a sound waste disposal program. A 1998 financial review commissioned by the State of Nevada concluded that the funding shortfall for the program would range from $12 to $17 billion in 1996 dollars. We urge that the Nuclear Waste Fund Fee be indexed to inflation so that there will be adequate funds to cover the ultimate cost of nuclear waste disposition.

---

[12] Report to Congress on Advanced Fuel Cycle Initiative: The Future Path for Advanced Spent Fuel Treatment and Transmutation Research, DOE, January 2003, p. II-6.

There is no current sound solution for the nuclear waste problem. Nuclear waste is one of the most dangerous substances created by humans. This waste remains dangerous for at least a quarter of a million years (based on the decay of Pu-239). One would expect that policies for dealing with this lethal material would be based on sound science and protecting public health. Instead nuclear waste policies in this country have been based on political expediency. The incredible problems faced by citizens living near former DOE weapons sites, such as Hanford, Washington should be a lesson to those who want to ignore science and public health. Irradiated fuel from nuclear reactors is perhaps the most toxic material generated by humans. Unshielded, it delivers a lethal dose of radiation within seconds. According to the Department of Energy, 95% of the radioactive waste (by radioactivity) in this country has been generated by commercial nuclear reactors.

We believe that the current project should be stopped, as the proposed dump site at Yucca Mountain cannot meet current standards for containing the waste. In 1998, PIRG and more than one hundred environmental, consumer and safe energy organizations petitioned then-Energy Secretary Richardson to disqualify Yucca Mountain because it would not meet current standards for containing the waste. Instead, DOE weakened the site guidelines, a clear case of changing the rules when science gives the answer that is not wanted.

Last year, Congress ignored serious safety concerns including the risk of transporting this waste across the country, and overrode the State of Nevada's veto to designate Yucca Mountain, Nevada as the nation's nuclear waste dump. The Bush Administration's 2004 budget proposal would reserve funds specifically for the Yucca Mountain project within discretionary cap adjustments for 2004 and 2005. This proposal would inappropriately limit the discretionary authority of appropriators to balance various budget priorities, essentially granting the DOE a blank check for Yucca Mountain spending. The General Accounting Office reported last year that, "DOE currently does not have a reliable estimate of when, and at what cost, a license application can be submitted or a repository can be opened."

We urge this committee to re-examine nuclear waste policy and develop a public, fair process based on sound science and protecting the public for deciding the ultimate fate of this extremely dangerous material. No country in the world has a permanent solution to this problem. The U.S. should reject its current mismanaged program that relies on changing the rules when the science isn't favorable to the industry's solution. Instead, we should show leadership by developing a solution focused on sound science and protecting the public.

CONCLUSION

Nuclear power is unsafe, uneconomic, unreliable and generates waste for which there is no sound solution. It is a failed technology of the past and would not exist were it not for enormous and unjustified government subsidies and policies. The U.S. should do everything it can to protect the health and safety of the public as well as our pocketbooks. Nuclear power should be phased out as quickly as possible and replaced by energy efficiency and clean renewable energy.

STATEMENT OF JEFFREY A. BENJAMIN

Mr. BENJAMIN. Chairman Barton, Ranking Member Boucher and members of the subcommittee. My name is Jeff Benjamin, Vice President of Licensing and Regulatory Affairs for Exelon Nuclear.

I have also led our company's efforts to respond to the security issues following the tragic events of September 11, 2001. My background includes working at four different reactor sites over the past 17 years, including as a Site Vice President at Exelon's LaSalle generating station.

Exelon is the largest operator of nuclear plants in the United States. We own and operate 17 reactors at 10 sites in 3 States, which represents approximately 20 percent of the commercial industry here in the United States.

I am particularly grateful for the opportunity to discuss the matters before you today regarding legislation to define and implement the comprehensive energy policy for this country.

Mr. Chairman, throughout my career in the nuclear power industry, safe operation of our plants and the safety of the public has been job one.

We recognize that operating our plant safely is essential, both from a public confidence standpoint and as a matter of good business economics.

The safe operation of our plants also includes providing effective security to protect the public from radiological sabotage. Since September 11, the nuclear industry has taken numerous and comprehensive steps to further strengthen security at our sites.

We have discussed these steps before you previously and maintain those improvements today. Suffice to say, with these improvement in place, we have added real security over the past 17 months.

Security measures that complement the pre-existing robust security that we had in place prior to September 2001. Recently the Nuclear Regulatory Commission provided the industry with an opportunity to comment on the staff view of adversary attributes for radiological sabotage.

This staff document contains a proposed change to the design basis threat which defines the nature of threats against which we are responsible for defending against.

The current NRC proposal contains several significant changes, that if implemented, present a number of considerable policy and legal challenges.

Challenges that also translate to other critical infrastructure. The issue at the heart of these challenges is improperly defining the division of responsibility between a civilian guard force and government, largely law enforcement and the military.

We have asked the NRC to resolve these issues, in full consultation with the Department of Homeland Security and Congress prior to proceeding with a revised design basis threat.

The NRC seems intent on issuing a revised design basis threat prior to resolving these issues. But the steps we have taken to strengthen security to date, we have the time to do this right.

We also feel that the creation of the Department of Homeland Security has defined the appropriate structure for threat assessment, response and recovery and has obviated the need for any additional legislation in these areas.

Much of what is included in Section 4012 of your bill has been overtaken by events and should be reconsidered. I would now like to discuss Exelon's view on the viability of nuclear option going forward.

Our company has a consistent standard for operating our nuclear plants. We will only operate them if they are both economical and safe.

I would like to start by addressing the notion that our industry is heavily subsidized. First of all, and I believe this is unique from other fuel sources, our industry pays for the cost of being regulated by the NRC, through the NRC's collection of fees.

Second, we pay for the existence of an industry watch dog group, the Institute of Nuclear Power Operations, who's main focus is plant safety and the sharing of best practices.

And third, and again, unlike the other forms of generation, we prepay our ultimate environmental clean up costs through decommission funds and the payments to the Nuclear Waste Fund.

Last year alone Exelon paid close to $119 million into the Waste Fund. Collectively, this prevents future generations from inheriting the burden of radiological decommissioning and waste disposal after our plants have shut down.

Our position on new reactors is simply that we believe that nuclear power is an option that must be maintained. We also believe that any new nuclear investment must be based on rigorous financial and risk evaluations that reflect the reality of a deregulated market.

Exelon has also been aggressive in upgrading the output of our units. And we have done that safely. Since 1998, in Illinois alone, we have added nearly 800 megawatts of capacity to our existing plants at a cost of just under $300 per installed kilowatt.

This compares roughly to $600 to $650 per installed kilowatt for a new combined cycle gas turbine and roughly $1,000 to $1,100 an installed kilowatt for a new coal plant.

Over the past 4 years, concurrent with installing these upgrades, we have operated our plants more efficiently and safely than ever before. Exelon has also submitted an application to the NRC to extend the licenses for Peach Bottom, Quad Cities and Dresden, for an additional 20 years.

The preparation of the Peach Bottom submittal alone involved over 30 man years of engineering effort to meet NRC application requirements and to assure the plant can operate safely for another 20 years.

We are expecting approval of our Peach Bottom submittal in May. The cost of this effort equates to less than $10 an installed kilowatt, for another 20 years of 2,300 megawatts of generation.

As a final point regarding the overall economics of our plants, in the year 2002, we operated our nuclear fleet at a capacity factor of 92.7 percent.

Our production costs, which includes our operating and maintenance costs and fuel, was 1.3 cents a kilowatt hour. Our all end costs for 2002, which includes everything from operating and capital expense to fuel, our property taxes and our mortgage, was 2.01 cents per kilowatt hour.

These costs remain relatively steady even with cold weather. Fuel is not a major driver to our costs. Our costs are driven by operating and maintenance expenses.

One simply needs to compare these generation costs with recent volatility in the spot electricity prices to recognize the stable yet cost-efficient role of nuclear power.

In summary, we recognize the special importance placed on our industry to operate our plant safely. However, we also feel that nuclear has an appropriate an important role in assuring the energy security of America in the future. Thank you.

[The prepared statement of Jeffrey A. Benjamin follows:]

PREPARED STATEMENT OF JEFFREY A. BENJAMIN, VICE PRESIDENT, LICENSING AND REGULATORY AFFAIRS, EXELON CORPORATION

Mr. Chairman and Members of the Subcommittee: I am Jeff Benjamin, Vice President of Licensing and Regulatory Affairs for Exelon Nuclear, a subsidiary of Exelon Corporation.

Thank you for the opportunity to share Exelon Corporation's views on the nuclear energy provisions of Chairman Barton's draft comprehensive energy legislation being considered by the Subcommittee.

Exelon Corporation is one of the largest electric suppliers in the United States, with major interregional operations in generation, transmission, distribution and marketing. Our two utilities, Commonwealth Edison of Chicago and PECO Energy of Philadelphia, serve approximately 5.1 million retail customers, the largest customer base in the country. Exelon and our affiliates own or control generation totaling over 40,000 megawatts, the largest generation portfolio in the country. Our wholesale power marketing division, known as the Power Team, markets the output of our generation portfolio throughout the lower 48 states and Canada with a perfect delivery record.

Exelon Nuclear owns the nation's largest fleet of commercial nuclear plants, operating 17 reactors at 10 sites in Illinois, Pennsylvania, and New Jersey. These plants—with 17,800 net megawatts of total operating capacity—represent roughly 20 percent of the nuclear capacity in the United States.

During 2002, Exelon's fleet of nuclear plants operated at an average capacity factor of over 92 percent and produced 118.7 million megawatt-hours of electricity, about 3 percent of all the electricity generated in the United States last year. All of this electricity was generated without emitting any criteria air pollutants or greenhouse gases. In fact, Exelon's nuclear fleet avoided the emissions of over 119 million tons of CO_2 during 2002.

Exelon achieved this performance while refueling 11 reactors in a record average of 22 days and completing the year without a single lost-time or restricted-duty injury at 9 of our 10 plant sites.

As Congress considers changes to America's energy policy, it is important to recognize the role of nuclear power and to make changes to Federal policy that will promote a diversity of generation technologies in the future. Exelon firmly believes that nuclear power will continue to play a valuable role in providing the nation with a safe, affordable, and environmentally-friendly supply of electricity, and I encourage the committee to move forward with many of the nuclear energy-related proposals included in Chairman Barton's draft legislation.

COMMENTS ON TITLE IV

Subtitle A. Price-Anderson Act Renewal

Subtitle A of Title IV would renew the Price-Anderson Act, legislation that ensures that the public is quickly compensated in the event of a radiological event at a commercial nuclear reactor. Exelon supports Price-Anderson renewal, both to continue the operation of our current fleet of nuclear plants with contractor support and to provide an essential prerequisite to the potential construction of new nuclear plants.

While the draft legislation includes the Price-Anderson provisions approved by the House of Representatives last year, Exelon would encourage the committee to support the Price-Anderson renewal language for commercial nuclear facilities that was agreed to last year by House and Senate conferees to H.R. 4 during conference committee consideration of that legislation.

One section of the draft proposal that was not included in last year's conference agreement (Section 4012) addresses the issue of nuclear facility threats. This section of the bill would direct the President, in conjunction with the Nuclear Regulatory Commission (NRC) and other federal, state and local agencies and private entities, to assess the types of threats faced by commercial nuclear facilities. The provision would also direct the President to assess the nature of any threat posed by enemies of the United States and to classify threats as being the primary responsibility of the Federal government or NRC licensees.

Much of what is included in Section 4012 has been overtaken by events, namely the creation of the Department of Homeland and the NRC's current effort to develop a revised Design Basis Threat. However, Exelon believes that it remains critical for all relevant agencies of the Federal government—in conjunction with state and local agencies and private entities—to fully examine the new threat environment facing the nation's critical infrastructure industries and to classify threats as being the primary responsibility of either the government or private industry. This should be done prior to the issuance of a new Design Basis Threat.

Additional comments on the issue of nuclear security are included later in my testimony.

Subtitle B. Miscellaneous Matters

Subtitle B includes a number of miscellaneous provisions to amend the Atomic Energy Act.

Section 4021 would clarify that the 40-year license period for commercial nuclear reactors begins once the reactor commences operation, not upon approval of the license. Exelon supports this change, which codifies existing Commission policy.

Sections 4022 through 4025 address miscellaneous NRC-related issues that have been requested by the Commission. Exelon has no objection to these provisions.

Sections 4026 through 4028 include provisions requested by the NRC to address security-related issues. Exelon has no objection to these provisions.

NUCLEAR SECURITY

Protection of the health and safety of the public and our employees is of paramount importance to the nuclear power industry. The industry has worked closely with a variety of Federal, state and local officials to identify safeguards and resources necessary to respond to potential threats to plant security, and we are fully supportive of taking all reasonable and necessary steps—whether they be by licensees or the government—to ensure that nuclear plants are able to withstand an attack by terrorists.

Commercial nuclear power plants are regarded by many to be the most well-protected industrial facilities in the United States today. Indeed, many other industries are turning to the nuclear industry as a model for providing security at a variety of commercial facilities. For example, in addition to unique physical protections employed at commercial nuclear facilities, the nuclear industry is alone among critical infrastructure industries in using the Federal Bureau of Investigations to run criminal background checks on applicants for positions at sensitive facilities.

Since September 11, 2001, the nuclear industry has undertaken extensive measures to enhance security at the nation's 72 commercial nuclear reactor sites, including actions to harden site access, increase security resources, and improve operational readiness.

To harden site access, Exelon has:

- established armed owner control area checkpoints for all vehicles entering the site;
- implemented additional vehicle pre-screening and control of all on-site deliveries upon entry to the owner-controlled area;
- positioned barriers to prevent access at alternate Owner Controlled Area entrances;
- restricted visitor access to those required for essential plant work;
- extended background checks for all personnel with temporary unescorted access; and
- checked employee databases against FBI watch lists of suspected terrorists from all known terrorist organizations.

To increase security resources, Exelon has:

- increased the number of security officers at each site;
- procured additional weapons and upgraded armaments;
- added armed security posts at key plant locations;
- increased security presence at the site entrance; and
- posted local law enforcement and, at times, National Guard units at site entrances.

To enhance operational readiness, Exelon has:

- enhanced plant procedures and operator training for use during an attack or credible threat;
- implemented a fleet-wide threat assessment procedure to respond to threat situations;
- elevated attention to security and fire protection related equipment; and
- established protocol for augmented federal and state law enforcement assistance and intervention.

Mr. Chairman, I want to stress the multiplicity of concrete actions we have taken since September 11, 2001, to respond to the increased security needs of our Nation and to further enhance our already substantial preparedness.

Revision of the Design Basis Threat

Since shortly after September 11, the Nuclear Regulatory Commission has been engaged in a top-to-bottom review of the Design Basis Threat (DBT), which defines

the nature of threats against which nuclear plant operators are responsible for defending, to reevaluate its adequacy. As an interim measure, the Commission issued Orders on February 25, 2002, that impose significant additional requirements on licensees pending the completion of a more comprehensive review of safeguards and security program requirements.

On January 2, 2003, the NRC provided the nuclear industry an opportunity to comment on the "Staff View of Adversary Attributes for Radiological Sabotage." This staff document contains a proposed change to the Design Basis Threat. The NRC proposal contains several significant changes that, if implemented, present a number of considerable policy and legal challenges. These challenges must be addressed by the NRC, in formal consultation with the Department of Homeland Security, other relevant Departments of the Administration, state and local responders and Congress, prior to moving forward with changes to the current DBT.

THE FUTURE OF NUCLEAR ENERGY

I would now like to discuss Exelon's view on the viability of the nuclear option going forward. Exelon has had a consistent standard for operating our nuclear plants—we will only operate them if they are economical and safe. Opponents of nuclear power frequently claim that the nuclear industry is heavily subsidized. Yet, unlike other generation sources, the nuclear industry incurs several costs unique to electric generators. First, our industry pays for the cost of being regulated by a Federal entity (the Nuclear Regulatory Commission) through the payment of NRC user fees. Second, the industry funds an "industry watchdog" group—the Institute of Nuclear Power Operations—whose main focus is plant safety and the sharing of best practices. Third, the industry fully prepays our ultimate environmental cleanup costs through plant-specific decommissioning funds and the Nuclear Waste Fund. This prevents future generations from inheriting the burden of radiological decommissioning and waste disposal after our plants have shut down.

With regard to new nuclear plants, Exelon strongly believes that nuclear power is an option for the future that must be maintained. We also believe that any new nuclear investment must be based on rigorous financial and risk evaluations that reflect the reality of a deregulated market.

We are one of three companies pursuing approval of an Early Site Permit (ESP) from the NRC. We are seeking an ESP for our Clinton site in central Illinois with the objective of "banking" the site for potential use in the future (the permit would be good for 20 years). Importantly, this process will serve to test the NRC's process for determining site adequacy. We are also working with the NRC through NEI to develop improved licensing processes for the consideration of new plants. All of these efforts are focused on ensuring that when new plants are built there is a well-defined and predictable regulatory process in place.

Even without the addition of new plants, the industry is dramatically increasing the amount of electricity generated from the nuclear sector. Exelon has been a leader in uprating the output of our existing units. In Illinois alone, we have added nearly 800 megawatts of capacity to our plants since 1998 at a cost of just under $300/installed kilowatt. This compares to roughly $800-1000/installed kilowatt to build a new gas or coal plant. Coincident with these uprates, our plants are running more efficiently and safely than ever before.

The industry has also been active in pursuing the renewal of operating licenses for existing plants. Exelon has submitted an application to the NRC to extend the licenses for Peach Bottom, Quad Cities, and Dresden for an additional 20 years. The preparation of the Peach Bottom submittal alone involved over 30 man-years of engineering effort to meet the application requirements and to assure the plant can operate safely for another 20 years. We are expecting approval of our Peach Bottom submittal in May.

CONCLUSION

Mr. Chairman, thank you for the opportunity to discuss these issues with you. Exelon looks forward to working with you and members of the subcommittee as you consider energy legislation this year.

STATEMENT OF EDWIN S. LYMAN

Mr. LYMAN. I would like to thank Chairman Barton and the other distinguished members of the subcommittee for the opportunity to present the views of the Nuclear Control Institute on the

role that nuclear power should play in a comprehensive national energy policy.

In the post-September 11, era, this issue merits most careful consideration. The Nuclear Control Institute is not an anti-nuclear organization. However, we do believe that the nuclear industry and its regulator, the NRC, have an extraordinary obligation to ensure that this inherently dangerous technology is used as wisely, safely and securely as possible.

We also believe that the Department of Energy has a responsibility to respect longstanding U.S. non-proliferation policy in considering the development of new nuclear technologies, both in its domestic and international cooperative research programs.

We cannot afford to repeat the mistakes of the early promoters of nuclear energy, who's lack of foresight has contributed in no small measure to real and growing threat of nuclear and radiological terrorism that Americans face today.

Unfortunately, the lackluster response of the NRC to the urgent nuclear security concerns after September 11, calls into question is credibility as a responsible regulator.

And DOE's misguided plans to revive spent fuel reprocessing and plutonium recycling in the U.S., and to encourage it abroad, albeit under the guise of proliferation resistant technology, will only increase the threat of nuclear proliferation and nuclear terrorism in the world.

It is therefore up to Congress to ensure that any nuclear component of a national energy policy be fully consistent with the fundamental objectives of Homeland Security and non-proliferation.

This requirement raises difficult issues. It is becoming increasing apparent that effective Homeland Security cannot be brought on the cheek.

It may turn out that the cost of measures needed to protect Americans from nuclear and radiological terrorism will be too great for the nuclear industry to bear and remain economically viable.

But if the security of nuclear facilities can be guaranteed only with public subsidy, Congress should assess how its constituents feel about using their tax money for this purpose.

If public reaction is negative, Congress needs to reconsider the role of nuclear energy in the future and whether efforts should be directed toward technologies that present less tempting terrorist targets.

I would now like to discuss a few specific objectives I think are necessary for responsible nuclear energy policy. If nuclear power is to have a continuing role in the Nation's energy mix, there has to be a fundamental change in our approach to protecting nuclear plants and materials from being used as terror instruments.

Nearly 18 months after September 11, NRC is still dragging its heels in putting into place a new frame work for nuclear facility protection.

The industry is bitterly resisting any new security requirements that will cost it money, and policymakers appear no closer to resolving a crucial issue.

And I agree with Mr. Benjamin. This is crucial. Who should have responsibility for protecting nuclear facilities against September 11 scale threats?

Congressional action is needed to break these logjams and the section on nuclear facility threats in the draft energy bill is a step in the right direction.

The draft legislation would authorize a Presidential review of threats to nuclear facilities in consultation with NRC and other appropriate agencies. I believe that this review is needed.

Because the current decision, a revised design basis threat, is being made entirely within NRC, including closed door consultations with the industry on the impact of the revision on its financial bottom line.

This isn't appropriate. The magnitude of today's threat should be based on the best intelligence information, something utility executives are not in a position to assess.

And the decision on where the responsibility in the industry stops and that of the Federal Government begins, definitely deserves a wider range of discussions.

Now a related issue is the private sector is having difficulty providing security forces that are flexible enough to adjust rapidly to changes in the homeland security threat status.

Utilities are unwilling to hire new security guards to meet the greater demands associated with an increase in the status if it appears the alert will only last for a short time.

But this means the existing guard forces are being burdened with excessive over time in exactly the times they need to be at peak levels of alertness.

Federal and other public resources, such as a reserve force of nuclear responders may be needed to smooth out these transitions.

Other issues that should be considered are the impact of a jet attack on a nuclear plant and what defenses maybe necessary, which again would be a responsibility we believe of the Federal Government.

Also, the draft bill's provisions to establish and operational safeguards response evaluation program are needed because the current program, even though NRC is putting into place, still have a number of weaknesses, including it is going to remain a voluntary program for at least another year.

And I think that they need to have enforcement and NRC should have the ability to choose the plants that it wants to test. We shouldn't wait for the industry to come forward and put their best foot forward.

Finally, other issues, such as new plant design approval, license renewal, new plant siting, should take into account the potential for terrorism.

For instance, for plant siting, there should a required assessment of the desirability of plant locations as terrorist targets from the standpoint of symbolic value, consequences, and inability to evacuate the area.

This would help to avoid ill-advised siting decisions, such as the one that allowed Indian Point to be built only 30 miles from New York City.

Many of these issues could be addressed in NEPA proceedings, but the NRC has recently ruled that out as far as its own NEPA activities goes.

And so I believe Congress should mandate the NRC carry out homeland security impact assessments for all significant agency actions.

In summary, we need to solve today's outstanding security problems affecting the nuclear industry before we can guarantee a long term role for nuclear power in our country. Thank you very much.

[The prepared statement of Edwin S. Lyman follows:]

PREPARED STATEMENT OF EDWIN S. LYMAN, PRESIDENT, NUCLEAR CONTROL INSTITUTE

I would like to thank Chairman Barton and the other distinguished members of the Subcommittee for the opportunity to present the views of the Nuclear Control Institute on the role that nuclear power should play in a comprehensive national energy policy. In the post-September 11 era, this issue merits most careful consideration.

The Nuclear Control Institute is not an anti-nuclear organization. However, we do believe that the nuclear industry and its regulator, the Nuclear Regulatory Commission, have an extraordinary obligation to the American people to ensure that this inherently dangerous technology is used as wisely, safely and securely as possible. We also believe that the Department of Energy has a responsibility to respect longstanding U.S. nonproliferation policy in pursuing the development of new nuclear technologies, both in its domestic and international cooperative research programs. We cannot afford to repeat the mistakes of the early promoters of nuclear energy, whose lack of foresight has contributed in no small measure to the real and growing threat of nuclear and radiological terrorism that Americans face today.

Unfortunately, the lackluster response of the NRC to the urgent nuclear security concerns that arose after the September 11 attacks calls into question its credibility as a responsible regulator of the U.S. nuclear energy infrastructure. And DOE's misguided plans to revive spent fuel reprocessing and plutonium recycle in the U.S. and to encourage it abroad—albeit under the guise of "proliferation-resistant" technology—will only increase the threat of nuclear proliferation and nuclear terrorism in the world.

It is therefore up to Congress to ensure that any nuclear component of a comprehensive national energy policy be fully consistent with the fundamental objectives of homeland security and non-proliferation. This requirement raises difficult policy issues. It is becoming increasingly apparent that effective homeland security cannot be bought on the cheap. It may turn out that the cost of measures needed to provide the American people with adequate protection from nuclear and radiological terrorism will be too great for the nuclear industry to bear and remain economically viable. If the security of nuclear facilities can be guaranteed only with public subsidy, Congress should assess how its constituents feel about using their tax money for this purpose. But if public reaction is decidedly negative, Congress needs to reconsider whether nuclear energy should have a significant role in the future or whether efforts should be directed toward technologies that present less tempting targets to terrorists.

I would now like to discuss a few specific objectives that are in our view essential elements of a responsible nuclear energy policy.

If nuclear power is to have a continuing role in the nation's energy mix, there must be a fundamental change in our approach to protecting nuclear power plants and materials from being used as instruments of terror. Nearly 18 months after the September 11 attacks, NRC is still dragging its heels in putting into place a new framework for nuclear facility protection, the nuclear industry is bitterly resisting any new security requirements that will cost it money, and policymakers throughout the government appear no closer to resolving the crucial issue of who should have responsibility for protecting nuclear facilities against September 11-scale threats. Congressional action is needed to break these logjams, and the section on "Nuclear Facility Threats" in the draft energy bill under discussion is a step in the right direction.

The draft legislation would authorize a Presidential review of threats to nuclear facilities, in consultation not only with NRC but with other appropriate agencies. This review would take into account realistic assessments of the post-September 11 terrorist threat, and would identify an appropriate "design basis threat" (DBT), establishing the dividing line between the level of protection that is the responsibility of NRC licensees and the level that is the responsibility of the Federal Government. This question raises complex policy issues requiring high-level consideration and full

interagency involvement, including the appropriate role of Federal assets in protecting commercial nuclear facilities.

This review is needed because right now the decision on a revised DBT is being made entirely within NRC, including closed-door consultations with the industry on the impact of the revision on its financial bottom line. This is inappropriate. The magnitude of today's terrorist threat should be based on the best intelligence information, something that utility executives are not in a position to assess. And the decision as to where the responsibility of the industry stops and that of the Federal Government begins should obviously involve a wider group than just the NRC and the industry it regulates.

A related issue that needs to be addressed is that the private sector is having difficulty providing security forces flexible enough to adjust rapidly to changes in the homeland security threat status. Utilities have proven to be unwilling to hire new security guards to meet the greater demands associated with an increase in the threat status if it appears that the higher alert will only last for a short time, as has been the case so far. But this means that the existing guard forces are being burdened with excessive overtime at exactly the times that they need to be at peak levels of alertness and performance. Federal or other public resources—such as a reserve force of nuclear plant responders—may be needed to smooth out these transitions.

Moreover, more general Federal assistance to nuclear plant guard forces may also be appropriate. To remedy the wide variations in qualifications, fitness and training among private security forces, the U.S. could standardize the process for hiring, training and retraining guards by instituting a Federal academy for this purpose. Graduates of this course would be certified to work as nuclear plant armed responders, subject to periodic recertification.

Broader government involvement and interagency expertise are also needed in considering how to deal with the ultimate September 11 threat of a jet aircraft attack on a nuclear plant. Although anti-aircraft weapons are now guarding the skies around Washington, the NRC continues to scoff at suggestions that it seriously consider requiring such protection at nuclear plants. Unsupported industry claims that nuclear power plants are essentially invulnerable to a jet attack are of little comfort to people who know that these plants remain undefended from the air.

The draft bill's provision to establish an "operational safeguards response evaluation" program for periodic force-on-force testing of nuclear facility security is also needed. But this provision would be strengthened if establishment of the program were put on a fast track and made more specific to addressing the deficiencies in NRC's own program. Although NRC finally appears to be resuming force-on-force testing after an 18-month hiatus, it is commencing with only a voluntary "pilot program" in which the exercises will not be graded on a pass-fail basis and no enforcement actions will be taken in the event of poor performance. At a time when America is facing the threat of terrorist reprisals in response to the imminent war in Iraq, we do not have the luxury of engaging in a drawn-out experimental program, or being patient if nuclear plant security forces prove unable to protect their facilities from a terrorist-caused meltdown. The NRC should immediately start formally testing the security at nuclear plants of its choosing, utilizing credible adversary characteristics (for both outsiders and insiders), and sanctioning plants that fail.

Finally, Congress should ensure that, if nuclear power is to remain an option in the United States, the regulatory processes for license renewal, new plant design approval and new plant siting should take into account the potential for deliberate acts of malice in addition to spontaneous accidents. The growing yet unpredictable threat of catastrophic terrorism has thrown a monkey wrench in NRC's traditional regulatory decision-making process, which is predicated on the assumption that the most severe accidents are the most infrequent and hence require far less consideration. But today, NRC should be required to seriously assess the potential for severe radiological releases resulting from a terrorist attack.

For emergency planning, NRC should determine all who are at risk from a terrorist attack and ensure that they can be protected, using methods grounded in science rather than public relations. Such an effort should result in the designation of emergency planning zones far larger than the 10-mile radius zones in place today. According to calculations I have performed using NRC-approved codes, these zones may have to extend more than a hundred miles downwind. If such zones are impractical and the residents cannot be adequately protected, then there must be a clear regulatory mechanism for shutting down plants that pose unacceptable risks.

For license renewal and new plant siting, there should be a required assessment of the desirability of plant locations as terrorist targets from the standpoint of symbolic value, potential consequences and inability to evacuate the area at risk. This

would help to avoid ill-advised siting decisions, such as the one that allowed the Indian Point nuclear plant to be built only thirty miles from New York City.

And for new plant designs, resistance to terrorist attack should be a fundamental design requirement—in contrast to the current generation of nuclear plants, which are vulnerable to common-mode failures that terrorists can induce with a minimum of effort.

Many of these issues could be addressed in National Environmental Policy Act (NEPA) proceedings. However, the NRC recently ruled that the consequences of terrorist attacks need not be considered in Environmental Impact Statements because "the possibility of a terrorist attack . . . is speculative and simply too far removed from the . . . consequences of agency action to require a study under NEPA." Congress should mandate that NRC carry out "homeland security impact assessments" for all significant agency actions.

In summary, we need to solve the outstanding security problems affecting our nuclear industry today before we can guarantee a long-term role for nuclear power in our country. I would point out that in an interview last September 11, Khalid Sheikh Mohammed said that al Qaeda decided to omit nuclear facilities from its list of targets "for now." As terrorists become increasingly desperate and dangerous, it would be foolish to expect that U.S. nuclear facilities will remain off that list much longer.

Now I would like to briefly comment on the Department of Energy's Advanced Fuel Recycling and Generation IV programs. The Nuclear Control Institute is opposed to spent fuel reprocessing on proliferation grounds, and believes that the U.S. moratorium on reprocessing, the outcome of a review begun in the Ford Administration, is sound policy. It allowed the U.S. to avoid the cost and risk associated with the accumulation of large stockpiles of separated civil plutonium, in contrast to countries that did not follow our lead, including the United Kingdom, France, Russia and Japan. It also gave the U.S. the moral authority to block the transfer of reprocessing technology to countries like South Korea.

Therefore, in our view, the desire of the White House and the Department of Energy to overturn this policy and pursue research, development and deployment of new reprocessing technologies is deeply troubling. This shift will send the wrong signal to the rest of the world, giving a boost to countries like Japan whose own plutonium recycling programs are in disarray, and removing the brakes on the ambitions of many other nations to reprocess their spent fuel. This will increase the risk of theft or diversion of plutonium at a time when the threat of nuclear terrorism has never been as great.

DOE's claim that the technologies it will develop are "proliferation-resistant" gives little reassurance. There is nothing new about these concepts that would change the conclusion reached by numerous analyses in the 1970s that the proliferation risks associated with reprocessing cannot be fixed with technical means. Unless the most rigorous safeguards and physical protection measures are applied to nuclear material during processing, transport, storage and utilization, plant insiders or suicidal attackers will be able to defeat the modest deterrent effect of the "proliferation-resistant" fuel cycles that DOE has proposed. And diversion of plutonium will be even harder to detect in "proliferation-resistant" facilities than in conventional reprocessing plants because the ability to make precise measurements would be diminished.

DOE's advanced fuel recycling research is not likely to win any converts among nations that already operate conventional reprocessing plants, such as France, but it is likely to give encouragement to countries that do not now reprocess but would like to, such as South Korea. The net effect of this program will be to increase the quantity of poorly safeguarded and protected nuclear weapon material in the world.

DOE's January 2003 report to Congress on its Advanced Fuel Cycle Initiative failed to answer nearly all of the questions that it was required to address for the technologies under study, providing no information on waste streams, life cycle costs, proliferation resistance or facility siting strategy. Before spending a penny more on this wasteful and dangerous program, Congress should demand and receive substantive answers to these questions.

Thank you for your attention.

STATEMENT OF STEVEN NADEL

Mr. NADEL. My name is Steve Nadel, I am here representing the American Council for an Energy Efficient Economy. We are a nonprofit research organization that has been working on energy efficiency technology and policy issues for more than 20 years.

I am going to be commenting on the energy efficiency aspects of the bill and there are quite a few energy efficiency aspects scattered among the five out of the ten titles in the draft Barton bill.

First, I wanted to note that energy efficiency has been a major resource for the United States. Since 1973, the U.S. has, through efficiency, reduced energy use more than 25 percent. So that makes it a very large resource.

Our analyses, also analyses by DOE, indicate that we can continue that trend and save an equivalent amount of energy over the next 20 or so years.

We think it is very important that the Unites States do so. It will help reduce oil imports. It will help with economic development.

It will provide downward pressure on prices. Prices are peaking now and they depend on the balance between supply and demand. If we can moderate demand, we can also moderate prices.

Finally, energy efficiency policy is part of a, I call it a no regrets policy toward climate change. These are things that are cost-effective that we can all agree on today that will help reduce emissions while we are figuring out what other steps, if any, to take.

Title I of Representative Barton's bill is the heart of energy efficiency. We wanted to praise Representative Barton for including this. There are a lot of good provisions in this Title.

It began with, in 2001, with the initial House energy bill, which had some useful provisions for energy efficiency. The Senate had a lot more time to work on things and expanded the energy efficiency provisions quite significantly on a bi-partisan basis.

Last year the House conferees accepted many of those provisions. We had consensus. Representative Barton has really picked up where this discussion left off last year and included a lot of good provisions in Title I.

In particular, we would note that Title I includes a variety of consensus efficiency standards. We worked with Dr. O'Hagan and other associations to negotiate consensus agreements in terms of new efficiency standards or in some cases provisions that DOE would set new standards.

There are some very significant savings from these provisions. There is also some very useful work dealing with Federal Energy Management Program, helping to improve that program and helping to save a lot more energy in the future building on its past successes.

A good provision dealing with industrial voluntary programs. Some very useful provisions dealing with State energy programs. A lot of good provisions, and we hope that Title I will be enacted.

We are also working with Dr. O'Hagan and other people to look at some possible consensus modifications, additions to this. Those discussions are still ongoing, but hopefully we will have consensus and some recommendations to share with you shortly.

I would also note that Title V includes lots of useful R&D activities. Advanced lighting, combined heat and power, many useful programs there. So that's a good Title.

Title V includes a section on hydrogen R&D, both for vehicles and for the infrastructure. Again, some very useful sections that we support.

We particularly support the fact that in Title V it actually sets some concrete goals for hydrogen vehicles. And these were discussed in the first panel.

In terms of decisions to produce vehicles by 2015 and actually start selling these vehicles by 2020. We think some concrete targets really will help to focus some of these efforts.

Title X of the bill deals with automobile fuel economy. It has a provision to authorize the Department of Transportation to set new fuel economy standards. We think this is helpful.

We also like the fact that the bill, unlike the 2001 bill, does not include an extension of the dual fuel credit for fuel economy.

This was a very well-intentioned provision to help encourage use of alternative fuels. While we support use of alternative fuels, that particular mechanism hasn't worked.

Research by the Department of Transportation indicates that 99 percent of the dual fuel vehicles actually just burn gasoline. But that provision effectively is allowing all vehicles to burn more gasoline because it reduces fuel economy, and it is not really resulting in any alternative fuel use.

So we think that section either needs to be reformed or dropped. And we praise Chairman Barton for not including it and hope that will continue as the bill moves forward.

Electricity is a major provision in the bill. One of the aspects that we work on from an efficiency point of view is combine heat and power plants.

These have enormous potential to save a lot of energy because they can be up to twice as efficient as separate boilers and separate power plants.

Currently there are quite a few obstacles toward these plants in terms of the utility regulations, in terms of hook up requirements, back up power prices, etcetera.

We recommend that FERC be given the authority, subject to, commensurate with their existing authority, to help us guide buyback rates, interconnection requirements.

We know that several members of this committee are actually thinking of introducing legislation shortly on this and we hope you will include it.

I guess to summarize, I would note that in our estimation the provisions, particular in Title I, will reduce U.S. energy use, we figure, by about 2 percent by 2020.

That is fairly significant. We are talking on the order of 40,000 megawatts of power reduction. It is equivalent to about 130 power plants, 300 megawatts each.

So some very significant savings there. But some of the additions that we suggest could increase these savings many fold and we hope you will buildupon the solid foundation that is in the bill and add a number of these new provisions. Thank you.

[The prepared statement of Steven Nadel follows:]

PREPARED STATEMENT OF STEVEN NADEL, EXECUTIVE DIRECTOR, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY

INTRODUCTION

ACEEE is a non-profit organization dedicated to increasing energy efficiency as a means for both promoting economic prosperity and environmental protection. We

were founded in 1980 and have contributed in key ways to energy legislation adopted during the past 20 years, including the Energy Policy Act of 1992 and the National Appliance Energy Conservation Act of 1987. I appreciate the opportunity to appear again before this Committee.

Energy efficiency improvement has contributed a great deal to our nation's economic growth and increased standard of living over the past 30 years. *Energy efficiency improvements since 1973 accounted for approximately 25 quadrillion Btu's in 2002, which is about 26% of U.S. energy use and more energy than we now get annually from coal, natural gas, or domestic oil sources.* Consider these facts which are based primarily on data published by the federal Energy Information Administration (EIA):

1. Total primary energy use per capita in the United States in 2002 was almost identical to that in 1973. Over the same 29-year period, economic output (GDP) per capita increased 74 percent.
2. National energy intensity (energy use per unit of GDP) fell 43 percent between 1973 and 2001. About 60% of this decline is attributable to real energy efficiency improvements and about 40% is due to structural changes in the economy and fuel switching.[1]
3. If the United States had not dramatically reduced its energy intensity over the past 29 years, consumers and businesses would have spent at least $430 billion more on energy purchases in 2002.
4. Between 1996 and 2002, GDP increased 21 percent while primary energy use increased just 2 percent. Imagine how much worse our energy problems would be today if energy use had increased 10 or 20 percent during 1996-2002.

Even though the United States is much more energy-efficient today than it was 25 years ago, there is still enormous potential for additional cost-effective energy savings. Some newer energy efficiency measures have barely begun to be adopted. Other efficiency measures could be developed and commercialized in coming years, with proper support:

- The Department of Energy's national laboratories estimate that increasing energy efficiency throughout the economy could cut national energy use by 10 percent or more in 2010 and about 20 percent in 2020, with net economic benefits for consumers and businesses.[2]
- ACEEE, in our *Smart Energy Policies* report, estimates that adopting a comprehensive set of policies for advancing energy efficiency could lower national energy use from EIA projections by as much as 11 percent in 2010 and 26 percent in 2020.[3]
- The opportunity for saving energy is also illustrated by experience in California in 2001. Prior to 2001 California was already one of the most-efficient states in terms of energy use per unit gross state product (ranking 5th in 1997 out of 50 states[4]). But in response to pressing electricity problems, California homeowners and businesses reduced energy use by 6.7% in summer 2001 relative to the year before (after adjusting for economic growth and weather)[5], with savings costing an average of 3 cents per kWh,[6] far less than the typical retail or even wholesale price of electricity.

Unfortunately, a variety of market barriers keep these savings from being implemented. These barriers are many-fold and include such factors as "split incentives" (landlords and builders often don't make efficiency investments because the benefits of lower energy bills are received by tenants and homebuyers); panic purchases (when a product such as a refrigerator needs replacement, there often isn't time to research energy-saving options); and bundling of energy-saving features with high-cost extra "bells and whistles."

Furthermore, recent developments indicate that the U.S. needs to *accelerate* efforts to implement energy-efficiency improvements:

---

[1] Murtishaw and Schipper, 2001, *Untangling Recent Trends in U.S. Energy Use.* Washington, D.C.: U.S. Environmental Protection Agency.

[2] Interlaboratory Working Group, 2000, *Scenarios for a Clean Energy Future.* Washington, D.C.: Interlaboratory Working Group on Energy-Efficient and Clean-Energy Technologies, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy.

[3] Nadel and Geller, 2001, *Smart Energy Policies: Saving Money and Reducing Pollutant Emissions Through Greater Energy Efficiency*, Www.aceee.org/ energy/reports.htm. Washington, DC: American Council for an Energy-Efficient Economy.

[4] Geller and Kubo, 2000, *National and State Energy Use and Carbon Emissions Trends.* Washington, DC: American Council for an Energy-Efficient Economy.

[5] California Energy Commission, 2001, *Emergency Conservation and Supply Response 2001.* Report P700-01-005F. Sacramento, CA.

[6] Global Energy Partners, 2003, *California Summary Study of 2001 Energy Efficiency Programs, Final Report.* Lafayette, CA.

- Oil, gasoline and natural gas prices have been climbing steadily in recent months. Energy-efficiency can reduce demand for these fuels, reducing upward price pressure and also reducing fuel-price volatility, making it easier for businesses to plan their investments. Prices are determined by the interaction of supply and demand—if we seek to address supply and not demand, it's like entering a boxing match with one hand tied behind our back. For example, the *Smart Energy Policies* study referenced above used the Department of Energy's (DOE's) National Energy Modeling System to assess the impacts of energy-saving policies and found that these policies could have a large impact on natural gas prices, reducing average prices in 2020 from $3.10 per million Btu's in the EIA basecase projection to $1.90 per million Btu's if a comprehensive set of efficiency policies is implemented.
- The U.S. is growing increasingly dependent on imported oil, with imports accounting for about 60% of U.S. oil consumption in 2000 of which nearly half came from OPEC and nearly a quarter came from the Persian Gulf.[7] Energy-efficiency can slow the growth in oil use, allowing a larger portion of our needs to be met from sources in the U.S. and neighboring friendly countries.
- The U.S. economy has been in the doldrums for more than two years. Energy-efficiency investments often have financial returns of 30% or more, helping to reduce operating costs and improve profitability. In addition, by reducing operating costs, efficiency investments free up funds to spend on other goods and services, creating what economists call the "multiplier effect", and helping the economy broadly. A 1997 study found that due to this effect, an aggressive set of efficiency policies could add about 770,000 million jobs to the U.S. economy by 2010.[8]
- Emissions of gases contributing to global climate change continue to increase. Early signs of the impact of these changes are becoming apparent in Alaska. Energy-efficiency is the most cost-effective way to reduce these emissions, as efficiency investments generally pay for themselves with energy savings, providing no-cost emissions reductions.

Energy-efficiency also draws broad popular support. A nationwide poll conducted for the *Los Angeles Times* found that when people were asked how to meet our energy needs, "15% called for greater conservation efforts, 17% supported development of new supplies and 61% said they favored both steps in equal measure".[9] Similarly, in a May 2001 Gallop Poll, 47% of respondents said the U.S. should emphasize "more conservation" versus only 35% who said we should emphasize production (an additional 14% volunteered "both"). In this same poll, when read a list of 11 actions to deal with the energy situation, the top four actions (supported by 85-91% of respondents) were "invest in new sources of energy," "mandate more energy-efficient appliances," "mandate more energy-efficient new buildings," and "mandate more energy-efficient cars." Options for increasing energy supply and delivery generally received significantly less support.[10]

Furthermore, increasing energy efficiency does not present a trade-off between enhancing national security and energy reliability on the one hand and protecting the environment on the other, as do a number of energy supply options. Increasing energy efficiency is a "win-win" strategy from the perspective of economic growth, national security, reliability, and environmental protection.

We are not saying that energy efficiency alone will solve our energy problems. Even with aggressive actions to promote energy efficiency, U.S. energy consumption is likely to rise for more than a decade, and this growth, combined with retirements of some aging facilities, will mean that some new energy supplies and energy infrastructure will be needed. But, aggressive steps to promote energy efficiency will substantially cut our energy supply and energy infrastructure problems, reducing the economic cost, political controversy, and environmental impact of energy supply enhancements.

COMMENTS ON THE DRAFT "ENERGY POLICY ACT OF 2003"

In the bulk of my testimony, I want to comment on the energy-efficiency sections in the draft "Energy Policy Act of 2003" released by Chairman Barton last week.

---

[7] Energy Information Administration, 2001, *Annual Energy Review 2001.* Washington, DC: U.S. Dept. of Energy.

[8] Alliance to Save Energy et al., 1997, *Energy Innovations: A Prosperous Path to a Clean Environment.* Washington, DC: American Council for an Energy-Efficient Economy.

[9] Barabak, Mark, 2001, "Bush is Criticized as Environment Weighed," *Los Angeles Times,* April 30, p. A1.

[10] Moore, David, 2001, "Energy Crisis: Americans Lean toward Conservation over Production," www.gallup.com/poll/releases/pr010515.asp. Princeton, N.J.: The Gallup Organization.

Five of the bill's titles address energy efficiency in some fashion including Titles I (Energy Conservation), V (Vehicles and Fuel), VI (DOE Programs), VII (Electricity), and X (Automobile Efficiency).

Overall, with the exception of Title VII, these provisions represent modest but significant steps to improve energy efficiency in the U.S. These provisions are also a significant improvement over the efficiency related provisions in the energy bill passed by the House in 2001.

Title I—Energy Conservation

Most of the efficiency gains are contained in Title I. This title is based almost entirely on the energy efficiency title negotiated last summer and fall by House and Senate energy bill conferees of both political parties. We support this title and recommend that it be included in the final House bill.

Most of the savings in this title come from Subtitle C on Energy-Efficient Products. This section includes consensus energy-efficiency standards negotiated by ACEEE and industry to improve the efficiency of various products used in homes and businesses. In cases where there was clear consensus on what the new standard should be, the specific standard is included in the bill. Placing these standards in the bill speeds up implementation (saving the three years for a typical DOE rulemaking) and also provides clear direction for manufacturers on the products they need to produce (with a rulemaking, manufacturers face uncertainty until a final rule is published). In cases where such consensus was lacking, the bill directs DOE to set standards by rule. Overall, we estimate that these standards will have a benefit-cost ratio of about five to one (energy bill savings will be about five times greater than the incremental cost of the more efficient equipment).[11] This Subtitle also includes a useful provision directing the Federal Trade Commission to review and improve the Energy Guide label that now is displayed on many types of appliances. The current label is ineffective at educating and motivating consumers and needs updating.

We do have a few small changes to suggest to this section. Most of these are too small and technical to mention here (we will instead note them in a separate letter to staff), but one item is worth mentioning. In the energy bill passed by the House in 2001, there was a provision directing DOE to consider efficiency standards furnace fans (these are the fans that circulate heated air through the ducts and into the living space). The Senate did not include this provision because furnace manufacturers argued (with ACEEE accent) that DOE already had this authority and should consider furnace fans as part of a current rulemaking on furnace efficiency. Recently DOE counsel has questioned whether DOE in fact has this authority. We recommend that the House bill clarify that DOE does in fact have authority to regulate the efficiency of furnace fans as part of rulemakings to set new furnace efficiency standards.

We are also talking with industry about a few possible additional consensus standards, such as a standard for compact fluorescent lamps that would be based on the present Energy Star specification for these products. As soon as these negotiations are completed we will bring our recommendations to Committee staff so that members may consider them.

Subtitle A addresses Federal Leadership in Energy Conservation. It is important for the federal government to continue to lead the nation in energy efficiency by setting an example of energy use in its own buildings. Few federal programs have been as cost-effective as DOE's Federal Energy Management Program (FEMP). At an average cost of only $20 million per year, FEMP has cut federal building energy use by nearly 21% from Fiscal Year 1985 to Fiscal Year 1999—a reduction that now saves federal taxpayers roughly $1 billion each year in reduced energy costs. The draft Energy Policy Act of 2003 includes an agreement from last year's Conference Committee on provisions to update and strengthen FEMP efforts including: (1)updating agency energy reduction targets; (2) extending and expanding Energy Savings Performance Contract (ESPC) authority; (3) requiring cost-effective metering; (4) increasing performance standards for new federal buildings; (5) strengthening federal procurement requirements; and (6) increasing federal fleet fuel-economy requirements. We fully support these provisions. This Subtitle also includes a useful new program to encourage and assist industry to make voluntary reductions in industrial energy intensity.

---

[11] Kubo and Nadel, 2001, *Opportunities for New Appliance and Equipment Efficiency Standards: Energy and Economic Savings Beyond Current Standards Programs.* Washington, DC: American Council for an Energy-Efficient Economy.

Subtitle B authorizes several new state and local energy-saving programs. These could be useful programs if funding is provided, but absent new funding these sections will probably have little impact.

Overall, preliminary estimates by ACEEE are that Title I will save about 18.5 quadrillion Btu's of energy ("quads") over the 2004-2020 period, including about 2.8 quads in 2020. These savings are nearly 1% of predicted U.S. energy use over this period, and about 2% of predicted energy use in 2020. Most of these savings will be in electricity, eliminating the need for about 130 new power plants (300 MW each) by 2020.

Title X—Automobile Efficiency

This section, according to the summary released by Committee Staff, authorizes the National Highway Transportation Safety Administration (NHTSA) to conduct fuel-economy rulemakings and also directs the National Academy of Sciences to conduct another fuel-economy study. What is most useful about this section is that is does not contain provisions from the 2001 House energy bill that extend the dual-fuel credit and that set overly modest goals for new efficiency standards. We hope that these omissions are permanent.

The dual-fuel credit was a well-intentioned effort to increase use of alternative fuels by giving a fuel-economy credit to manufacturers for producing cars that can use both gasoline and alternative fuels. However, this provision has resulted in little use of alternative fuels and instead has increased gasoline consumption by allowing the entire fleet of vehicles to decrease average fuel economy by up to 1.2 miles per gallon. According to a recent joint report by U.S. Department of Transportation (DOT) and other agencies, dual fuel vehicles use gasoline 99% of the time.[12] The draft bill does well not to extend the dual-fuel credit. This action could save up to 55 million barrels of oil annually, which is more than the oil-savings target in the 2001 House energy bill. In addition, we recommend the further step of reducing the 0.9 mpg dual-fuel credit that DOT has proposed for model years 2005 to 2008. Alternatively, the dual fuel credit could be extended, but the amount of credit based on actual use of alternative fuels by dual-fuel vehicles (as determined by DOT). Such a provision would encourage manufacturers and alternative fuel providers to work together to increase the use of alternative fuels by these vehicles.

The 2001 bill also included a fuel savings target of 5 billion gallons of oil savings over the 2004-2010 period. While this number may sound significant, it's really a "fig leaf" and represents a fuel-use reduction of only 0.5% over this period. In fact, this target only captures modest fuel economy improvements that manufacturers have already announced, and that are also covered in a proposed NHTSA rule.[13] For a fuel-savings target to be useful, it needs to be significant. If a target is added to the bill, we would suggest 1 million barrels per day of oil savings by 2010. This level of savings is about 30% more than the U.S. imported from Iraq in 2001and would represent a 22% average improvement in vehicle fuel economy by 2010 (e.g. from the current 24 mpg under the EPA test procedure to 29 mpg).

Ultimately, the U.S. needs much larger improvements in fuel economy in order to substantially reduce our reliance on oil imports. The last study by the National Academy of Sciences (NAS) found that a significant and cost-effective increase in mpg is possible over the next ten years.[14] Analysis by ACEEE has found that an average fuel economy of 41 mpg is possible and cost-effective by 2012.[15] Furthermore, both NAS and ACEEE have found that the largest percentage improvements in fuel economy can be achieved in SUVs and other light trucks, indicating that it is possible to improve fuel economy and still sell these types of vehicles. We recognize that there may not be the political will today to increase fuel economy significantly, and therefore that Congress is unlikely to take any significant action on this issue. However, such a course has a price—a price at the pump (since increased demand for gasoline tends to increase prices) and also a price in terms of the long-term competitiveness of the U.S. auto industry (if U.S. manufacturers pay less attention to fuel economy than foreign manufacturers, U.S. manufacturers will be at

[12] DOT, DOE, and EPA, 2002, Report to Congress, *Effects of the Alternative Motor Fuels Act CAFE Incentives Policy*, March. Washington, DC: U.S. Dept. of Transportation.

[13] NHTSA, Dec. 16, 2002, "Light Truck Average Fuel Economy Standards Model Years 2005-07." Washington, DC: National Highway Transportation Safety Adminstration.

[14] National Research Council, 2002, *Effectiveness and Impact of Corporate Average Fuel Economy Standards*. Washington, DC: National Academy Press.

[15] DeCicco, An and Ross, 2001, *Technical Options for Improving the Fuel Economy of U.S. Cars and Light Trucks by 2010-2015*. Washington, DC: American Council for an Energy-Efficient Economy.

a competitive disadvantage when fuel supplies inevitably tighten up at some point in the future).

Title's V and VI

Title VI authorizes DOE energy-efficiency programs for the next five years. By and large this title contains a variety of useful ideas (we particularly support the work on lighting and distributed energy systems). However, the impact of this title will primarily depend on future appropriations. Title V also includes specific authorization for the Freedom Car and Hydrogen Fuel programs. We think these are useful programs, and the draft bill improves upon DOE's formulation of the program by setting real-world goals for the introduction and performance of fuel cell vehicles. However, it will be at least 2030 before these vehicles have any significant impact. For example, Title V sets a goal of 2015 for production decisions and 2020 for selling vehicles that will be accepted by consumers. Since most new technologies only gradually penetrate the market, it will be at least 2030 before these vehicles have a significant presence on the road. In the interim, increased efforts will be needed to improve the efficiency of gasoline-powered vehicles. Also, it is far from certain that efforts to develop a hydrogen economy will be successful, so that rather than putting all of our "eggs" in the hydrogen basket, we recommend that a diverse range of advanced high-efficiency technologies be pursued.

Title VII—Electricity

In times of increasing energy costs, combined heat and power (CHP; sometimes also called cogeneration) represents one of the most important opportunities available for improving efficiency, the environment and economic competitiveness. With fair rules, 50,000 MW of CHP capacity can be added by 2010 and an additional 95,000 MW added by 2020, reducing the fuel needed to generate electricity by up to 50%.[16] A recent ACEEE study identified utility practices toward CHP and other distributed generation technologies as the most significant barrier to their expanded use.[17] However, in many utility territories, due to these utility practices, current PURPA provisions represent the only opportunity to make such facilities viable.

Subtitle E removes the mandatory purchase and sale requirements under Section 210 of PURPA once a competitive market is present. While we support this concept in principle, we are concerned that the actual provisions in the bill are not sufficient to protect new and existing qualifying facilities (QFs) from predatory behavior by utilities. To make the PURPA provisions in the bill workable, more explicit requirements are needed to ensure that a functioning market exists, where facilities can be interconnected at reasonable cost and in a reasonable timeframe, where excess power can be sold at fair prices, and where backup and supplemental power can be purchased at fair rates. In addition, we are disappointed that the bill does not include provisions that would address these underlying market problems directly, providing an orderly transition from the current PURPA QF structure to one in which distributed generators participate in a fair market place that values their benefits and prices services in a truly competitive manner. We understand that several members of this Committee are now attempting to craft language that would provide protection for distributed generation from predatory practices by utilities. We urge the Committee to give such provisions serious consideration. If a provision cannot be crafted that assures fair protections for distributed generation facilitiess, the existing protections afforded by PURPA are preferable to the current draft bill.

We also recommend that a provision be added to establish an Energy Efficiency Performance Standard (EEPS) to establish energy-savings targets for electricity suppliers. Such a program was established in Texas as part of electricity restructuring legislation and appears to be working well.[18] A federal EEPS should require savings from efficiency programs of about 1% per year, starting in 2005 (in order to permit time for programs to start-up), thereby requiring 5% savings in 2010, 10% savings, in 2015, etc. Such a program should permit trading, so that utilities that save more than their target can sell savings credits to utilities that fall short of their savings targets. Trading would also permit the market to find the lowest-cost savings nationwide.

---

[16] Nadel and Geller, 2001, *Smart Energy Policies: Saving Money and Reducing Pollutant Emissions Through Greater Energy Efficiency*, Www.aceee.org/ energy/reports.htm. Washington, DC: American Council for an Energy-Efficient Economy.

[17] Brown, Scott and Elliott, 2002, *State Opportunities for Action: Review of States' Combined Heat and Power Activities*. Washington, DC: American Council for an Energy-Efficient Economy.

[18] Kushler and Witte, 2001, *A Revised 50-State Status Report on Electric Restructuring and Public Benefits*. Washington, DC: American Council for an Energy-Efficient Economy.

CONCLUSION

Energy efficiency is an important cornerstone for America's energy policy. Energy-efficiency has saved consumers and businesses billions of dollars in the past two decades, but these efforts should be accelerated in order to:

- save consumers and businesses even more money;
- change the energy supply and demand balance and put downward pressure on energy prices;
- decrease reliance on imported oil;
- help with economic development (since savings from energy efficiency generates jobs); and
- reduce carbon emissions, helping to moderate growth in the gases that contribute to global climate change.

The provisions in the draft Energy Policy Act of 2003 take modest steps in this direction, particularly the section establishing new appliance and equipment efficiency standards. We are also happy to see that the bill does not extend the gasoline-wasting credit for dual fuel cars. *Overall, we estimate that this bill will reduce U.S. energy use by about 2% by 2020.*

But much more can and should be done. We recommend that Congress include provisions:

- Clarifying in Title I that DOE can address furnace fan energy use in its current rulemaking for a new residential furnace efficiency standard;
- Adding other new efficiency standards in Title I when and if negotiations with industry are successfully completed;
- Setting a fuel-savings goal in Title X of 1 million barrels per day of oil savings by 2010 for future passenger vehicle fuel-economy rulemakings (an increase of about 5 mpg, thereby displacing imports from Iraq);
- Encouraging combined heat and power and other distributed generation systems by adding provisions to Title VII that would provide an orderly transition from the current PURPA structure to one in which distributed generators participate in a fair market place that values their benefits and prices services in a truly competitive manner;
- Including an Energy Efficiency Performance Standard in Title VII, modeled after a program now operating in Texas.

These provisions would increase the savings under the bill by more than a factor of five. Failure to take these steps now will make it more likely that Congress will have to address energy problems in the not very distant future.

This concludes my testimony. Thank you for the opportunity to present these views.

STATEMENT OF MALCOLM O'HAGAN

Mr. O'HAGAN. Good afternoon, Mr. Chairman, Congressman Boucher, my name is Malcolm O'Hagan, I am President of the National Electrical Manufacturers Association.

NEMA applauds the leadership of your committee in addressing the energy needs of our Nation, and we are fully supportive of Chairman Barton's bill.

The 400 members of NEMA manufacture all of the products in the electricity supply chain, from the generator at the power plant to the outlet in your home.

We also manufacture the products that consume most of this electricity, namely lighting and electric motors. NEMA strongly supports the enacted of the comprehensive energy bill.

This year, in fact, we had hoped that it would pass last year. Electricity has become an essential part of our economy, powering industry, commercial sector and our homes, as well as becoming essential to public health and safety.

However, we could use electricity a lot more efficiently without any, without in any way compromising our lifestyle. Let me offer a few examples of how we could realize large savings.

The use of high-efficiency distribution transformers, meeting the industry consensus standard, NEMA TP-1, could save an average of 5 to 10 billion kilowatt hours per year.

Upgrading commercial buildings to meet or exceed the consensus standard ASHRAE 90.1 would result in substantial savings in electricity demand for lighting and air conditioning.

The installation of high efficiency electric motors, both to industry standard NEMA premium, could save 5,800 gigawatt hours of electricity and prevent the release of 80 million metric tons of carbon per year.

Replacing incandescent bulbs with compact fluorescent lamps, would reduce electricity consumption by 75 percent for the same level of lighting.

Market based incentives and solutions should be the primary vehicle to enhance energy efficiency and conservation. However, NEMA acknowledges that on a case-by-case basis there is value in other interventions such as targeted incentives and standards.

We are pleased to see that the bill relies on standards which I just cited. Market based incentives include EnergyStar, and we support making this a statutory program.

NEMA also recommends that the legislation include energy conservation standards for medium-based compact fluorescent lamps, which is not currently the case.

Although tax provisions will be added later in the energy legislation process, I would like to point out that NEMA and the National Resources Defense Council strongly supported the provision in the last Congress which will spur significant energy savings.

This provision has wide support on both sides of the aisle. The proposal would provide $2.25 per square foot tax deduction for commercial buildings with efficiencies 50 percent over ASHRAE 19.1 standard.

This tax benefit would flow to the building owner, who is the one bearing the cost, an important principle of incentives.

NEMA believes that the Federal Government should lead by example by upgrading its own facilities to the highest efficiency standards.

NEMA supports the revision and upgrading of Federal building energy efficiency performance standards. We also advocate that the Federal Government procure NEMA premium motors.

Finally, Mr. Chairman, NEMA is a member of the High Tech Energy Working Group. Its members are the Association of Home Appliance Manufacturers, the Air Conditioning and Refrigeration Institute, the Gas Appliance Manufacturers Association, the Electronic Industries Alliance, the Consumer Electronics Association, the Association for Competitive Technology and the Information Technology Association.

All of these organizations have concerns regarding the issue of standby power and the recent proliferation of State energy efficiency standards.

In the case of standby power, we support the compromise reached by the conferees last year and applaud its inclusion in the current bill.

In the case of proliferation of standards in the States, we urge you to work with stakeholders to draft effective preemption legisla-

tion that will result in nationwide energy efficiency and labeling standards.

Federal standards should preempt State standards for the same products. Thank you, Mr. Chairman, for the opportunity to testify this afternoon.

[The prepared statement of Malcolm O'Hagan follows:]

PREPARED STATEMENT OF MALCOLM O'HAGAN, PRESIDENT, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

INTRODUCTION

Good morning Chairman Barton and members of the Subcommittee on Energy and Air Quality. I am Dr. Malcolm O'Hagan and I am President of the National Electrical Manufacturers Association (NEMA). NEMA is the leading trade association in the United States representing the interests of electroindustry manufacturers. Founded in 1926 and headquartered near Washington, D.C., our 400 member companies manufacture products used in the generation, transmission and distribution, control, and end-use of electricity. Domestic shipments of electrical products within the NEMA scope exceed $100 billion.

NEMA strongly supports the enactment of comprehensive energy legislation this year. Our national energy policies must be updated to reflect technological advances and changes in energy markets. A comprehensive national energy policy must address and balance important goals such as electricity conservation, energy production, and the widespread deployment of new technologies that promise greater efficiency and environmental protection. Moreover, the Subcommittee has recognized and addressed the need for energy efficiency in the electrical transmission grid.

We commend you for your initiative in beginning the debate this year through your draft legislation, the "Energy Policy Act of 2003." We very much appreciate this opportunity to offer testimony on Title I, the energy efficiency proposals, contained in your draft proposal. These proposals reflect much of the hard work done by the members of the House and Senate conference committee on H.R. 4 last year, and provide, we believe, a very solid foundation for moving forward this year. These proposals will achieve meaningful reductions in energy usage and greater energy efficiency in a variety of important areas.

My testimony today will highlight:

- The role of NEMA products and services in achieving energy efficiency and conservation and helping to meet out national energy needs—a role we are very pleased to say is acknowledged in several of the provisions of the draft legislation;
- Specific provisions of Title I of the draft legislation that are of great significance to NEMA members; and
- Other provisions that we believe should be included in comprehensive energy legislation.

NEMA ELECTRICAL ENERGY AND ENERGY EFFICIENCY POLICY PRINCIPLES

NEMA has crafted a set of electrical energy and energy efficiency principles for your guidance and consideration as you and your colleagues proceed on a comprehensive national energy policy. Let me take this opportunity to highlight the three main points from our principles:

1. A comprehensive electrical energy policy should rely on affordable, proven technology to address energy supply and demand;
2. Second, it is critical to understand that energy efficiency and conservation don't mean sacrifice and reduced access, but rather doing more with existing capacity by achieving reduction in energy usage through the use of more efficient products and systems; and
3. Third, market-based incentives and solutions should be the primary vehicle to enhance energy efficiency and conservation. However, NEMA acknowledges that, on a case-by-case basis, there is value in other interventions such as targeted government research and development, incentives and standards.

With regard to energy efficiency issues, NEMA specifically proposes the following concepts as guidelines:

- NEMA believes market forces to achieve energy efficiency and conservation. The litmus for efficient products and control systems is technological feasibility, economic justification, energy savings and commercial availability.

- NEMA acknowledges the key role the federal government should play in fostering public use of energy efficient products and systems. Specifically, NEMA believes that the federal government should promote user education on energy efficiency; support energy efficient upgrades through programs such as the Federal Energy Management Program; encourage performance-based incentives in the private sector; and promote the use of economically sound energy efficient products and systems.

NEMA MEMBER COMPANY PRODUCTS AND SERVICES ACHIEVE ENERGY EFFICIENCY AND CONSERVATION

NEMA recognizes that a comprehensive national energy policy requires a mix of conservation and production, and the promotion of new technologies that promise greater efficiency and environmental protection. NEMA member products are at all stages of the electrical energy process, from generators, transformers, wire and cable, to lighting, motors, and switches at the consumer and end-user points. As an intriguing example of how technology can save energy, NEMA manufacturers have developed technology and products for Intelligent Transportation Systems (ITS), a project under the auspices of the Department of Transportation. This project is a highly cost effective means of reducing transportation fuels consumption, associated air pollution, and also reduces the non-productive time workers spend commuting. As you will see in our recommendations, these and other NEMA products serve to make the system work better and faster without compromising availability. NEMA members are able to do this by taking the best of industry technology and standardizing those products so that they are available globally, delivered locally, competitively priced, able to perform predictably and are safe and environmentally sound.

Members of NEMA produce the products that will enable increases in energy efficiency. From Fort Wayne, Indiana (where Rea, Superior Essex and Phelps Dodge produce magnet wire, one of the keys to increased energy efficiency in motors) to California, NEMA members are on the front line of the battle to increase energy efficiency. NEMA-member software products, such as ABB Energy Interactive's Energy Profiler Online™, facilitate energy load management for commercial and industrial customers, and have been used in California and elsewhere to manage a variety of mandatory and voluntary utility load curtailment programs.

KEY PROVISIONS OF TITLE I OF THE DRAFT "ENERGY POLICY ACT OF 2003"

We see the energy efficiency title of the draft Energy Policy Act of 2003 as particularly valuable because it represents a consensus of views on steps that can be taken beginning now to make real improvements in energy efficiency. NEMA believes that energy efficiency should be evaluated and rewarded on an energy savings and systems basis. When creating incentives, the beneficiary of the cost incentive should be the investor in the equipment. Very simply put, if a building owner makes the capital investment, that owner should get the benefit. This approach can be applied in the public sector as well, as proposed in the draft legislation, which would allow federal agencies to retain the savings they achieve through energy efficiency improvements.

While the technology exists to achieve broad cost savings through energy efficient devices and controls, there is a lack of awareness of the benefits of a systems and control based approach. This is opposed to a piecemeal component approach, to achieve the maximum level of cost effective energy efficiency. To that end, NEMA proposes that the federal government move from strictly encouraging products or components, to promoting the implementation of systems and controls to efficiently manage energy on a wider basis. For example, California enacted legislation that would provide energy efficient upgrades for lighting systems. California recognized the large efficiency gains that would be realized by encompassing lighting controls, occupancy sensors, and luminaires added to any upgrade. Similar efficiency gains can be achieved at the commercial level with industrial and automated controls.

Industry and government both strive to achieve the best performance. But for too long, the hopeful and anticipated approaches of both camps have been belied by the unintended consequences of mandated standards. Voluntary, consensus-driven codes and standards will achieve the greatest level of cooperation and distribution of energy efficient technology in the marketplace. Already, the marketplace recognizes industry-driven standards to achieve efficient products. In particular, the NEMA Premium™ Motor program recognizes efficient motors above the standards contained in current law. The same can be said for distribution transformer consensus standards represented by NEMA TP-1. Industry believes that industry consensus building codes can be a valuable part of ensuring that cooperative goals are achieved and

efficiency gained. We are particularly grateful that the energy efficiency provisions in the draft legislation build on these consensus agreements.

NEMA believes that technological solutions combined with industry consensus and proven results will lead to enhanced energy efficiency. This formula is made even stronger if the cooperative efforts of industry and policymakers are joined. We see this happening in the energy legislation, and look forward to supporting the bill as it moves through the legislative process.

We offer the following specific comments on the proposals contained in Title I:

Provisions to Assert Federal Leadership in Energy Efficiency Improvements (Sections 1001-1004)

NEMA believes that the federal government can set the standard—and a good example—for energy efficiency by starting with the public's own facilities. NEMA urges that the Federal government emphasize the implementation of systems approaches, not merely component replacement, to achieve energy reduction requirements, along with the adoption of new technology, such as NEMA Premium™ motors and distribution transformers that comply with the NEMA TP-1 standard, as discussed below.

We are pleased that the draft legislation requires the Federal government to take a leadership role in expanding the use of energy efficient technologies. Section 1001 appropriately requires that Congress start with itself, by adopting energy and water savings measures in Congressional buildings. In my past testimony before this Subcommittee, I noted that the lighting used in this very hearing room is perhaps a bit less than the most efficient on the market. The initiatives proposed in your legislation will speed the updating of these important public facilities.

Section 1002 proposes energy management goals for Federal agencies, calling for progressive reductions in energy consumption per gross square foot through 2013. As the President and Congress have recognized, the federal government is a major consumer of energy. NEMA has long supported an approach of establishing performance standards, rather than prescriptive requirements for specific technologies, which encourage the selection of the most appropriate technologies and systems approaches in the areas of lighting, controls, and heating, ventilation and air conditioning. A program to require energy efficient upgrades of building systems in existing federal buildings offers the potential for significant energy savings. NEMA supports the approach in section 1002, which does not require adherence to a rigid standard, but rather provides flexibility to agencies to adopt the most efficient systems that meet their needs.

Section 1003 would require the metering of energy use in all Federal buildings. Advanced metering technologies are an important tool in the energy efficiency arsenal, and offer a cost-effective means to identify energy savings potential. We endorse this provision, and look forward to participating in the development of the guidelines called for under proposed NECPA section 543(e)(2).

NEMA supports the revision and upgrading of Federal Building Energy Efficiency Performance Standards. Section 1004 of the draft seeks to achieve energy savings in new facilities based on the industry consensus ASHRAE 90.1 standard. NEMA recommends, however, that you consider setting the level of required improvement over the ASHRAE standard at 10%, not 30% as in the current draft. Achieving an efficiency level 30% above the ASHRAE standard for energy improvements would require custom designs that would greatly increase costs and could actually discourage the deployment of energy efficient technologies in new Federal buildings.

Procurement of Energy Efficient Products by the Federal Government (Sec. 1005)

Executive Order 13123 sought to encourage the acquisition of energy efficient products by the federal government. In addition, programs such as the Federal Procurement Challenge encourage agencies to buy energy efficient products. However, while the Executive Order and the Federal Procurement Challenge have resulted in many efficient upgrades, many agency heads have not had their feet held to the fire to comply with such orders. Many opportunities still exist in federal agency and Congressional offices to achieve energy efficiency.

NEMA believes that provisions to require the procurement of highly efficient products by the Federal Government, as proposed in section 1005, are vitally important. It is fully appropriate to use the purchasing power of the Federal government to build the market for highly efficient products. Aligning these Federal procurement efforts with voluntary industry efforts to mark and market the most highly efficient products promises great rewards.

Section 1005 generally relies on Energy Star and FEMP product designations, which is appropriate. The opportunity is also available, as the draft recognizes, to take advantage of voluntary industry efforts to improve product efficiencies. With

respect to electric motors of 1 to 500 horsepower, we believe that the procurement standard for such motors should be based on the existing NEMA Premium™ standard. Specifying NEMA Premium™ will ensure accurate and real conformance with a proven consensus standard without delay.

By way of background, the NEMA Premium™ motor program is a collaborative effort with the Department of Energy, motor manufacturers and electric utilities. It is an excellent model of how voluntary industry standards can improve efficiency thereby providing a benefit to consumers and the environment. The NEMA Premium™ standard has been endorsed by the Consortium for Energy Efficiency, manufacturers, utilities and several states. NEMA Premium™ is used widely to distinguish the most energy efficient motors.

The NEMA Premium™ motor program expands high efficiency motors standards beyond current requirements. The program covers a broader range of motors than do minimum federal energy efficiency standards (up to 500 horsepower, whereas Federal energy conservation standards apply only up to 200 hp), and it is a more exacting standard. In fact, Department of Energy analyses shows that the NEMA Premium™ motor program, including commercial and agricultural applications, would save 5,800 gigawatt hours of electricity and prevent the release of nearly 80 million metric tons of carbon into the atmosphere in the next ten years. Electric-motor-driven equipment consumes about 60% of all the electricity produced in the country, according to the Department of Energy.

The NEMA Premium™ motor program has significant real-life impact. The Cummins Engine Company's Columbus Engine Plant in Columbus, Indiana retrofitted energy efficient motors on to existing machining and transfer lines and installed the most efficient motors available onto the new lines. Cummins saw a 2.75 percent reduction in total energy costs for the Columbus plant, which was hailed by company executives as a significant savings. The Department of Energy indicated that if every plant in the United States integrated motor system upgrades to the extent that Cummins did, American industry would save an estimated one billion dollars annually in energy costs. This would be the equivalent of the amount of electricity supplied to the State of New York for three months.

We are hopeful that in performing the duties required under proposed section 1005, the Secretary of Energy would take advantage of the NEMA Premium™ standard in designating appropriate energy efficient motors for procurement pursuant to the legislation. Doing so would enable all new equipment acquisitions to be based on current energy efficiency standards with the dual result of energy savings to the government and widespread market penetration of the most highly efficient technologies in energy-intensive equipment. It would also serve as a valuable demonstration of energy efficient savings to the private sector. Government should recognize these industry-led efforts to increase energy efficiency and provide for the most rapid possible integration of technologies meeting the latest efficiency standards into federal facilities. Increasing the deployment of these technologies throughout the Federal government offers a ready means to significantly reduce energy consumption in Federal facilities.

NEMA recommends further that the federal government should use NEMA TP-1 transformers in its purchase specifications and be required to replace failed transformers with new units meeting TP-1 efficiencies. Acquisition of distribution transformers that meet the NEMA TP-1 standard will improve distribution transformer efficiency over the low first cost transformers that are typically selected for government procurement.

Energy Saving Performance Contracts (Sec.1006)

The extension of energy savings performance contracts proposed in section 1006 is also an important element to enable Federal leadership in energy conservation programs. The extension of the program to include replacement facilities is important to greatly expand the reach of this initiative. NEMA members Honeywell and Johnson Controls make extensive use of this program to help Federal agencies save energy.

Voluntary Commitments to Reduce Industrial Energy Intensity (Sec. 1007)

Greater attention must be focused on the reduction of energy use in the industrial and commercial sectors. The potential for energy savings is significant, but cost barriers and lack of information too often prevent the adoption of new energy efficiency technologies and systems in industrial facilities and businesses of all sizes. NEMA encourages the Committee to explore additional means of supporting the deployment of highly efficient new technologies through programs targeted specifically to the industrial sector. Consideration might be given, for example, to a program mod-

eled on the highly successful Weatherization Assistance Program but targeted to small businesses.

Weatherization Assistance Program (Sec. 1021)

The Weatherization Assistance Program has been an important element in the nation's effort to assure that the burdens of high energy costs do not fall disproportionately hard on those least able to afford them. Including electricity efficiency retrofits as an element of the Weatherization program would have long term benefits for residents and property owners. For example, the State of California made upgrades to major systems, such as the installation of high efficiency air conditioners and high efficiency water heaters, as well as other efficient technologies, including set-back thermostats, eligible for the State's residential upgrade program. Taking a similar approach at the Federal level could significantly increase the long term benefits of the Weatherization program. As resources permit, the eligibility of more capital-intensive measures should be fully considered.

State Energy Program (Sec. 1022)

NEMA supports the concept of updating the State energy efficiency goals. As with the Federal government, state energy efficiency plans should not be limited to encouraging certain energy efficient products or components, but rather should focus on promoting the implementation of systems and controls that will enable more efficient energy management. States should also make special outreach to the commercial and industrial sector to reach the untapped energy conservation potential of those sectors. Importantly, however, state energy efficiency initiatives must not conflict with areas in which the Federal government has already exercised its authority pursuant to the National Appliance Energy Conservation Act (NAECA) of 1987 and the Energy Policy Act (EPAct) of 1992.

Energy Star Program (Sec. 1041)

NEMA supports the statutory authorization for the Energy Star program. Under the new statutory authorization, preserving the integrity of the Energy Star label is an express requirement for the Secretary of Energy and the Administrator of the Environmental Protection Agency (EPA). We believe this is very important. Consumers today rely on the Energy Star label to designate superior products with superior performance. Vigilant oversight is needed to assure that products are properly labeled, so that purchasers can be sure up front of the quality of the products that they are purchasing.

The Energy Star program should require the DOE and EPA to develop public plans for the Energy Star program, including the criteria for expansion and program implementation and opportunities for public comments on new and revised product categories and response to comments. Moreover, DOE and EPA should consider the cost effectiveness of the Energy Star program as compared to other programs, and should assure that production lead times are considered and adequate notice given of program changes. These considerations should be balanced against the need for the Energy Star program to remain agile and flexible while allowing for more accountability, commensurate with its increasing stature in the marketplace.

The Energy Star Buildings Program has made significant advances in improving the efficiency of commercial buildings. However, the vast majority of Federal facilities have not yet achieved the Energy Star rating, a classification given only to the top 25% of buildings in terms of watts used per square foot. Therefore, NEMA recommends that existing buildings be upgraded to meet the Energy Star Building Program requirements.

Test Procedures for Determining Energy Efficiency (Sec. 1044)

NEMA fully supports the approach taken in the draft to specify testing requirements for products for which energy efficiency standards would be set in the legislation. Adoption of existing test procedures developed through the Energy Star program, where energy conservation standards are proposed to be set based on Energy Star performance requirements, is appropriate. Similarly, in the case of transformers, it is appropriate to establish the test procedures based on the TP-2 Standard Test Method, developed on a consensus basis by the industry. TP-2 is the test procedure associated with the TP-1 energy efficiency standard that would be established in the legislation as the energy efficiency standard for distribution transformers.

Energy Efficiency Standards for Specific Products (Sec. 1045)

Subtitle C contains a number of specific energy efficiency provisions on which consensus was reached between the time that the House initially passed H.R. 4 in August 2001 and the Senate's passage of its version of the legislation in April of last

year. We are pleased to see these agreements carried forward into the draft legislation. We believe there are significant energy savings offered by the product standards called for in the draft legislation, and that the best way to recognize these savings is through the proposals contained in Subtitle C.

As a general matter, with regard to any additional product standards, NEMA believes that efficiency standards should be based on industry consensus standards achieved through recognized standards setting processes endorsed in the private sector. To the extent that standards are developed within the Department of Energy or other Federal agencies, it is imperative that there be careful adherence to established regulatory processes and procedures, such as those contained in DOE's July 1996 process improvement interpretive rule. The process improvement rule incorporates critical principles for every stage of the energy efficiency standards setting process. However, as good and practical as this rule is, it is not a binding requirement on the Department of Energy. NEMA manufacturers require additional assurance that there will be faithful adherence to all aspects of the process improvement rule in all future standards setting rulemakings for consumer, commercial and industrial products. Greater certainty would be provided if the process improvement rule were formally incorporated into the Department of Energy's regulations governing the establishment of energy efficiency standards.

Standby Power

On the issue of energy efficiency standards for products in a standby mode, your legislation adopts the compromise on this issue ratified last year by the conferees. This approach has been supported by an ad hoc group of manufacturers and concerned trade associations, commonly known as the High Technology Energy Working Group, for the establishment of standards for battery chargers and external power supplies. It is particularly important to concentrate regulatory efforts on those products that are major sources of energy consumption in the standby mode and which are assigned a high priority for regulation, and to rely on voluntary efforts to address other products.

Distribution Transformers

Of particular importance to NEMA are the provisions of the legislation that adopt industry consensus standards as the energy efficiency standards and testing requirements for low voltage dry type distribution transformers. These standards already form the basis for the performance specification for these transformers in the Energy Star program. As indicated below, NEMA believes that the energy efficiency standards should be expanded to cover all distribution transformers.

In 1996, the Transformers Products Section of NEMA developed voluntary energy efficiency standards for distribution transformers. This standard was revised to further increase efficiency in 2002. As virtually all electricity used flows through distribution transformers, the appropriate choice of energy efficiency is very significant. The basic efficiency standard, known as NEMA TP-1 and the associated test and labeling standards (TP-2 and TP-3, respectively) have gained widespread acceptance as the industry norm for energy efficient transformers.

As another excellent example of industry led consensus standard making, if TP-1 were used nationwide, NEMA estimates an energy savings would be in the range of 2-3 quads over a 30-year period. This is an average energy savings of between 5 and 10 billion kilowatt-hours per year. By using NEMA Standard TP-1, the energy used by low-voltage transformers can be cut by over one-third, and by twenty-five percent for medium voltage transformers.

In light of the 2002 revision to TP-1, NEMA requests that the current language in the legislation referring to NEMA TP-1-1996 be updated to refer to NEMA TP-1-2002.

Energy Labeling (Sec. 1046)

The draft legislation calls for a rulemaking on energy efficiency labeling requirements for products for which energy conservation standards would be set in the legislation, including distribution transformers. NEMA recommends that the labeling section of the legislation be revised to specify that the labeling requirements for distribution transformers would be those set under the NEMA TP-3 labeling protocol for all distribution transformers satisfying TP-1. The legislation already adopts the testing and efficiency standards requirements of the NEMA protocols for distribution transformers, and therefore it would be appropriate to apply the TP-3 labeling requirements as well. Doing so would also save the resources that would otherwise be expended to carry out what would essentially be a duplicative rulemaking process to develop a labeling requirement when one is already in place.

Standards for Other Products

NEMA also supports the provisions of the legislation to adopt the performance requirements of the Energy Star program as the energy conservation standards for lighted exit signs, traffic signal modules and torchiere fixtures. Adoption of these standards will expand the benefits of the Energy Star program by increasing the use of highly efficient products in the marketplace without the need for costly and time-consuming agency rulemaking processes for these products.

Effectiveness of Federal Standards

Consistent with the Energy Policy and Conservation Act, these Federal standards should preempt state standards for the same products. The essence of legislation such as NAECA and EPAct is that Federal standards were either legislated or required to be developed by DOE in exchange for broad preemption of state standards except under extremely limited circumstances. Recently, however, a proliferation of state energy efficiency standards and legislation has appeared for numerous products, including the NEMA products that are the subject of this draft legislation. We urge you and your staff to work with stakeholders to address this priority issue as it concerns the realm of proposed standards and rulemakings in this legislation.

Additional Recommendations

NEMA is actively working with other stakeholders to develop additional consensus recommendations to increase the already significant energy savings that will result under the draft legislation. At this time, NEMA has the following recommendations for improving the energy efficiency provisions of the draft legislation.

First, we recommend that the legislation be expanded to set energy efficiency standards for all distribution transformers, including medium-voltage and liquid-filled transformers, to meet the NEMA TP-1 standard already required under the legislation for low-voltage dry-type distribution transformers. Expanding the provisions agreed to by the conferees last year and included in your draft legislation to include all distribution transformers would more than triple the transformer annual product electrical capacity covered by higher efficiency requirements. The proposed legislation would complete the process of establishing energy efficiency requirements for distribution transformers called for in EPAct, but which has yet to result in minimum energy conservation standards.

As all electricity used goes through transformers, transformer losses are a major portion of losses in the distribution system. Specifying TP-1 efficiency reduces losses by about one third over low first cost transformers. Thus, requiring TP-1 will raise electrical efficiency in the commercial and industrial sector significantly. The latest revision to the standard, TP-1-2002, includes modest efficiency increases for some transformer sizes.

The TP-1 standards already form the basis for the performance specifications for low-voltage dry-type distribution transformers in the EPA/DOE Energy Star® program. Low-voltage dry-type distribution transformers are typically used in commercial buildings and often purchased based on low initial cost with little consideration of efficiency. Less than 2% of the low-voltage dry-type units shipped met TP-1-1996. The draft legislation already includes provisions to assure that these transformers will meet higher efficiency standards; as noted above, the reference in the current draft legislation to TP-1-1996 should be updated to refer to TP-1-2002.

Medium-voltage dry-type distribution transformers are used in commercial and industrial buildings. While some buyers do consider energy savings, most medium-voltage dry-type buyers order lowest first cost units. A little less than half the medium-voltage dry-type transformers met TP-1-1996.

Liquid-filled distribution transformers are typically owned by electric utilities. About two-thirds of the liquid-filled distribution transformers shipped met TP-1-1996. Therefore, setting the threshold at the consensus TP-1 standard will substantially increase the overall efficiency of the fleet of new distribution transformers installed.

In conjunction with the energy efficiency standards for distribution transformers, there is a need to clarify the criteria for exempting products from the mandatory energy conservation standards. This is important in order to ensure that the named exempted products are used primarily in special-purpose niche applications and to prevent instances of misuse or confusion as occurred with a few of the standards enacted under EPAct. A requirement that exempted products be "unlikely to be used in general purpose applications" would give the Department of Energy necessary guidance and authority to prevent such situations.

Consistent with the recommendation above to expand the scope of the transformer standards, the TP-2 testing protocol should be used for all distribution transformers,

and the TP-3 labeling protocol should be used for all transformers for which TP-1 energy efficiency standards would be established in the legislation.

Second, we encourage you to consider adding to the legislation energy conservation standards for medium base compact fluorescent lamps. Energy conservation standards for general service fluorescent lamps were added to the Energy Policy and Conservation Act (EPCA) through EPAct, which designated these lamps as "covered products." EPAct did not establish energy conservation standards for medium base compact fluorescent lamps (CFLs) nor include them explicitly in the list of "covered products". EPAct did, however, contain a definition of "medium base compact fluorescent lamp" and a requirement that the Federal Trade Commission establish labeling requirements for these lamps. Although EPCA does not include energy conservation standards specifically applicable to medium base CFLs, the voluntary DOE/EPA Energy Star program does include energy efficiency specifications, test requirements, labeling requirements and specifications for parameters other than energy efficiency for medium base CFLs.

Medium base CFLs are a direct screw-in replacement for incandescent lamps in most applications. Medium base CFLs consume only approximately one-fourth of the electricity used by an incandescent lamp to achieve the equivalent light output. Thus, the energy savings for replacement of even a modest fraction of existing lamps would be substantial. Moreover, medium base CFLs offer highly favorable economics on a life cycle cost basis.

BARRIERS TO THE WIDESPREAD APPLICATION OF ENERGY EFFICIENT PRACTICES AND TECHNOLOGIES

While much good has been done to promote energy efficiency, there remains work to be finished. NEMA believes the primary barriers to investing in energy efficient technology include: (1) the cost of investment in energy efficient technologies and whom should receive the financial benefit of the energy efficient investment; (2) the lack of awareness of a systems and controls based approach for energy efficient cost effectiveness; (3) and issues surrounding codes and standards.

Currently, the federal tax code does not fully encourage an investor to make energy efficient investments, upgrades or retrofits to facilities. While recognizing that tax matters are not specifically the subject of today's hearing, NEMA would like to note the need for tax incentives to encourage investment in devices that promote energy efficiency. NEMA believes that there are situations where the marketplace does not adequately reward innovations in energy-saving technology. In such cases, the right types of tax incentives will provide the necessary impetus for investments in property that will address the energy needs of individual firms and consumers, as well as our nation as a whole. Properly designed tax incentives will also encourage manufacturers to develop innovative technology to respond to the increased demand for energy-efficient devices.

NEMA believes that a particular tax provision included last year in both the House and Senate versions of the energy bill warrants support and special attention this year. This provision would allow taxpayers to expense and deduct (rather than capitalize and depreciate) a portion of the cost of energy efficient property placed in service in commercial buildings. Targeting the tax benefits delivered by the provision to the commercial sector, where there are substantial opportunities to save energy that are not being realized today, is a cost-effective means to achieve significant energy savings. Last year, NEMA joined with the Natural Resources Defense Council (NRDC) in analyzing the legislative language and making recommendations that will insure that the tax benefits provided by the provision are commensurate with the level of additional investment needed to achieve energy-savings standards. NEMA has and will continue to support the agreement it has reached with NRDC and will work closely with the Congress to support enactment of these important provisions.

CONCLUSION

In conclusion, let me reiterate the three points I began with today. A comprehensive electrical energy policy should rely on affordable, proven technology to address energy supply and demand. Second, it is critical to understand that energy efficiency and conservation don't mean sacrifice and reduced access, but rather doing more with existing capacity by achieving reduction in energy usage through the use of more efficient products and systems. Third, market-based solutions should be the primary vehicle to enhance energy efficiency and conservation.

Chairman Barton, we thank you for your efforts, and for holding this hearing today. I am happy to answer your questions.

STATEMENT OF ALDEN MEYER

Mr. MEYER. Thank you, my name is Alden Meyer, I am Director of Government Relations for the Union of Concerned Scientists.

We are a non-profit group of more than 60,000 citizens and scientists working for practical, environmental solutions. I have a little powerpoint presentation which, if we can get turned on, a little entertainment at the close of the panel for you here.

This first slide shows cost trends for renewable energy technologies. And I think we need to acknowledge that this is a real American success story in this area.

And it is the result of research and development, tax incentives and actions by States like California starting as early in 1980, to run with these technologies.

This is data from NREL, National Renewable Energy Lab, showing actual costs to date and then projections out of 2020.

To realize additional reductions, of course, we need to continue R&D, we need to have additional tax incentives and we need measures like net metering and interconnection standards.

But the most important driver we believe is going to be expanding the markets for these technologies which allows manufacturers to attract the low cost financing they need to build new production facilities and continue lower costs.

This is why we believe the most effective policy in the renewable area is the renewable energy standard, also known as the renewable portfolio standard.

This would require electric suppliers to increase their share of electric generation coming from non-hydro renewable sources over time.

It could be met by self-generation or by purchasing credits from other companies. It is like the clean air trading system in that regard.

It assures producers an expanding market an access to lower cost financing. It works together with other policies, and 13 States have already adopted such standards, several others appear poised to do so this year.

What I am going to show you now is a slide that compares where we have been, which is the black trend line here in terms of actual renewable energy generation.

The red line is business as usual projections, which includes the actions of the 13 States I mentioned, as well as public benefit funds and other incentives.

The top blue line shows what the provisions in the Senate energy bill passed last year would do by the year 2020.

The public overwhelming supports these technologies and let me talk about the Energy Information Administration and their analysis on the cost of these technologies. There has been a myth out there that the portfolio standard would dramatically increase consumer energy bills.

EIA conducted an analysis at the request of Senator Frank Murkowski, and actually found just the opposite. That largely as a result of reducing the cost, the demand for natural gas, and therefore price pressures on natural gas, an RPS of 10 percent by 2020 would not only not increase electricity cost to consumers, it would

result in overall lowering of non-transportation consumer energy bills because of the savings largely on the natural gas side.

And if you look at what EIA is talking about in natural gas price projections in the analysis they used, you can see they were projecting $3, $3 to $4, out as far as the eye could see.

And the little asterisk on this chart shows you where spot prices were last month. And as Chairman Barton mentioned, they have gone higher since then.

To the extent that these gas price projections are overly optimistic, obviously the economics of the RPS improve even further and the natural gas savings from reduced consumption improve further.

We also did an analysis that confirms the EIA findings and also quantifies some of the direct benefits, particularly for rural economic development over $1 billion in new property tax revenues, hundreds of millions of dollars in lease payments to farmers and rural land owners.

And these programs are already proving very popular in States like Texas and throughout the Great Plains where it is a new source of revenue for the depressed farm economy.

Of course we are all concerned about greenhouse gas emissions. This line shows business as usual trend on greenhouse gas emissions from the power sector which accounts for roughly 40 percent of U.S. carbon dioxide emissions.

The 1990 trend line here is what would be required under the four pollutant legislation introduced last year in the Senate.

This is the result of our very aggressive analysis of a package of renewable energy and energy efficiency policy, the clean energy blueprint. This line is what Senator Jeffords' 20 percent renewable energy standard would do, basically flattening out from now through 2020, greenhouse gas emissions for this sector.

This is what Senator Bingaman's RPS combined with the Senate electricity efficiency provisions would do. So you can see that these policies can start to make a difference on greenhouse gas emissions from this sector, and it is something we think the committee really ought to take seriously.

The bottom line is that RPS is good for consumers. It is good for the environment. It is good for fuel diversity and for energy security and we believe the committee ought to include a strong RPS in any bill it reports to the floor of the House. Thank you very much.

[The prepared statement of Alden Meyer follows:]

PREPARED STATEMENT OF ALDEN MEYER, DIRECTOR OF GOVERNMENT RELATIONS, UNION OF CONCERNED SCIENTISTS

I. INTRODUCTION

The Union of Concerned Scientists (UCS) is a nonprofit organization of more than 60,000 citizens and scientists working for practical environmental solutions. For more than two decades, UCS has combined rigorous analysis with committed advocacy to reduce the environmental impacts and risks of energy production and use. Our clean energy program focuses on encouraging the development of clean and renewable energy resources, such as solar, wind, geothermal and biomass energy, and on improving energy efficiency.

We favor the adoption of policies to increase the use of renewable energy resources in our nation's electricity generation mix. Such policies are needed to meet our future electricity needs, diversify our electricity supply, reduce the vulnerability

of our energy system, stabilize electricity prices, and protect the environment. Specifically, we endorse a renewable electricity standard, sometimes also known as a renewable portfolio standard—a market-based mechanism that requires utilities to gradually increase the portion of electricity produced from renewable resources.

The electricity industry penetrates every sector of the economy and our lives. It keeps our food fresh. It lights up the darkness. It powers the manufacturing process. It runs life-giving medical systems and mind-enriching information systems. It helps warm us in the winter and cools us in the summer.

As important as electricity is to the economy, the tragic events of September 11th have brought renewed attention to how vital and connected our energy system is to national security. The vulnerability of the energy infrastructure to attack has been increasingly recognized as a significant issue, with terrorist threats reported to nuclear power plants and natural gas pipelines, and heightened security implemented at dams, power plants, refineries, liquefied natural gas tankers and terminals, and the electrical grid.

Electricity use also has a significant impact on the environment. Electricity accounts for less than three percent of US economic activity. Yet, it accounts for more than 26 percent of smog-producing nitrogen oxide emissions, one-third of toxic mercury emissions, some 40 percent of climate-changing carbon dioxide emissions, and 64 percent of acid rain-causing sulfur-dioxide emissions.

Unfortunately, there are no quick fixes to make the United States energy independent, ensure price stability, or clean up the air we breathe. However, investments in domestic renewable energy sources, together with continued efficiency improvements, can gradually reduce our dependence on imports and reduce the vulnerability of the US energy system to disruption of supplies or to attack. Investments that increase fuel diversity strengthen the ability of our economy to withstand supply interruptions or price shocks from any one fuel source. Investments in indigenous renewable energy sources keep money circulating and creating jobs in regional economies, and create export opportunities. And of course, investments in clean air benefit everyone that breathes the air.

By investing in renewable energy, our nation promotes a host of important public goods: national security, fuel diversity, price stability, universal and reliable electric service, economic development, and a healthier environment. Most importantly, investing in renewable energy can provide all these benefits and reduce electricity costs.

In this statement, I review the potential for renewable energy and how it can help promote these public goods. I then present the renewable energy standard for electricity as the best policy mechanism for reducing market barriers and stimulating the development of renewable energy resources. Finally, I review three recent studies that show we can significantly improve our efficiency and increase the contribution of renewable energy to our electricity mix, while lowering consumer energy bills.

II. RENEWABLE ENERGY POTENTIAL, BENEFITS, AND BARRIERS

The United States is blessed by an abundance of renewable energy resources from the sun, wind, and earth. The *technical* potential of good wind areas, covering only 6 percent of the lower 48 state land area, could theoretically supply more than one and a third times the total current national demand for electricity. An area just over one hundred miles by one hundreds miles in Nevada could produce enough electricity from the sun to meet annual national demand. We have large untapped geothermal and biomass (energy crops and plant waste) resources. Of course, there are limits to how much of this potential can be used economically, because of competing land uses, competing costs from other energy sources, and limits to the transmission system. The important question is how much it would cost to supply a specific percentage of our electricity from non-hydroelectric renewable energy sources. As this testimony will later show, recent analyses demonstrate we could affordably generate *at least 20 percent of our electricity* from non-hydro renewable energy by 2020.

The benefits of renewable energy are as plentiful as the resource itself—environmental improvement, economic development, and increased fuel diversity and national security.

Harnessing renewable energy conserves natural resources for future generations, and reduces the environmental and public health impacts of mining, refining, transporting, burning, and disposing of wastes from fossil fuels, as well as reducing air emissions. Renewable resources also provide insurance against increased costs from stricter environmental regulations in the future.

Renewable energy provides new economic development opportunities, especially in rural areas that are rich in wind and biomass resources. According to the US De-

partment of Energy, generating 5 percent of the country's electricity with wind power by 2020 would add $60 billion in capital investment in rural America, and create 80,000 new jobs. Renewable energy technologies also offer the potential for a very large export market, as many countries around the world are increasing their use of renewable resources.

Renewable energy technologies diversify our energy resource portfolio, reducing exposure to energy supply interruptions and price volatility, which can affect the entire economy. Indeed, Stephen Brown, director of energy economics at the Dallas Federal Reserve Bank, notes that "nine of the 10 last recessions have been preceded by sharply higher energy prices." Two years ago, soaring natural gas prices was one key factor in the California energy crisis that caused rolling blackouts and cost energy consumers billions of dollars. There are now significant indications that the natural gas price volatility experienced during 2001 was not an isolated event. Just last week, as the composite price of March natural gas on the New York Mercantile Exchange *jumped 65 percent in one day,* the Wall Street Journal reported industry observers as saying that "the U.S. is entering a prolonged period of higher natural-gas prices, and the days of $3 natural gas, which lasted from the mid-1980s until about 2000, may be gone."

There is also a growing recognition that renewable energy and efficiency can enhance energy security. An official banner at the Administration's Renewable Energy Summit in the fall of 2001 read: "Expand Renewable Energy For National Security." James Woolsey, former head of the Central Intelligence Agency, Robert McFarlane, President Reagan's former national security advisor, and Admiral Thomas Moorer, former chair of the Joint Chiefs of Staff, together wrote Congressional leaders in September 2001 urging enactment of minimum standards for renewable fuels and electricity, along with an increase in energy efficiency funding, in order to increase national security.

In spite of these compelling environmental, economic, and security benefits, renewable energy technologies continue to face many market barriers, which unnecessarily keep them from reaching their full potential.

Renewable energy has made great strides in reducing costs, thanks to research and development and growth in domestic and global capacity. The cost for wind and solar electricity has come down by 80-90 percent over the past two decades. However, like all emerging technologies, renewable resources face commercialization barriers. They must compete at a disadvantage against the entrenched industries. They lack infrastructure, and their costs are high because of a lack of economies of scale.

Renewable energy technologies face distortions in tax and spending policy. Studies have established that federal and state tax and spending policies tend to favor fossil-fuel technologies over renewable energy. A recent study by the Renewable Energy Policy Project showed that between 1943 and 1999, the nuclear industry received over $145 billion in federal subsidies vs. $4.4 billion for solar energy and $1.3 billion for wind energy. Another study by the non-partisan Congressional Joint Committee on Taxation projected that the oil and gas industries would receive an estimated $11 billion in tax incentives for exploration and production activities between 1999 and 2003. In addition to these subsidies, conventional generating technologies enjoy a lower tax burden. Fuel expenditures can be deducted from taxable income, but few renewable technologies benefit from this deduction, since most do not use market-supplied fuels. Income and property taxes are higher for renewable energy, which require large capital investments but have low fuel and operating expenses.

Many of the benefits of renewable resources, such as reduced pollution and greater energy diversity, are not reflected in market prices, thus eliminating much of the incentive for consumers to switch to these technologies. Other important market barriers to renewable resources include: lack of information by customers, institutional barriers, the small size and high transaction costs of many renewable technologies, high financing costs, split incentives among those who make energy decisions and those who bear the costs, and high transmission costs.

Some have called for future support of renewable energy through "green marketing," selling portfolios with a higher renewable energy content (and lower emissions) to customers who are willing to pay more for them. We strongly support green marketing as a means to increase the use of renewable energy and reduce the environmental impacts of energy use. Surveys show that many customers are willing to pay more for renewable energy, and pilot programs have shown promising, but not overwhelming results.

Green marketing is not a substitute for sound public policy, however. There are many barriers to customers switching to green power, not the least of which is inertia. More than fifteen years after deregulation of long-distance telephone service, half of telephone customers still had not switched suppliers, even though they could

get much lower prices by doing so. A recent study by the National Renewable Energy Laboratory projects that in an optimistic scenario, green marketing could increase the percentage of renewable energy in our electricity mix from about 2 percent today to only about 3 percent in ten years.

With green electricity, the benefits of any individual customer's choice accrue to everyone, not the individual customer. Green customers gets the same undifferentiated electrons and breathe the same air as their neighbors choosing to buy power from cheap, dirty coal plants, creating a strong incentive for people to be "free riders" rather than pay higher costs for renewable resources. People recognize this public benefits aspect of green power. While they consistently say they are willing to pay more for electricity that is cleaner and includes more renewable energy, they overwhelmingly prefer that everyone pay for these benefits to relying on volunteers. A deliberative poll by Texas utilities found that 79 percent of participants favored everyone paying a small amount to support renewable energy, versus 17 percent favoring relying only on green marketing.

III. THE RENEWABLE ENERGY STANDARD

A number of complementary policies should be enacted to reduce market barriers to renewable energy development:

- Extending production tax credits of 1.7 cents per kWh and expanding them to cover all clean, renewable resources (excluding hydropower)
- Enacting a federal public benefit fund to match state programs for energy efficiency, renewable energy, research and development, and protecting low-income customers
- Adopting national net metering standards, allowing consumers who generate their own electricity with renewable energy systems to feed surplus electricity back to the grid and spin their meters backward, thus receiving retail prices for their surplus power production
- Increasing spending on renewable energy research and development

The deployment of all these policy solutions will be required to truly level the playing field for renewable energy. However, we believe that a national Renewable Energy Standard for electricity—also known as a Renewable Portfolio Standard (RPS) is the cornerstone of any comprehensive policy approach to stimulate renewable energy development. A national RPS can diversify our energy supply with clean, domestic resources. It will help improve our national security, stabilize electricity prices, reduce natural gas prices, reduce emissions of carbon dioxide—which are heating up the earth and threaten to destabilize the climate—and other harmful air pollutants, and create jobs—especially in rural areas—and new income for farmers and ranchers. For these reasons, we believe a national RPS should be included in any electricity bill.

The RPS is a market-based mechanism that requires utilities to gradually increase the portion of electricity produced from renewable resources such as wind, biomass, geothermal, and solar energy. It is akin to building codes, or efficiency standards for buildings, appliances, or vehicles, and is designed to integrate renewable resources into the marketplace in the most cost-effective fashion.

By using tradable "renewable energy credits" to achieve compliance at the lowest cost, the RPS would function much like the Clean Air Act credit-trading system, which permits lower-cost, market-based compliance with air pollution regulations. Electricity suppliers can generate renewable electricity themselves, purchase renewable electricity and credits from generators, or buy credits in a secondary trading market. This market-based approach creates competition among renewable generators, providing the greatest amount of clean power for the lowest price, and creates an ongoing incentive to drive down costs.

Thirteen states—Arizona, California, Connecticut, Iowa, Maine, Massachusetts, Minnesota, Nevada, New Jersey, New Mexico, Pennsylvania, Texas, and Wisconsin—have enacted minimum renewable energy requirements. But energy production creates national economic and environmental problems that need national solutions. The U.S. Senate recognized this need last year when they passed the first-ever national renewable energy standard with strong bi-partisan support. As part of comprehensive energy legislation (H. 4), the Senate passed a 10 percent by 2020 renewable energy standard that, if signed into law, would have saved consumers money on their energy bills and resulted in the U.S. increasing its total homegrown renewable power to over 74,000 megawatts (MW). This level of renewable development would produce enough electricity to meet the needs of 53 million typical homes.

The RPS is the surest mechanism for securing the public benefits of renewable energy sources and for reducing their cost to enable them to become more competi-

tive. It is a market mechanism, setting a uniform standard and allowing companies to determine the best way to meet it. The market picks the winning and losing technologies and projects, not administrators. The RPS will reduce renewable energy costs by:

- Providing a revenue stream that will enable manufacturers and developers to obtain project financing at a reasonable cost and make investments in expanding capacity to meet an expanding renewable energy market.
- Allowing economies of scale in manufacturing, installation, operation and maintenance of renewable energy facilities.
- Promoting vigorous competition among renewable energy developers and technologies to meet the standard at the lowest cost.
- Inducing development of renewables in the regions of the country where they are the most cost-effective, while avoiding expensive long-distance transmission, by allowing national renewable energy credit trading.
- Reducing transaction costs, by enabling suppliers to buy credits and avoid having to negotiate many small contracts with individual renewable energy projects.

Some people have asked why hydropower is not eligible to earn renewable energy credits in most RPS proposals. The primary reason for not including hydro is that it is a mature resource and technology. In most cases, it is already highly competitive. It will not benefit appreciably from the cost-reduction mechanisms outlined above, and an RPS that included hydro would produce negligible, if any, increases in hydro generation.

Some people have also expressed concerns about the variable output of renewable sources like solar and wind, and believe that an RPS would affect the reliability of our energy system. However, the electric system is designed to handle unexpected swings in energy supply and demand, such as significant changes in consumer demand or even the failure of a large power plant or transmission line. Solar energy is also generally most plentiful when it is most needed—when air-conditioners are causing high electricity demand. There are several areas in Europe, including parts of Spain, Germany, and Denmark, where wind power already supplies over 20 percent of the electricity with no adverse effects on the reliability of the system. In addition, several important renewable energy sources, such as geothermal, biomass, and landfill gas systems can operate around the clock. Studies by the EIA and the Union of Concerned Scientists show these non-intermittent, dispatchable renewable plants would generate about half of the nation's non-hydro renewable energy under a 10 percent RPS in 2020. Renewable energy can increase the reliability of the overall system, by diversifying our resource base and using supplies that are not vulnerable to periodic shortages or other supply interruptions.

IV. BENEFITS OF A RENEWABLE PORTFOLIO STANDARD

Three recent studies, one by the U.S. Energy Information Administration (EIA) and two by the Union of Concerned Scientists, show that a 10 percent RPS by 2020 is easily achievable and can stimulate economic development and increase energy security, while reducing consumer energy bills as well as local and global environmental hazards. Increasing the RPS to 20 percent by 2020 would result in greater diversity, environmental, and economic development benefits compared to the 10 percent standard, and would still provide savings to energy consumers. When combined with energy efficiency measures and additional renewable energy policies, the RPS can significantly lower consumer energy bills.

EIA Analysis: The EIA study was conducted at the request of Senator Frank Murkowski, as the Senate considered inclusion of the RPS as part of comprehensive national energy legislation (S.1766). As part of their analysis, the EIA examined the costs of using the RPS to achieve levels of 10 percent (both with and without the sunset provision in S.1766) and 20 percent renewable electricity supplies by the year 2020.

The EIA scenarios found benefits to consumers from increasing renewable energy use despite including a number of assumptions that are extremely unfavorable to renewable energy. Many of these assumptions were examined and rejected by the Interlaboratory Working Group—made up of experts from the National Renewable Energy Lab, Oak Ridge National Lab, Pacific Northwest Lab, Battelle Memorial Institute, and Lawrence Berkeley National Lab—in their *Scenarios for a Clean Energy Future* (IWG, 2000). In some of the most important such assumptions, EIA

- Used higher cost and worse performance assumptions for most renewable technologies than recent experience or projections by the Electric Power Research Institute and DOE;
- Arbitrarily increased the capital cost of wind, biomass, and geothermal technologies by up to 200 percent in a given region after a fairly small amount of

the regional potential is met; more than 90 percent of the highest value wind resources in the US, for example, are assigned a capital cost multiplier of 200 percent; and

- Limited the penetration of variable output resources like wind and solar power to 15 percent of a region's electricity generation; in parts of Germany, Denmark and Spain, wind power is already providing more than 20 percent of total electricity generation.

These assumptions, and others, led to projections of very high renewable energy prices in high renewable energy penetration scenarios. With the availability and penetration of the lowest cost wind and biomass resources assumed to be sharply limited, higher RPS levels in EIA's version of the model require deploying more expensive renewable resources.

Despite these overly conservative assumptions for renewable energy cost and availability, EIA still found that the 10 percent RPS would have *virtually no impact* on retail electricity prices. Figure 1 shows that, in 2020, electricity prices would be only one-tenth of one cent per kilowatt-hour higher than business as usual under a 10 percent RPS.

Even these small increases in electricity prices are largely offset, however, by lower natural gas prices. Diversifying the electricity mix with renewable energy helps stabilize electricity prices by easing pressure on natural gas prices and supplies. Under a 10 percent RPS, EIA found that average consumer natural gas prices are 2.2 percent lower than business as usual in 2010, and 1.9 percent lower in 2020. These lower prices would save gas consumers $1.7 billion per year by 2020 (2000 dollars, 8 percent discount rate).

In the key results section of its report, EIA recognizes this benefit of increased renewable energy use by noting that "the retail electricity price impacts of the RPS are projected to be small because the price impact of buying renewable credits and building the required renewable energy is projected to be relatively small when compared with total electricity costs and to be mostly offset by lower gas prices that result from reduced gas use."

However, EIA did not report on the extent to which these lower natural gas prices offset higher electricity costs. By adding total residential, commercial and industrial energy expenditures, it can be seen that total non-transportation energy costs would actually be $2.7 billion *lower* in 2010 and only $1.5 billion or 0.3 percent higher in 2020 under the 10 percent RPS than under business as usual (Figure 2).[1] The net present value *savings* of the RPS scenario would be $6.7 billion compared to the business as usual case (2000 dollars, 8 percent discount rate).

A 10 percent RPS would also help reduce emissions from power plants. Under an RPS, carbon emissions from power plants would be 23 million metric tons or 3 percent lower than business as usual in 2010 and 53 million metric tons or 7 percent lower in 2020, according to EIA.

"No Sunset" Case: The EIA report also examined a 10 percent RPS by 2020 without a key provision included in the original RPS proposed in S.1766—a 2020 sunset date. EIA found that this sunset provision would cause electric generators to chose an alternative compliance mechanism rather than develop additional renewable energy sources in the later years of the requirement. If the sunset provision was removed from S. 1766—as was effectively the case in the RPS passed by the Senate—EIA found that there would be a significant impact on the costs and benefits of the RPS.[2]

EIA results show that under a 10 percent RPS with no sunset, average retail electricity prices would be unchanged through 2020 compared to business as usual. Average consumer natural gas prices would be 2.3 percent lower than business as usual in 2020. With no change to consumer electricity prices, lower natural gas prices result in *savings* for consumers on their electricity and natural gas bills throughout the 2002-2020 period (Figure 3). Total non-transportation energy costs would be $3.1 billion lower in 2010 and $3 billion lower in 2020 under the 10 percent RPS than under business as usual (Figure 2). Removing the sunset provision from the 10 percent national standard would also *nearly double total energy consumer savings* to $13.2 billion through 2020.

---

[1] Results obtained through personal communication with Laura Martin at EIA, on March 7, 2002. Tables available upon request.

[2] The sunset does not actually have to be removed, but it must be at least ten years after the date at which the renewable energy ramp-up ends, in order to allow generators that come on-line late in the RPS ramp-up enough time to recover their costs. Otherwise, no renewable energy generation would be added in the last few years of the RPS, and suppliers would instead buy proxy credits from or pay penalties to DOE. The early sunset thus produces less renewable generation and higher costs.

EIA 20 percent analysis: Results from the EIA analysis also show that increasing the renewable energy standard to 20 percent by 2020 would result in greater diversity and environmental benefits compared to the 10 percent standard, and would still provide savings to energy consumers.

Under a 20 percent RPS, EIA results show *virtually no impact* on retail electricity prices compared to business as usual through 2015. In 2020, electricity prices would be just two-tenths of one cent per kilowatt-hour higher than business as usual.

By diversifying the energy mix even further with a 20 percent RPS, EIA results show an even greater impact on natural gas prices and supplies. Average consumer natural gas prices are 3 percent lower than business as usual in 2010 and 3.6 percent lower in 2020. These lower prices would save gas consumers $3.3 billion per year by 2020.

Similarly to the 10 percent RPS case, EIA results show that lower natural gas prices more than offset the very small increases in electricity prices caused by adding more renewable energy sources to the generation mix. Total consumer energy savings would be $5.7 billion over the next 18 years.

According to EIA, a 20 percent by 2020 RPS would also result in greater carbon emissions savings from power plants. Carbon emissions would be 43 million metric tons or 6 percent lower than business as usual in 2010 and 76 million metric tons or 10 percent lower in 2020.

UCS Analysis: The Union of Concerned Scientists, in *Renewing Where We Live: A National Renewable Energy Standard Will Benefit America's Economy,* investigated the costs and benefits of a 10 percent RPS by 2020 RPS combined with an extension of the Federal renewable energy production tax credit as passed by the Senate in March 2002.

Our analysis used the US Energy Information Administration's NEMS computer model, with scenarios run for UCS by the Tellus Institute. We based our business-as-usual scenario on Annual Energy Outlook 2002 (EIA, 2001), the EIA's long-term forecast of US energy supply, demand, and prices. The year 2000 is the last year of history in the model, which makes projections through 2020. We modified several NEMS assumptions for renewable energy, generally in line with the IWG Clean Energy Future analysis, in order to model these technologies more accurately.

We found that the national portfolio standard and renewable energy tax credits passed by the Senate would reduce long run energy costs to consumers. Total annual consumer energy bills (not including transportation) would be $100 million lower than business as usual in 2010, and $3.8 billion or 1 percent lower in 2020 (Figure 4). The present value of total consumer savings would be $7.8 billion between 2002 and 2020. If taxpayer costs from the tax credits and increased federal research and development funding for renewable energy are included, total consumer savings would be $2.8 billion.[3] Increased competition from renewable energy leads to lower natural gas prices, which more than offset the slightly higher costs of generating renewable electricity in the United States.

UCS analysis found that under a 10 percent RPS, the United States would increase its total homegrown renewable power to over 74,000 megawatts (MW) by 2020. The majority of this development would be powered by America's strong winds, with significant contributions from biomass and geothermal. This level of renewable development would produce enough electricity to meet the needs of 53 million typical homes.

Renewable energy development resulting from the Senate-passed RPS would bring significant economic benefits to the United States. Through 2020, the national standard would produce

- $17 billion in new capital investment
- $1.2 billion in new property tax revenues for local communities
- $410 million in lease payments to farmers and rural landowners from wind power

UCS also found that the increased use of renewable energy in the United States would reduce air pollution from power plants. Nationally, the renewable energy standard will reduce about 27 million metric tons of carbon emissions a year by 2020. The renewable standard will also reduce harmful water and land impacts from extracting, transporting, and using fossil fuels.

In the future, natural gas is projected to fuel much of the new electricity generation built in the United States without additional policies for renewable energy. This increase in demand for natural gas may lead to natural gas prices that are higher

[3] Last year's House and Senate energy bills included renewable energy tax credits worth between $2.6 billion (Congress' estimate) and $5.2 billion (UCS' estimate) over the next 10 years. The bills also included 10 years' worth of subsidies for fossil fuel and nuclear power totaling about $9.1 billion in the Senate bill and $28 billion in the House bill. (Note: these dollar figures are not discounted.)

and more volatile than those used in our base case analysis. Based on these assumptions, UCS also examined the effects of a 10 percent RPS on an alternative scenario where wholesale natural gas prices are 35 percent higher by 2020.

UCS found that the more expensive natural gas is, the greater the savings will be from reducing natural gas use through a renewable energy standard. In the scenario that we analyzed, total consumer energy bill savings through 2020 from the renewable standard would more than double to $17.6 billion. Renewable energy generation and related economic development benefits would also increase significantly if gas prices were higher.

In *Clean Energy Blueprint: A Smarter National Energy Policy for Today and the Future,* the Union of Concerned Scientists investigated the costs and benefits of two energy efficiency and renewable energy scenarios, compared to business as usual. We did not examine RPS-only scenarios, as in *Renewing Where We Live* or as EIA did, but looked at a 20 percent RPS in combination with other renewable energy and energy efficiency policies.

We examined a scenario consisting primarily of the policies in the Renewable Energy and Energy Efficiency Investment Act of 2001 (S. 1333), sponsored by Senator Jeffords. In addition to a 20 percent RPS, S. 1333 would have established a federal public benefit fund and net metering. We also assumed that research and development spending on renewable energy and efficiency would increase 60 percent over three years to levels recommended by the President's Committee of Advisors on Science and Technology.

We also investigated the costs and benefits of the RPS with an expanded suite of renewable energy and energy efficiency policies. In addition to the above policies, these included:

- Production tax credits of 1.7 cents per kWh for renewable energy would be extended and expanded to cover all clean, non-hydro renewable resources, helping to level the playing field with fossil fuel and nuclear generation subsidies.
- Combined heat and power: Incentives would be provided and regulatory barriers removed for power plants that produce both electricity and useful heat at high efficiencies.
- Improved efficiency standards: National minimum efficiency standards would be established for a dozen products, generally to the level of good practices today. In addition, existing national standards would be revised to levels that are technically feasible and economically justified.
- Enhanced building codes: States would adopt model building codes established in 1999/2000, as well as new more advanced codes established by 2010.
- Tax incentives would promote efficiency improvements for buildings and equipment beyond minimum standards.
- Industrial energy efficiency measures: Industry would improve its efficiency by 1 to 2 percent per year through voluntary agreements, incentives, or national standards.

Like Renewing Where We Live, this analysis used the US Energy Information Administration's NEMS computer model, with scenarios run for UCS by the Tellus Institute. For this report, we based our business-as-usual scenario on Annual Energy Outlook 2001 (EIA, 2000). The year 1999 is the last year of history in the model, which makes projections through 2020. The efficiency policies were developed by and modeled by the American Council for an Energy Efficient Economy. The calculated energy savings were used to adjust the AEO forecasts. The energy efficiency costs were annualized and added to the results. Once again, we modified several NEMS assumptions for renewable energy, generally in line with the IWG Clean Energy Future analysis, in order to model these technologies more accurately and applied these modifications to both the business-as-usual scenario and the Clean Energy Blueprint.

Combined with increased research and development, S. 1333 would save consumers a total of $70 billion between 2002 and 2020, with savings reaching $35 billion per year by 2020. Under a higher-gas-price scenario, cumulative savings would reach $130 billion between 2002 and 2020. In 2020, monthly bills for a typical household would be $34 per month under S. 1333, compared to $38 per month under business as usual and $25 per month under the Clean Energy Blueprint.

Carbon dioxide emissions from power plants would be nearly one-third lower than under business as usual by 2020, while sulfur dioxide emission levels would be 8 percent lower and nitrogen oxide emissions 15 percent lower.

When combined with the energy efficiency and additional renewable energy policies included in the Clean Energy Blueprint, the economic and environmental benefits of the RPS are even greater. Under the Blueprint, total energy use would be 19 percent lower than business as usual by 2020 and only 5 percent higher than 2000 levels, due to increased energy efficiency in homes, offices, and factories. Nat-

ural gas use would grow by 8 percent from today's level, but be 31 percent less than business as usual by 2020. Coal-fired electricity generation is 61 percent below business as usual in 2020 and 53 percent lower than today's levels.

Oil use would be reduced by 5 percent, saving over 400 million barrels per year by 2020. More oil would be saved over the next 18 years than is projected to be economically recoverable from the Arctic National Wildlife Refuge over 60 years. The Clean Energy Blueprint did not include oil savings from increased energy efficiency and renewable energy use in the transportation sector. Another recent UCS study, *Drilling in Detroit: Tapping Automaker Ingenuity to Build Safe and Efficient Automobiles,* has shown that fuel economy improvements in cars and light trucks would provide significant oil savings (UCS, 2001). If these savings were combined with the savings from the Clean Energy Blueprint, the United States would save more than 15 times the oil available in the Arctic Refuge at 2001 oil prices (Figure 5) and total oil use would be 9 percent lower in 2010 and 23 percent lower in 2020 than under business as usual. The combined net savings to consumers would increase to over $150 billion per year by 2020 and $645 billion between 2002 and 2020.

Non-hydro renewable energy sources (wind, biomass, geothermal, and solar) would produce 20 percent of the nation's electricity by 2020. Energy efficiency measures would offset projected growth in electricity use. Combined heat and power plants would meet 39 percent of commercial and industrial electricity needs. Thus, the Clean Energy Blueprint would eliminate the need for 975 of the 1,300 new power plants the administration's *National Energy Policy* says we need by 2020, and retire 180 existing coal plants and 14 nuclear plants, reducing the number of vulnerable energy facilities.

By 2020, because of lower electricity demand and because natural gas is used both to generate electricity and to produce useful heat, overall natural gas generation is 33 percent lower than business as usual in 2020. The Blueprint's efficiency and renewable energy policies reduce natural gas prices by 27 percent by 2020, saving businesses and homes that use natural gas nearly $30 billion per year.

Under the Clean Energy Blueprint, net energy savings would grow to $105 billion per year by 2020, totaling $440 billion between 2002 and 2020 (total savings between 2002 and 2020 are in 1999 dollars using a 5 percent real discount rate.) A typical family would save $350 per year in lower energy bills by 2020 (Figure 6).

The Clean Energy Blueprint would reduce power plant carbon emissions two-thirds by 2020 compared to business-as-usual projections (Figure 7). Sulfur dioxide emissions, which are the primary cause of acid rain, and nitrogen oxide emissions, a major cause of smog, would both be reduced more than 55 percent.

The Clean Energy Blueprint would reduce the need to drill for natural gas and to build some significant portion of the over 300,000 miles of new pipelines called for in the administration's National Energy Policy. It would also reduce the need to mine, transport, and burn 750 million tons of coal per year by 2020 compared to business-as-usual projections. Moreover, energy efficiency measures and renewable energy facilities can be deployed faster than new fossil and nuclear energy supplies could be developed.

VI. CONCLUSION

Survey after survey has shown that Americans want cleaner and renewable energy sources, and that they are willing to pay more for them. A survey conducted last year by Mellman Associates found that when presented with arguments for and against a 20 percent RPS requirement, 70 percent of voters support an RPS, while only 21 percent oppose it.

The combination of EIA and UCS studies demonstrate that with appropriate policies, renewable energy technologies can provide Americans with the clean and reliable electricity they desire, while also saving them money, contributing to our nation's energy security and achieving significant reductions in harmful emissions.

The net metering and renewable energy production incentive provisions included in the current draft bill before the committee are laudable and deserving of support. But by themselves, these provisions will not get the job done. A strong, market-friendly renewable energy standard is required to realize the full potential of America's renewable energy resources.

For all of these reasons, we respectfully urge that as the Committee moves forward with its development of national energy legislation, you support inclusion of a renewable portfolio standard. Thank you.

INSERT OFFSET FOLIOS 10 TO 11 HERE

Mr. FOSSELLA [presiding]. Thank you, each of you, for your testimony and your time and patience. We will jump right into the questions. Mr. Fertel, with respect to the Davis-Besse nuclear power plant that experienced a large corroded hole on the top of its reactor vessel head last spring, the plant has been shut down for almost a year.

Industry, otherwise has a good safety record. Why do you think this particular plant was allowed to corrode to such a dangerous degree, and how, if at all, is this typical of how other plants are operating?

Mr. FERTEL. Let me start with the second part of your question first, Congressman. The NRC has required all the plants that are similar in design, pressurized water reactors, to do inspections.

And what we found over the last year is that none of the plants had a similar problem. So, I think, starting with the second part of your question of do we have a vulnerability elsewhere, the answer right now is no.

How did it occur at Davis-Besse? We have understood corrosion, like you saw at Davis-Besse, for a lot of year now and all the plants have programs that they are implementing to basically monitor and manage that.

In Davis-Besse's case they were not doing it as well as they should have been doing it and that is why the plant had a problem. That is why the plant has been down for a year.

And that is why there have been dramatic changes there. As a result of Davis-Besse, a number of things have happened. The NRC has done a major lessons learned and about 3 weeks ago the commission approved, I think, 51 out of 52 recommendations to change things that the NRC does based upon what happened at Davis-Besse.

On the industry side, also a number of things have happened. As I mentioned, we have had a number of programs going on looking at corrosion and aging of materials, which is not a phenomena that is unexpected.

What we found was there had been going on probably very good technically, but in a bunch of different areas without a lot of integration.

And we have now taken steps to bring them basically under NEI, in some respects, in an integrated way with much more senior people looking at both the priorities and the funding for those programs.

Just also to react to the Davis-Besse question from what Anna said, Davis-Besse did have a bad event. That should not happen, there is no excuse for it.

On the other hand, both the analysis that they have done and the analysis that NRC has recently done, says that there was no threat to health and safety from the situation there at the time or for probably up to 2 years.

Now again, that does not excuse the event. And in 2 years, if something happened, it wasn't going to be a threat to health and safety offsite.

It was going to be a real problem at the plant, but not a threat offsite. So I am not excusing what went on there, but I think we need to keep a perspective on what the consequences are that could have happened.

There was not a threat offsite.

Mr. FOSSELLA. Follow on the other side of the equation, in effect, the NRC has not licensed a new plant in over 20 years. What do you think, I mean what is your opinion of when we might see the next one?

Mr. FERTEL. As far as license renewal, first, even there, you know, our plants had a 40 year license that was issued originally.

There was no technical basis for the 40 year license. As best we could determine from looking back at the Atomic Energy Act and its evolution, there were two primary reasons it is 40 years.

One, it was a normal depreciation period that you use. And two, it was what we used to issue FCC licenses for 40 years. So basically you got a 40 year license.

Nothing at our plants is designed to stop working or fail in 40 years. You analyze your plant from a safety standpoint performance for certain systems based upon 40 years of operation.

When you renew the license, what NRC does is they take a look at what you are doing, because there is really no difference in plant operation in year 39 or year 41, in many respects.

But what they ask you to do is analyze those systems that are not in a maintenance program for basically long term management of performance and see whether you need to put them in that.

And they ask you to re-analyze those portions of the plant that were analyzed for 40 years, now analyze it for 60 years.

So our conclusion is that the NRC's process is pretty rigorous. There is no reason the plant can't operate for 50, 60 or potentially 70 or 80 years, because you are basically changing it out and maintaining it as you go.

Mr. FOSSELLA. My question was when do you think the next new plant will be licensed?

Mr. FERTEL. Oh, I am sorry. Okay, the next new plant, there are a couple of things happening there. There is a significant effort by the industry, and really I will mention the Scully report.

We are not asking, nobody I am aware of is asking for 50 percent above market prices. That may be something the DOE people have looked at but it is not something the industry is looking at.

Right now what is going on in the industry is there is an effort to certify new designs before the Nuclear Regulatory Commission, Chairman Meserve mentioned that.

There are also right now three companies looking at banking sites. You are allowed to bank a site for future use. And three companies are planning on filing early site permits this year.

It doesn't mean they are necessarily build there, but it means they are banking it. We are working with the NRC to define the licensing process better and those are all public meetings and everybody can attend them.

And our expectation is that based upon the electricity markets right now and what appears to be a glut of capacity that people are waiting to buy at distressed prices, there won't be a need for new baseload capacity decisionmaking until the 2005-2006 timeframe.

What we are trying to do is have everything ready by then and we are expecting that we could see potential plant orders in the time period. And then it would be probably, for the first plant, about a 7-year timeframe.

And then after that we think we are down in the 5 or 6. So, in the 2000, latter part of this decade, Congressman.

Mr. FOSSELLA. Other than what you have provided in your testimony, there are those, including some on the panel here, who feel that the industry wouldn't exist but for, and I am quoting one, for enormous subsidies paid for by rate payers and taxpayers. Do you agree with that?

Mr. FERTEL. No, I don't agree with it, but it is a long answer to explain it. And Price-Anderson may be a good example.

This committee has supported Price-Anderson and we appreciate that, and so has the Congress over and over again. Anna is right on one thing she says that when Price-Anderson was passed in 1957, it was a subsidy.

The government was basically capping liability at $560 million. The government was picking up $500 million and the commercial market would only provide $60 million.

Over the ensuing 45 years, Congress has modified Price-Anderson to be, what I believe, is an extremely good public policy. It is probably the best public policy in the world for a third party liability protection.

It creates a pool that all the plants, Jeff Benjamin, it works for Exelon. If there is an accident at my plant, Jeff has to help pay for it.

It creates a pool across all of our companies that puts $9.5 billion available. No other industry has $9.5 billion.

In fact, they don't have anything close to it. Okay, that you have to share, you can't walk away. What you hear is we should have unlimited liability. Well, there is no such thing. Companies declare bankruptcy when there is unlimited liability.

We see it every day, unfortunately, over the last 2 years. So it has turned out to be, because again of Congress, you changed it from a subsidy to an extremely good public policy.

If you were talking about 1957, you would be correct in saying it is a subsidy. It isn't now. It is a very good public policy. So I would disagree respectfully with Anna.

Mr. FOSSELLA. Thank you. Shifting to your left, Ms. Aurilio, according to your testimony, "spent nuclear fuel from reactors cause perhaps the most toxic material generated by humans."

Jumping ahead, "unshielded it delivers a lethal dose of radiation within seconds." How many people have died in the last 20 years due to exposure to unshielded spent nuclear fuel?

Ms. AURILIO. Well, hopefully none because I am hoping no one has stood next to unshielded nuclear fuel.

Mr. FOSSELLA. So that sort of answers the second question. You are unaware of anyone who has ever died from exposure to unshielded spent nuclear fuel, right?

I am going to shift to your left, because I have about 2 minutes left. Mr. Benjamin, according to your testimony, according to the testimony of Dr. Lyman, who sits on the panel, "the nuclear industry is bitterly resisting any new security requirements that will cost it money."

Is this true, in your opinion, and how much money has Exelon spent on new security requirements since September 11?

Mr. BENJAMIN. I will answer the second part of your question first. We have spent, across our fleet, around $12 million in capital expenditures by putting new hardware in our plants.

And we have increased our operating and maintenance budget for security from roughly $45 million per year, which is about 4.5 percent of operating budget, up to close to $64 million per year. Just a little bit under 6.5 percent.

I think it is fair to say that we have worked very aggressively and in concert with the Nuclear Regulatory Commission over the past 17 months to put in real security improvements at our sites.

You drive up to our plant sites today, you will be met out in the owner controlled area. Your identification will be verified.

If you are driving a vehicle of sufficient size, it will be searched. Again, at a distance sufficiently far from the plant site itself, so that any potential terrorist act wouldn't pose a threat to the plant itself.

We have taken a number of additional measures for operational readiness. We have gone back and made sure that we have checked again on the people who have unescorted access to our sites.

At Exelon alone, we have added over 260 new security officers and we have trained them. We have provided them improved weapons and we have bought additional weapons for the previously existing guard force.

So I think we have acted both responsibly and in concert with the wishes of the Nuclear Regulatory Commission and believe we have effected real security improvements.

The issue in front of us now, again, as I stated in my oral remarks, is one of public policy in terms of where do we draw the lines?

Where do we establish the limitations on what we want and need a civilian guard force to carry out in terms of its security mission.

And where do we then bring in the roles of local law enforcement, State law enforcement, Federal law enforcement and the military.

And those are the issues before us that we are simply seeking the NRC acting in full consultation with the Department of Homeland Security and Congress to get sorted out before issuing a new design basis threat.

Our job one is safety. Safety to the public. We want to do what is proper. We think we have done what is proper. The security that we have put in place, I think gives us the time to do it right.

Mr. FOSSELLA. Thank you, Mr. Benjamin. We have other questions, but at this point I turn to my colleague, Mr. Boucher.

Mr. BOUCHER. Thank you very much, Mr. Chairman, I am going to be very brief. Mr. Nadel, I want to ask for your assistance in perhaps providing a primer on the steps that we need to take in order to make sure that our society receives from combined heat and power the added benefits both on the environmental side and the energy efficiency side that would come from an expansion of capacity. What do we need to do? What steps should we take?

Mr. NADEL. Several things. Probably the most important is to address some of the barriers in terms of individual utility and sometimes individual State regulations on hook ups of these types of systems on back up power, how much they get charged for back up power.

What the rates are that they can sell. Some facilities have good access to this, they are qualified facilities, many do not.

We think it is real important to get these signals right, and we recommend that the energy bill, that hopefully this committee reports out, gives FERC explicit authority to develop those so that we have fair and reasonable hook up requirements, back up power rates, etcetera.

That is by far the most important thing that I think needs to be done. In addition, some tax credits could be useful. The President has proposed that in his budget.

The House Ways and Means Committee did report out a bill in 2001, so that will be an aspect of it. We think those should particularly target the medium and smaller size plants, that is where the assistance is most needed.

Not in the very large plants where the market is starting to take off a little bit more. There is some R&D in terms of the more advanced technologies, and the bill, I think it is in Title VI, does include quite a bit on that.

So that is good. But particular dealing with the back up power, the interconnection, I think that would be very useful.

Mr. BOUCHER. All right, that is helpful to know. Would you like to take just a minute to underscore what some of the benefits of using combined heat and power facilities are, in comparison with the national electricity generation-based generally, specifically with respect to the more environmentally benign nature of CHP and the higher energy efficiency that CHP achieves.

Mr. NADEL. Right, as you point out, and you are absolutely correct, combined heat and power or CHP, by using the same fuel effectively twice, both to provide heat and provide power, tends to be much more efficient.

We are talking about efficiencies, you know, 75, 80, 85 percent compared to your typical existing power plant which is just over 30 percent.

Even some of your newer power plants are maybe in the 40's or something like that. So you are talking a major efficiency advantage, if you will.

That, in turn, means much lower emissions per kilowatt hour of output. Also, it depends on the type of system, but many of these systems use very advanced combustion techniques, using natural gas and other fuels, they can burn extremely cleanly which helps reduce emissions.

So that is another major advantage.

Mr. BOUCHER. Well, thank you. As you may know, I am considering recommending to the committee that some of the steps you have outlined be taken.

And it is helpful to have your statement on the record of very strong support for that happening. Ms. Aurilio, let me ask you a question, if I may.

The administration is recommending an R&D program of about $2 billion to be expended at $200 million increments over a 10-year period, for, primarily for the development of advanced coal gasification technologies.

The theory being, I suppose, that coal gasification is an appropriate way to derive hydrogen which in turn could power fuel cells.

And from the environmental side, the gasification process conveniently enables CO_2 to be drawn off in a separate stream and it then potentially could be sequestered and dealt with in a better way than simply releasing it into the atmosphere. What do you think of that?

Ms. AURILIO. That is a great question. I don't think I have seen enough of the goals or specifications of the program to have an overall opinion on it.

A couple of concerns I think, and things that I would look for in evaluating that kind of program is first of all what is the goal of the program?

So others have testified, for example, about the hydrogen car and the fact that there is no actual promise that taxpayers will get a product at the end of the billions of dollars that are spent.

I would like to see what taxpayers will get for their money at the end of that kind of program. In the past we have questioned the clean coal technology program because it is developed technologies that weren't even as good as stuff that was developed without government subsidy.

So I would want to see what the criteria were. Finally, I think the President's budget, as we looked at it, took money out of a lot of very deserving programs like renewable energy programs to put into some of these new initiatives.

And I don't think that we should be taking money out of existing renewable energy programs to be paying for stuff like this.

If someone wants to make a case to do this brand new technology that again, I think has been very vague in terms of its goals and guarantees, we ought to be preserving the existing programs as well.

Mr. BOUCHER. Okay, thank you. Mr. Meyer, would you like to comment on the same question?

Mr. MEYER. Yeah, I agree with Anna that we need much clearer goals set out here. We also need to look at the permanence issue, I think, with carbon sequestration.

Because I think this is a technology that has some promise, but it is a technology where you have to be very certain that the carbon you put down in the ground stays there for centuries and longer.

Because if you had some pulse of carbon being emitted from underground storage, it could be quite troubling to the climate system.

Again, I agree totally with Anna that the shell game of cutting some of the core of renewable energy programs, such as biomass, wind and geothermal. To switch money into either this coal initiative, the FutureGen initiative or the hydrogen initiative is misguided.

We need a balanced portfolio. And as I said in my oral statement, we need to increase R&D on renewable technologies if we want to keep those positive cost trends going in the right way. So I think that was a mistake.

We are supportive of some additional R&D on these technologies. Clearly, if you look at countries like China and India, which are going to use their tremendous indigenous coal resources to modernize their economies, we need to find ways to square the circle in terms of carbon emissions from coal over the long term.

And I think gasification technology is clearly the way to go there. As you said, it makes it much easier to separate the carbon before it is combusted.

So, some additional R&D is useful. I agree with Anna, you need to see clear goals and what you are going to get for your buck.

We need to see what other countries are going to come in on this kind of technology with us. I know they are trying to get international partnerships launched here.

Let's see what the Europeans, the Japanese and others that are looking at this are willing to ante up in the bar and do.

Mr. BOUCHER. Thank you very much. In deference to the fact that we have all had a very long day and you have devoted, as we have, virtually your entire day to informing us, let me thank each of you for your participation.

Your written statements and your testimony will be most helpful to us. And Mr. Chairman, having said that, I would recommend that we call it a day. Thank you very much, I yield back.

Mr. FOSSELLA. Thank you, Mr. Boucher, I will take that suggestion under advisement. We have just a few more quick questions and then everybody can go home, if you don't mind.

Mr. Meyer, your testimony states that you support net metering and the draft energy proposal contains a provision on net metering. Do you support the net metering provision in the discussion draft?

Mr. MEYER. Yes, we think this is a positive step forward. As I said, it is not sufficient in and of itself to move renewable technology where we want to go.

Net metering is aimed at onsite, small scale technologies which are important and you want to continue the cost trends.

But that is sort of a niche market in terms of overall renewable contribution to the country long term. So we also need policies like tax incentives.

We ought to be extending and expanding the production tax credit which unfortunately Congress has only reauthorized in year or 2 year increments, which doesn't provide the long term certainty to the industry that it needs to achieve low cost financing.

We also need the renewable energy standard, which will drive the bulk power technologies, such as geothermal, biomass and wind into the major contribution that they can make.

We see no reason why we can't get 20 percent of our electricity from non-hydro renewables by the year 2020. We think that ought to be the goal.

We understand the Senate made some compromises there and only went for 10 percent, but we think we ought to go as far as we can, particularly given the gas price volatility and some of the energy security concerns we are seeing currently.

Mr. FOSSELLA. And the Union of Concerned Scientists supported the net metering provisions in the Senate's energy bill last Congress, correct?

Mr. MEYER. Yes, we did.

Mr. FOSSELLA. Which is identical to the one in the draft?

Mr. MEYER. Yes.

Mr. FOSSELLA. Dr. O'Hagan, can you comment, and if you feel you covered it in your testimony, that is fine. NEMA's role in helping the Federal Government implement its energy management goals?

Mr. O'HAGAN. Mr. Chairman, when I testified here last year I suggested that a good place to start would be in this hearing room by installing energy efficient lighting. I am afraid to see it hasn't happened yet.

We, I think there are two important things. One is that the government should lead by example in upgrading its own facilities.

And the other is widely promoting the use of the voluntary consensus standards that have been developed collaboratively in the private sector.

Mr. FOSSELLA. And also discuss an involvement with the American Council for Energy Efficient Economy to develop the energy efficiency standards in the H.R. 4 conferees adopted, which I understand again are the same provisions in the draft bill.

Mr. O'HAGAN. That is right Mr. Chairman. We are all on the same page on the energy efficiency standards. I don't think there is anybody that opposes conservation.

There is enormous waste. One point I would make that, and we have made this point to the Department of Energy.

In the case of energy efficiency the technology exists. We are not waiting for new technologies to come. Unfortunately it hasn't been deployed to the extent that it should be.

And primarily because the first cost is higher, but the life cycle cost is much lower. So we would like to see the Department of Energy and the government lead a major, national education effort to really try to get the country to adopt the energy efficient technologies.

Pointing out that it is cost saving in the long run and that is of great benefit to the Nation and our energy policy.

Mr. FOSSELLA. Thank you, sir. Mr. Nadel, in your testimony you State that while you strongly support the energy efficiency Title of the draft bill, you would like to add certain energy efficiency standards, "When and if negotiations with industry are successfully completed," that is your quote. What is the status of the negotiations and where are they headed at this time?

Mr. NADEL. We are talking with several industry associations about possible new standards. In general, all the standards in the bill were consensus, so people both on the House side and the Senate side have made clear that they are really looking for consensus on these issues.

So we are trying to work with groups like NEMA. We are talking with them about compact fluorescent lamp standards.

We are also talking with them about extending the transformer standard to another type of transformer I will call liquid-immersed.

So we are having discussions with the association, with their members to see if we can work out the technical details. And if we can fairly soon, hope to have something to present to the members for consideration.

Also talking with one other trade association, I don't think I should say in public until it is farther along, but hopefully there may be something there as well.

Mr. FOSSELLA. In addition, you State that the energy efficiency provisions in the draft bill are, "a significant improvement relative to the efficiency provisions passed by the House in 2001."

Can you elaborate on this and tell us in what specific respects this draft is stronger than the House passed H.R. 4 on energy efficiency?

Mr. NADEL. Okay, a number of provisions were added in this bill that were not in the 2001 bill that I think significantly strengthened it.

The efficiency standards is a prime example. The four standards that are specifically in the bill now were not in the bill in 2001.

It has to do with exit signs, traffic lights, torchiere lighting fixtures and transformers. In addition, the bill now directs the Department of Energy to develop some standards on additional products that were not in the House bill.

Commercial refrigerators, for example, comes to mind, as an example. The requirements for Federal Government, the Federal energy management provision. So it has been significantly strengthened.

There has been, more than a year has elapsed and there was time for people to really sharpen their pencil and come up with some additional improvements.

There is a section on industrial voluntary programs to encourage industrial customers to voluntarily improve their efficiency. Meaning reduce their energy use per value of product by 2.5 percent per year.

That was not in. So those are some examples of some very concrete provisions that have been added. And we very commend the Chairman for including them.

Mr. FOSSELLA. The last question is for Dr. Lyman. In your testimony you State that the Nuclear Control Institute is not an anti-nuclear organization.

Can you provide me with one, two or three examples of how nuclear power is beneficial, and if so, what would they by?

Mr. LYMAN. Well, we are not an anti-nuclear organization, but neither are we pro-nuclear. We are anti-pro-nuclear. So let's say our position is neutral.

I can see obviously there are, it is wrong to not consider any options when you are thinking about future energy needs.

And, but I do believe there are risks associated with n nuclear energy generation that do have to be fully taken into account. And if they are, I haven't seen any analysis that would indicate that it would remain an economic form of electricity generation.

So, I mean, you have to satisfy both safety, security and an economic consideration simultaneously. And the day when that is possible is the day when I will look at the other purported advantages.

But that is the first bar in my view.

Mr. FOSSELLA. So to be clear, what exactly is the benefit, if any, in your opinion? If you don't believe there are any, that's fine. But I am just curious, for the record.

Mr. LYMAN. Simply, from the point of view that I don't think options should be limited.

They have to be evaluated on their merits. And until the safety and security issues are fully resolved, I can't look forward to even discussing that question.

Mr. FOSSELLA. Do you think there are any benefits to nuclear power?

Mr. LYMAN. There is a limited benefit associated with greenhouse gas generation, there is no denying that. Although you do have to take into account the full life cycle emissions associated with that.

And, again, I haven't the analysis that would fully justify even that statement. What you really do need is a full life cycle analysis that does, in which you are able to compare apples and oranges, for instance, the purported benefits of nuclear power against the risks and the benefits of other energy technologies.

And that is a difficult calculation. But I would simply reserve until I have seen a convincing calculation to answer that question.

Mr. FOSSELLA. Ms. Aurilio, do you think there are any benefits to nuclear power? And if so, what do you think they are?

Ms. AURILIO. Well, I don't. I think until we solve the waste and the safety problem that we are still very concerned and I am actually almost floored by the industry's response to the Davis-Besse incident, where one, the response was there was no offsite threat. I disagree with that.

It could have caused the most serious loss of coolant accident that we have seen. And in the case to Three Mile Island, which was a loss of coolant accident, there was a melt down.

No. 2, I was floored by the response that said that none of the other plants had similar kinds of problems because in October 9, 2002, the North Anna Plant, not named after me, in Virginia, actually disclosed that it had serious cracking problems.

I was also floored when I heard that the nuclear industry hasn't uncovered any problems with aging related problems in license extension. Because in fact similar reactor vessel cracking was found in the Oconee plant after the NRC approved its license.

Mr. FOSSELLA. That is interesting that you bring that up. What exactly were the offsite problems associated with Three Mile Island?

Ms. AURILIO. Well, there was a release of radiation. Now no one can quantify exactly what happened there. The evacuation order wasn't given, I believe, until days after the accident.

So I don't know that anybody actually had the monitoring in place to see what the problems were in the folks who might have been exposed to that radiation.

But there certainly was a release of radiation.

Mr. FOSSELLA. So you are saying there was a health impact from Three Mile Island?

Ms. AURILIO. I mean I can only assume that there was a health impact, because there was no monitoring in place and because there was denial on the part of the decisionmakers until hours and potentially days after the accident.

I don't think we will ever know.

Mr. FOSSELLA. But in your, I am just trying, I want to make sure I understand this. In your, are you saying there is documented evidence or any evidence whatsoever that says there was a health impact?

Ms. AURILIO. There was a release of radiation. And there is a theory that says that there is no level of exposure to radiation below which there is no risk.

So if you buy into that theory, which is shared by many health physicists, and you know that there is a release of radiation that could come into contact with a human being, then you have to assume that there was a health risk.

Mr. FOSSELLA. So if anybody lives around there, you are basing your response on a theory and following that through?

Ms. AURILIO. Yes.

Mr. FOSSELLA. As opposed to some sort of hard evidence that there was in fact.

Ms. AURILIO. Well, I think there wasn't a good faith effort in trying to monitor and find out the evidence.

Mr. FOSSELLA. I see. Okay. Well, unless Mr. Boucher has any more questions, this hearing—I want to thank all the panelists for coming, for insightful testimony and thank you for your prompt response to questioning and this hearing is in recess. Thank you.

[Whereupon, at 3:53 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

RESPONSES FOR THE RECORD OF HON. KYLE MCSLARROW

QUESTIONS OF CONGRESSMAN WAXMAN

Question 1: I requested and you agreed to provide the Administration's projection on how much oil the nation will consume in 2040, including an explanation of how this projection was calculated and what assumptions about fuel economy and oil production were used.

Answer: The Department's Office of Energy Efficiency and Renewable Energy (EERE) used the VISION model to estimate the light vehicle oil use to 2040. The EERE baseline projection to 2040 assumed that the fuel economy of light vehicles

remained constant at the 2000 levels and all vehicles used gasoline. Estimated increases in the total stock of light vehicles and estimated increases in the annual number of miles traveled per vehicle lead to an estimated baseline light vehicle oil use of 14.81 mbpd in 2040. No assumptions about oil production were made. EERE has not made projections for other U.S. uses of oil, such as in heavy trucks, aircraft, industry, buildings, or electricity generation.

Question 2. Although you declined to say so clearly, I understood your testimony to be that under the President's proposal, hydrogen cars would not significantly reduce the nation's oil consumption before 2020, but that the President's proposals on research and development and tax incentives for new technology would reduce oil consumption prior to 2020. You agreed to provide an estimate of how much projected oil consumption will decrease as a result of each of the Administration's new policies. Please include a list of each proposal and the reduction in projected oil consumption attributed to policy. Please also include the timeframe during which the expected decrease in projected oil consumption will occur.

Answer. The following are a list of proposals and a discussion of fuel savings:

Increase light truck Corporate Average Fuel Economy (CAFE) standards.

This proposal would increase the current 20.7 miles per gallon (mpg) CAFE standard for light trucks to 21.0 mpg for Model Year (MY) 2005, 21.6 mpg for MY 2006, and 22.2 mpg for MY 2007.

This increase in CAFE standards is projected to decrease annual petroleum use by 140,000 barrels per day by 2010, and by 250,000 barrels per day by 2020. Cumulative petroleum energy savings through 2020 are estimated to be 900 million barrels.

Credit for qualified hybrid and fuel cell vehicles.

This proposal would provide temporary tax credits for certain hybrid and fuel cell vehicles. The tax credits would be available through December 31, 2007. For hybrids, the credit would be based on the amount of power provided by the electric drive train and the improvement in fuel economy compared to a 2000 model year vehicle. The electric drive train tax credit ranges from a low of $250 for a vehicle that gets 5 percent of its maximum power from the electric drive to $1,000 for a vehicle that gets 30 percent or more of its power from the electric drive train. The fuel economy improvement credit increases from $500 (for a hybrid that achieves 125 to 150 percent of the fuel economy of a model year 2000 vehicle) to $3,000 (for a hybrid that achieves at least 250 percent of the fuel economy of a model year 2000 vehicle).

For hybrid vehicles, estimates of the reduction in petroleum use resulting from the tax credit program will be affected by several key factors:

1) Interaction with State policies to promote hybrids. In addition to the proposed Federal tax credit for hybrid vehicles, several States (Colorado, Maryland, and Oregon to name a few) have also enacted various tax breaks for hybrid vehicles. States have also implemented other non-financial policies to encourage the sales of hybrid vehicles. Policies of this type typically provide reduced or no cost parking and/or single occupant hybrid vehicle access to high occupancy vehicle (HOV) lanes (Arizona, Maryland, and Virginia allow hybrid vehicles access to HOV lanes). State incentives can magnify the impact of Federal tax credits, but their availability is difficult to project given present State-level budget difficulties.

2) Interaction with the Zero Emission Vehicle (ZEV) program. Hybrid vehicles will likely play a significant role in meeting mandated sales requirements under California's ZEV program, which is now being revised to remove explicit reliance on fuel economy as a factor in determining ZEV credits. Providing Federal tax credits for hybrid vehicles will make the ZEV program, which several Northeastern States also plan to adopt, more attractive to policymakers by reducing net vehicle costs to consumers. Assuming that the ZEV program is successful in California and the Northeast, the *Annual Energy Outlook 2003* reference case shows that hybrid sales would exceed 9 percent of new vehicles sold by 2020.

3) Interaction with CAFE Standards. If CAFE standards are binding on one or more manufacturers, the projected reduction in petroleum use could be partially offset if manufacturers change their product or sales mix to use up the CAFE "breathing room" provided by additional sales of hybrid vehicles due to the tax credit. The level of the CAFE standards will determine the likelihood that they will bind, with higher standards causing the standards to be binding for more manufacturers.

4) Learning Benefits and Cost Reduction. By increasing market penetration of hybrids, Federal tax credits can help to accelerate cost reduction for hybrid technologies. With sufficient cost reduction, Federal tax credits could have a significant impact on hybrid vehicle penetration long after the proposed tax credits have expired.

5) Consumer Acceptance Issues. Given that wide consumer acceptance of hybrid vehicles is unproven at this time, the impacts of proposals designed to stimulate this market are clearly uncertain. Product offering is another issue that cannot be ignored. Although several auto manufacturers have announced plans to offer hybrid vehicles in the future, others have deferred or canceled the introduction of new hybrids.

In sum, the impact of Federal tax credits for hybrid vehicles on petroleum consumption depends on many factors, including other policy decisions at the State and Federal levels that are not yet fully resolved. Estimates are highly uncertain, and they can also be sensitive to the order in which the variety of state and Federal programs affecting vehicle characteristics and choices are considered. Plausible estimates of cumulative reductions in petroleum use through 2007 range from zero to as much as 7 million barrels. For a 2020 horizon, the cumulative reduction in petroleum use from tax credits alone could be as much as 29 million barrels. The cumulative combined reduction in petroleum use from tax credits and the state ZEV programs whose implementation they may help to facilitate could be as much as 140 million barrels by 2020 in a scenario where CAFE standards are not binding.

For fuel cell vehicles, the proposal provides a minimum credit of $4,000 plus an additional credit based on the improvement in fuel economy compared to a model year 2000 vehicle ($1,000 for a fuel cell vehicle achieving 150 to 175 percent of the fuel economy of a model year 2000 vehicle to $4,000 for a fuel cell vehicle achieving at least 300 percent of the fuel economy of a model year 2000 vehicle). The cost hurdles that must be overcome to achieve viable market penetration of fuel cell vehicles is not expected within the time frame of the proposed tax credit, resulting in few new sales of fuel cell vehicles through 2007.

REPLY TO CONGRESSMAN WAXMAN RE VEHICLE EXPENSING

Question 3. We also briefly discussed the Administration's tax proposals. You stated that the Administration had analyzed how its proposal to allow small businesses to deduct the entire value of a vehicle during the first year it is put into service might create greater incentives for inefficient vehicles than for highly efficient hybrid vehicles. You agreed to provide me with the analysis.

Answer: The Department of Treasury indicates that existing tax law does enable greater cost recovery for heavier vehicles, compared to lighter passenger cars, because heavier vehicles are not subject to the "luxury car" limits on depreciation that are applied to autos. However, Treasury staff have concluded that the Administration's proposal to allow small businesses to deduct the entire value of a vehicle during its first year would not materially affect this existing relationship and the enactment of the Administration's energy tax proposals, which include tax credits for hybrid and fuel cell vehicles, would provide an incentive equivalent to a first year deduction of 115 percent of the cost of these energy efficient vehicles. The following is summary of the basis for these conclusions.

Heavier vehicles, by virtue of not being subject to the "luxury car" limits on depreciation, are provided with larger cost recovery allowances under current law when compared to equally priced, lighter passenger automobiles that are subject to those limits. The advantage of not being subject to the "luxury car" limits is also larger if the taxpayer is a small business that is able to expense property under section 179. This general result is true under current law whether the vehicle is a conventional vehicle, a clean-fuel vehicle, or a hybrid electric vehicle. The distinction is potentially less important for electric vehicles, where the depreciation limits are tripled and therefore generally less constraining.

Nevertheless, the Administration's proposal to raise the expensing limit for small businesses will not materially alter the current law relationships between passenger automobiles and heavier vehicles exempt from the depreciation limitations. This is because current law provides expensing and depreciation deductions that are nearly equivalent to full expensing for most trucks and vans that are not subject to the depreciation limits. For example, a $35,000 pickup truck with a GVWR in excess of 6,000 pounds can potentially benefit from $29,400 in first-year deductions (comprised of a $25,000 expensing deduction, a $3,000 bonus depreciation deduction, and a $1,400 MACRS depreciation deduction). When the remaining MACRS deductions are added to this first-year deduction, the present value of deductions (using a 4 percent discount rate) are nearly 99 percent of cost. Even if full expensing is allowed, as is possible under the Administration's proposal, the present value of the deductions cannot be increased to above 100 percent. Expensing will, however, provide a simplification benefit to these taxpayers.

Finally, under the Administration's energy tax proposals, hybrid and fuel cell vehicles are granted a significant tax benefit in the form of tax credits. For example,

a $25,000 hybrid car with a hybrid vehicle credit of only $1,400 (the maximum credit is $4,000) will receive tax benefits that are equivalent to deductions having a present value of 115 percent of cost, despite the fact that the car remains subject to the depreciation limits.

Question 4: You testified that the goal of the administration's FreedomCAR initiative is to enable automakers to decide by 2015 whether to offer hydrogen fuel cell vehicles for sale. Assuming that automakers do decide in 2015 to offer such vehicles, what proportion of the vehicles fleet will consist of hydrogen fuel cell vehicles by 2020, 2030 and 2040?

Answer: If fuel cell and hydrogen infrastructure technology development is successful, a 2015 commercialization decision by industry could lead to hydrogen fuel cell vehicles being offered 3 to 5 years later. In that case, we estimate that 3% of the total U.S. fleet would be light duty hydrogen fuel cell vehicles by 2020, 38% by 2030 and about 79% by 2040.

Question 5: Assuming that hydrogen fuel cell vehicles are offered to consumers in the mass market starting in 2020, what are the projected oil savings and pollutant reductions that will be realized over business as usual projections by 2020, 2030 and 2040?

Answer: The Department believes that successful fuel cell and hydrogen infrastructure technology development efforts can lead to a commercialization decision by industry in 2015. We estimate that sales of light duty fuel cell vehicles (FCVs) may start as early as 2018. With this assumption the oil savings (million barrels per day) that could be realized over business as usual projections are as much as:

- By 2020—400,000 barrels per day
- By 2030—5 million barrels per day
- By 2040—11 million barrels per day

This reduction in oil demand is relative to what light duty conventional vehicles might otherwise consume and emit. Significant energy savings could also result from the widespread use of hydrogen in stationary applications.

DOE has not attempted to model the pollutant reductions (such as NO_x, SO_x, and particulate matter) associated with the introduction of fuel cell vehicles.

Question 6: Will a complete, nationwide hydrogen refueling infrastructure, roughly equal in extent to today's petroleum refueling infrastructure, be in place by 2020? If not, when do you estimate that a nationwide hydrogen refueling infrastructures, roughly equal in extent to today's petroleum refueling infrastructure, will be in place? What proportion of existing petroleum fueling stations do you estimate will offer hydrogen fuel by 2020, 2030 and 2040?

Answer: The Department believes that successful fuel cell and hydrogen infrastructure technology development efforts can lead to a commercialization decision by industry in 2015. If this decision is positive, it will take 3-5 years to install initial hydrogen refueling capability. The full transition to a hydrogen-based energy system, including refueling infrastructure equal in extent to today's petroleum refueling infrastructure will take several decades and depends on many technical and economic factors.

A consumer study showed that mass market penetration of fuel cell vehicles would require hydrogen availability in at least 25% of stations in urban areas and in at least 50% in rural areas

Question 7: Assistant Secretary Garman recently testified that the FreedomCAR and FreedomFuel initiatives contain research projects for fuel cells that will have applications other than for vehicles, and that the first applications will be applied to consumer electronics, then stationary sources, including power plants and homes, and then vehicles. What is your approximate timeline for deployment into the mass consumer market of fuel cell technology for consumer electronics, then stationary sources and then vehicles?

Answer: Deployment of fuel cells in portable and stationary power markets can be dependent on technology development success for automotive applications, especially related to cost, hydrogen delivery/availability, and the ability to build a component supplier base. Certain portable power applications could become available within the current decade. Stationary applications will likely occur in the 2010-2020 timeframe. If an industry decision to commercialize hydrogen fuel cell vehicles is made by about 2015, mass-market penetration could begin in 2018.

The Department's Fuel Cell Report to Congress submitted in February 2003 provides more discussion on timelines for commercialization of stationary and automotive applications.

Question 8: A recent MIT study finds that if hydrogen fuel is derived from fossil fuels, the benefits of fuel cell cars in terms of total energy use and greenhouse gas emissions will not exceed the benefits of relying on petroleum-electric hybrid cars. On the other hand, deriving hydrogen fuel from renewable sources of energy will

produce greater benefits than hybrids in term of total energy use and greenhouse gas emissions.

a. What is DOE doing to promote the deployment of hybrid vehicles, a technology that already exists, prior to the deployment of a national hydrogen refueling infrastructure?

Answer: DOE's has significant research and development efforts to improve the performance of hybrid vehicles and reduce the cost of the core technologies. Today's hybrid technology is not yet cost effective, lacks the needed performance, and has been applied to a fairly narrow niche market of smaller and lighter vehicles. Improving the technology (e.g., batteries or capacitors for energy storage, power electronics for energy conversion and management, and efficient electric traction motors) so that it could be cost effectively applied across the entire vehicle market is an important objective of the FreedomCAR Partnership. The hybrid technologies we are developing support not only improving our energy security in the mid-term with hybrid internal combustion vehicles, but are also essential to realizing the full potential of fuel cell powered vehicles.

The President's National Energy Policy also endorsed a tax credit, for fuel efficient vehicles between 2002 and 2007, to purchase of hybrid vehicles and advance their market penetration, which the Administration has proposed in its Fiscal Year 2002, 2003 and 2004 budget requests to Congress. The Clean Cities Program is the key deployment activity for light vehicles in DOE. This program now promotes the use of hybrid vehicles in their partnerships.

b. What energy reductions and greenhouse gas reductions will result between now and 2020 as a result of DOE's measures to promote deployment of hybrid vehicles?

Answer: It is difficult, if not impossible, to predict the impact of hybrid technology between now and 2020 because we do not know the rate or degree to which these technologies will be introduced. These are business decisions that will be influenced by many factors: the success of our research; the cost of fuel in the market; the importance the public places on energy security; the extent that government incentives are available; and others. The key point, however, is that when introduced in substantial numbers the impact will be significant. Fuel economy would improve by 50 percent to 200 percent per vehicle (depending on the vehicle) and greenhouse gases would be released in proportion to the reduction in fuel use.

Despite difficulties in predicting the future, the Department models potential benefits of its programs assuming certain technological successes. While the Department has not estimated benefits specifically for deployment of hybrid vehicles, it has modeled benefits of its FreedomCAR and Vehicle Technologies Program, which supports hybrid and other technologies. Estimated annual energy savings from the program in 2020 are 1.58 quadrillion BTUs, and estimated annual carbon emissions reductions total 29.8 million metric tons. Details on the Department's models and assumptions for estimating these benefits will soon be available on line at: http://www.eere.energy.gov/office_eere/budget_gpra.html

c. Assistant Secretary Garman testified that DOE intends to derive hydrogen fuel from fossil fuels. What proportion of the hydrogen fuel for transportation uses will come from fossil fuels in 2020, 2030, and 2040?

Answer: The Department's scenarios indicate that the proportion of the hydrogen fuel for light duty vehicle transportation uses that comes from natural gas (rather than from a source with no net carbon emissions) will be 90% in 2020, 55% in 2030, and 15% in 2040. However, fuel cell vehicles powered by hydrogen that is derived from natural gas deliver significant efficiency improvements and carbon reductions when compared with petroleum-powered vehicles. Our studies show that even without carbon sequestration, natural gas-based hydrogen fuel cell vehicles use 50% less energy and emit 60% less carbon dioxide than today's vehicles.

d. What proportion of the FreedomFuel budget will go toward the development of hydrogen fuel from (i) fossil fuels, (ii) nuclear power, and (iii) renewable energy?

Answer: The Department's FY2004 Budget Request for the President's Hydrogen Fuel Initiative is $181.7 million. In this request, there is a total of $38.5 million for hydrogen production research. It includes $17.3 million from renewables (44.9%), $17.2 million for fossil (44.7%), and $4 million for nuclear (10.4%).

e. What are the benefits of utilizing hydrogen derived from fossil fuels? Please specifically address the effect of this approach on greenhouse gas emissions?

Answer: Domestic coal as a feedstock to make hydrogen is a vast energy resource which can reduce our dependence on imported oil. The U.S. has over 10,000 Quads (quadrillion BTUs) of coal which could supply our demand of 27 quads per year of oil consumed for transportation applications. On February 27, 2003, Secretary Abraham announced FutureGen, an initiative to demonstrate the world's first coal-based, zero emissions electricity and hydrogen power plant. This project will be undertaken

with international partners to dramatically reduce air pollution and capture and store emissions of greenhouse gases.

Combined with other hydrogen production technologies using both fossil feedstocks and renewable energy sources, we estimate that as much as 170 MMTCe in 2030 and 500 MMTCe in 2040 of greenhouse gas reductions could be realized over business as usual projections.

QUESTIONS FROM CONGRESSMAN JOHN DINGELL

Question 1(a): Section 3001 of Chairman Barton's draft, entitled "Alternative Fishways and Conditions," would amend the Federal Power Act to permit applicants for hydroelectric licenses to propose "alternative conditions" to those required by the resource agencies for the protection of river systems. It appears that the provision would require the Secretary of the Interior to accept the applicant's proposal unless he or she could demonstrate, subject to judicial review, that the proposal does not provide for adequate protection of the reservation. Does the Administration support this provision and exact language, and why or why not? To what extent are any Administration concerns about the hydropower licensing process addressed by the proposed rule issued by the Federal Energy Regulatory Commission (FERC) on February 20, 2003, entitled "Hydroelectric Licensing under the Federal Power Act"?

Answer: It is the Administration's policy to fulfill its statutory responsibilities to preserve and protect public and Indian trust resources. We also wish to encourage a license applicant's ingenuity in crafting approaches to fulfilling these responsibilities.

The President's National Energy Policy called for making the licensing process more clear and efficient, while preserving environmental goals. The Federal Energy Regulatory Commission (FERC) has made substantial progress in achieving these objectives. In its integrated licensing process, to be completed this summer, FERC and the resource agencies have developed a streamlined process that increases collaboration among all parties. In addition, the Department of the Interior is in the process of designing a fair, objective, expeditious, and transparent appeals process that recognizes the importance of hydroelectric generation and ensures that high standards for resource conservation, efficiency, and reasonableness are maintained.

The development of a substantive appeals process in the agencies, coupled with process improvements underway at FERC may obviate the need for Congressional action. If Congress decides to act, the Department of the Interior would like to work with the Committee on wording to ensure that all objectives are met without unduly extending the licensing process and burdening agency budgets.

Question 1(b): What effect, both procedurally and substantively, would Section 3001 of the Barton Draft have on current law, the responsibilities of the resource agencies and those of the Secretary of the Interior? Are you aware of any other statute designed to protect health or the environment or wildlife under which (a) the head of an agency must carry the burden of proof in order to prove a license application does not meet the statutory standard for approval and (b) a license applicant is the sole party that can propose an alternative to a Federal agency's determinations regarding an application?

Answer: Procedurally and substantively the Administration is committed to addressing the issues raised in Section 3001. The Administration believes that the combination of the revised FERC procedures and the appeals process under development at the Department of the Interior will meet these needs in the most efficient and cost-effective manner.

The Administration believes that the public interest is best served when all parties are committed to mitigation measures based on sound science. As in all areas of resource management, the Administration holds its agencies to that high standard by requiring that their conditions and prescriptions be supported by substantial evidence and capable of supporting judicial review. The Administration believes that an applicant's alternatives to agency proposals must meet the same sound science standards.

In developing an appeals process, the Administration believes that the applicant's intimate knowledge of its own systems puts it in an excellent position to propose alternatives. The Administration also believes that other interested and affected parties should be heard in any appeal. This is especially important when hydroelectric projects affect Indian trust resources. The Administration also believes that other groups with specialized knowledge should also be heard.

Question 3. Section 7022 of the draft, titled "Regional Transmission Organizations," includes a subsection (d)(3) concerning "Federal Utility Participation in RTO's" denoted "Existing Authorities and Obligations." This section provides that "Where a contract, agreement, or other arrangement . . . conflicts with any statutory

authority, duty, or obligation, under any authority of law, of a Federal utility, such authority shall be suspended for the duration of the contract, agreement, or other arrangement." Does the Administration support this provision, and why or why not? What other Federal laws would be affected, and how? In particular, how would obligations of the Bonneville Power Administration and the Tennessee Valley Authority be affected? What would be the legal impact of this provision on existing contract rights between Federal authorities and private parties, and could this provision give rise to claims against the Federal Government for breach of contract.

Answer 3. Section 7022 of the draft House bill as introduced dealt with Federal utility participation in a regional transmission organization (RTO). It provided the Secretary the authority, which may then be delegated to a PMA, to enter into contracts or other arrangements to participate in an RTO approved by the Federal Energy Regulatory Commission.

The Administration supports participation by Federal utilities in RTOs. However, and as I said in my written testimony at the Subcommittee hearing on March 5, 2003, we had concerns about section 7022 of the draft House bill because, among other things, it did not explicitly provide for Federal cost recovery when a power marketing administration joins an RTO, or for preserving prior contracts and third-party financing obligations of the PMAs. However, in the full Committee markup of the bill, the Committee substituted a new RTO provision that resolved our concerns. We believe that this new provision, which we support, ensures the sanctity of existing contracts, agreements and financing obligations of the power marketing administrations and TVA, and that compliance with this provision will not give rise to claims against the Federal Government for breach of contract.

QUESTIONS FROM CONGRESSMAN PICKERING

Question 1: Does the Administration support the FERC's proposed SMD order?

Answer: The Administration supports the goals of the Standard Market Design proposed rule: customers to receive the benefits of lower-cost-and more reliable electric supply, prevent market manipulation and market power abuse, prevent undue discrimination and preference, make competitive markets work better, assure adequate electricity supplies, eliminate transmission constraints, and encourage investment in new generation and new transmission. We believe those are the right policy goals. The proposal is complicated, and public comments total many thousands of pages. It is important that the record be properly weighed to determine whether the proposed rule effectively advances the policy goals, and what changes to the proposed rule are needed.

Question 2: Included in the Omnibus Appropriations bill was language that required DOE to conduct a study to evaluate the potential of the SMD order. Can you explain to me how DOE will conduct this study? Who at DOE will conduct this study?

Answer: A DOE's analysis is being managed by small team of the Department's electricity policy staff. The analysis will consist of both quantitative and qualitative analysis. The quantitative analysis will be done using two economic models, DOE's POEMS model (managed by OnLocation Inc.) and General Electric's MAPS transmission model. Charles River Associates will also assist us, chiefly on certain questions related to our input assumptions and interpretation of the output of the MAPS model. The qualitative analysis will be done by DOE staff, aided by specialists on selected subjects.

General Electric and Charles River Associates are under contract with CERTS, the consortium of labs and universities that DOE used for our National Grid Study.

This is a strong team of consultants. GE and Charles River Associates, for example were involved in the study of Standard Market Design conducted for the Southeastern Association of Regulatory Utility Commissioners (SEARUC).

The scope of the study is consistent with the appropriations report language accompanying the FY 03 omnibus bill. The calls for the Secretary to submit to Congress:

> "an independent analysis of the impact of the SMD rule that FERC proposes to finalize. This independent analysis must compare wholesale and retail electricity prices and the impact on the safety and reliability of generation and transmission facilities in the major regions of the country both under existing conditions and under the proposed SMD rule. This analysis must also address the proposed SMD rule's: (a) costs and benefits, including its impacts on energy infrastructure development and investor confidence; (b) impact on state utility regulation, (c) financial impact on retail customers; (d) impact on the reasonableness of electricity prices; and (e) impact on the safe, reliable, and secure operation of the Nation's generation and transmission facilities."

The conference report calls for DOE to "work in consultation with the FERC so that the Secretary's analysis will most accurately address the contents and conclusions of the most current version of the proposed rule."

The study is to be completed by April 30, 2003.

Question 3: What is the Administration's goal in regards to electricity policy?

Answer: Developments in recent years have brought the electricity industry to a crossroads. Twice in the past 25 years Congress has enacted laws to promote competition in wholesale power markets. While the move to competitive markets has fostered significant benefits, major challenges exist. Competitive markets have great potential to benefit consumers. Between 1985 and 2000, wholesale power prices fell 23 percent. While the electricity crisis in California and the West in 2000 and early 2001 reversed some of these gains, prices have continued to fall since then. There are still challenges confronting wholesale power markets. It is important to start by identifying the problems that exist under the status quo. In recent years we have witnessed dramatic price spikes in wholesale power markets, attempts to manipulate power markets, a large expansion of generation by independent power producers, followed by serious challenges facing many of these producers, and stagnant investment in the transmission grid. Reforms—some of which already are possible under existing law and are being pursued by FERC right now—that would promote effective competition and address these challenges include the following:

- Prevent market manipulation and market power abuse.
- Promote reliability of electricity service.
- Ensure open access to the interstate transmission grid.
- Eliminate undue discrimination in wholesale power markets.
- Ensure that customers have the ability to respond to price in real-time.
- Encourage investment in new generation and transmission facilities.
- Support transmission policy options, including participant funding, and appropriately allocate costs.
- Lower barriers to entry to electricity markets.

The Administration believes there is a need to complete the transition to effective competition in wholesale power markets that deliver reliable, abundant, and affordable electricity.

Question 4: Does the Administration support the formation of RTOs?

Answer: The Administration believes regional transmission organizations have great potential to promote effective wholesale competition in regional power markets.

Question 5: Does the Administration believe that the FERC should allow and account for regional differences in the creation of RTOs?

Answer: Yes. The United States has and most likely will continue to have a series of regional power markets. There are important differences among these regional power markets. For that reason, it is important to consider regional differences in the development of regional transmission organizations.

Question 6: What role do you see for the states in the development of RTOs?

Answer: Among other authorities, States have jurisdiction over the retail sales of electricity and the siting of generation and transmission facilities. As a result, States must play a strong role in the development of regional transmission organizations, and FERC should work closely with the States in the development of market rules that reflect differences in regional power markets.

QUESTIONS FROM CONGRESSMAN WHITFIELD

Former Worker Medical Screening Program

Question 1. DOE requested approximately 14.9 million for the former worker medical screening programs within the Office of Environment, Safety and Health for FY 04, a $1 million increase over FY 03 request. Of the amount for FY 04, how much is allocated for the medical screening programs for workers at the gaseous diffusion plants for screening workers, including the early lung cancer detection program?

Response. The funding for former worker medical screening programs supports three different programs, including the Former Beryllium Workers Medical Surveillance Program, the Rocky Flats Former Radiation Workers Medical Screening Program and the Former Workers Program. Medical screening for former gaseous diffusion plant workers is budgeted in the FY 04 Former Workers Program budget request at a level of $1 million, including early lung cancer detection screening.

Uranium Enrichment

Question 2: What action would or has the Department taken to ensure continued supply of enriched uranium in the event that USEC and LES are not able to deploy advanced gas centrifuge technology?

Answer: The Department has taken a number of major actions to help assure a continued supply of U.S. enrichment to USEC's nuclear utility customers:

- On June 17, 2002, the Department of Energy and USEC signed an agreement that, in part, commits the corporation to operate the Paducah Gaseous Diffusion plant at a level at or above 3.5 million SWU per year. USEC may not reduce this level until six months before USEC has the permanent addition of 3.5 million SWU per year of new capacity installed based on advanced enrichment technology.
- The June 17 agreement also requires USEC to take "actions appropriate to maintaining the Paducah plant to operate at an annualized rate of 5.5 million SWU per year."
- Pursuant to the June 17 Agreement, if USEC ceases enrichment operations at Paducah, as that phrase is defined in the Agreement, DOE may take actions it deems necessary to transition the operation of the Paducah Gaseous Diffusion Plant from USEC operation.
- The Department maintains the Portsmouth Gaseous Diffusion plant in cold standby with the ability to operate at 3 million SWU within 18 to 24 months of a supply disruption.
- The Department is actively pursuing with Russia other initiatives to accomplish the mutual goals of the 1993 U.S./Russian HEU Agreement of converting Russian HEU extracted from nuclear weapons to LEU. In this regard, initial efforts of a U.S./Russian Joint Experts Group established by Presidents Bush and Putin in May 2002 have focused on an agreement and implementing contract for the U.S. to purchase LEU derived from Russian HEU to be maintained as part of the Department's uranium stockpile. In the event of supply disruption, DOE could sell the LEU purchased from Russia for use in commercial reactors.

The Department will continue to monitor the domestic nuclear fuel markets to assure U.S. energy security requirements are met.

Energy Employees Occupational Illness Compensation Program

Question 3(a): To date, the Energy Department has received 14,000 requests for assistance under DOE's program for claims related to state worker compensation. Your staff indicates that approximately 7 claims have been processed through the DOE's Physicians' Panel in the 6 months since the rule was been issued. And we understand that there are only about 20 claims sent to the Physicians' Panel. The rest are backlogged with a support service contractor, SEA. By comparison, the Department of Labor has been tasked with evaluating claims for cancer, beryllium disease and silicosis under the Energy Workers Compensation program. The Department of Labor has received over 39,000 claims, recommended decisions on almost 20,000 claims, and issued $475 million in payments to 6,600 claimants since July 2001. Comparisons are said to be odious, but in this case, the comparisons are less than flattering to the DOE. How many years will it take for DOE to work through this backlog of claims? Three years? Four years? Five years?

Response: As of April 7, 2003, the Department has initiated the processing of more than 7900 claims and has completed the development of 44 case files for the physician panels. We continue to work to process claims quickly and effectively. As more information is developed about exposures at specific sites through site profiles and we continue to work with sites to optimize processes, the Department expects that it will be processing claims at a rate of 100 per week by August 31, 2003. At this rate, our goal is that the current caseload (existing claims plus new claims received) will be processed through physician panels in approximately five years, depending on new cases coming in. However, DOE will continue to do everything it can to expedite the consideration for requests for assistance under Subtitle D.

The separate sections of the EEOICPA program delegated to the Departments of Energy and Labor are not directly comparable. The DOE portion of the program faces unique challenges. In addition to basic information on eligibility, the applicant's case must include enough information for the physician's panel to determine if the illness or death of a DOE contractor employee arose out of and in the course of employment and exposure to a toxic substance at a DOE facility. This will be based on whether it is at least as likely as not that the exposure was a significant factor in aggravating, contributing to or causing the worker's illness or death. The law requires that DOE obtain additional evidence within the control of the DOE and relevant to the panel's deliberations. Therefore, the DOE is working closely with the applicants and the DOE sites to obtain the relevant information. The final outcome is to assist applicants in filing a claim under the appropriate State workers' compensation system.

Energy Employees Occupational Illness Compensation Program

Question 3(b). Given that DOE had two years to get these claims ready for review by the Physicians' Panels before DOE's rulemaking was complete in August 2002, what explains the lack of performance?

Response: The Department was first able to begin processing claims under Subtitle D in September 2002 when the rule governing operation of the program became effective. As a result of comments from the public and Members of Congress, significant and substantive changes were made to the rule throughout the rulemaking process and after the public comment period had closed. These changes had a direct impact on eligibility requirements and the types of documentation needed in support of a worker's claim. As a result, the Department was extremely limited in its ability to process claims prior to the issuance of the final rule. Since September 2002, DOE has initiated processing of over 7900 claims and prepared 44 cases for review by physician panels, including informing 731 that they do not qualify for the program. The preparation of cases is a multi-faceted process that involves gathering employment records, establishing relevant occupational histories (which, for some workers, involves multiple sites), and medical records in possession of DOE and in possession of the claimant. We expect that the pace with which we are able to prepare cases will rapidly increase as we gain experience, streamline efforts such as shared agency databases, develop generic information on facilities and their hazards (site profiles) that can be used for all cases at that site, and benefit from economies of scale. We believe these process improvements will allow us to be at a production rate of 100 cases per week through the Physicians Panels by August 2003. We are developing options for further accelerating the rate with which we process claims.

Energy Employees Occupational Illness Compensation Program

Question 3(c). What obstacles does DOE face going forward to assure rapid and accurate processing of claims?

Response: The Department does not anticipate major obstacles in implementing the requirements of Subtitle D. To date, the greatest challenge has been the time and effort required to locate employment and occupational history records that are up to 50 years old. The challenge is greater for those who have worked at multiple sites, or for contractors and subcontractors that no longer have a relationship with the DOE. As we move more and more cases through the process, the upcoming challenge will be the ability of the independent physician panels to handle the case loads.

Energy Employees Occupational Illness Compensation Program

Question 3(d). How much is DOE paying SEA per year to provide claims processing services?

Response: DOE does not have a contract with SEA for this program. DOE has a cooperative agreement with the U.S. Navy's Space and Naval Warfare Information Center (SITC) for assistance with the EEOICPA program. As part of that agreement, the Navy has made available its SITC management and operating contractor to assist the Office of Worker Advocacy. DOE is using expertise from SITC in a number of ways—to process cases, to develop Office of Worker Advocacy business processes, and to implement an integrated claims and records management system. DOE paid $3.8 million for this assistance in FY 02 and is budgeted to pay $12 million in FY 03.

Energy Employees Occupational Illness Compensation Program

Question 3(e). What are SEA's specific qualifications to carry out this worker compensation administration and case management activity? Is it time to look to others with more expertise?

Response: DOE has the expertise needed to meet its responsibilities under Subtitle D. At the SITC, SEA has successfully integrated numerous military data systems into an integrated personnel management framework allowing for a single point of contact for naval veterans or current naval personnel for their human resources, occupational medical, and posting/assignment information.

Energy Employees Occupational Illness Compensation Program

Question 3(f). Was the SEA contract awarded on a competitive basis?

Response: DOE does not have a contract with SEA for this program. DOE has a cooperative agreement with the U.S. Navy's Space and Naval Warfare Information Center (SITC) for assistance with the EEOICPA program.

Energy Employees Occupational Illness Compensation Program

Question 4(a). Last year the DOE General Counsel indicated that the DOE does not have entities who will serve as a payor for as many as 50% of the claims which

have been approved by the DOE Physicians' Panels. This problem has not been solved in Kentucky for USEC workers and perhaps others at the Paducah Plant. Approximately 2000 Subtitle D claims are pending at Paducah. Nationwide, this involves thousands of claims. This problem was revealed to Congress nearly a year ago, and was identified by DOE's advisory committee nearly 18 months ago. Late last year, legislation I cosponsored HR 5493 which would authorize the Department of Labor to solve the willing payor problem. Would you support the idea of having the DOL assigned the responsibility of paying valid claims instead of sending workers back to the states where they won't have someone to pay their claim?

Response: To meet our requirements under the Act, DOE is identifying the contractual arrangements that exist with current and former DOE contractors that will allow as many workers with positive findings to receive benefits as possible.

Energy Employees Occupational Illness Compensation Program

Question 4(b). Please provide a list of all contractors, subcontractors and facilities/locations for which the DOE has not yet identified a willing payor under Subtitle D. Please identify by time period and location.

Response: EEOICPA did not confer on DOE any authority to identify or seek "willing payors." It simply directed DOE to exercise its contract administration authority with respect to its existing contractor in a manner that would encourage those contractors not to contest workers workers' compensation claims filed by their employees who had received a favorable final determination from a DOE Physician Panel. DOE is so directing its current contractors.

Energy Employees Occupational Illness Compensation Program

Question 4(c). Congress deemed that workers in Special Exposure Cohorts (SEC) would not be able to obtain accurate radiation dose estimates. Paducah workers employed for more than 250 days prior to 1992 who were badged with a dosimeter are in the SEC. What policy will DOE apply under Subtitle D for workers whose claims have been approved by the DOL under the Special Exposure Cohort and are requesting assistance with State worker compensation? Will DOE require workers to obtain dose reconstructions for cases where doses cannot be reconstructed? Or will DOE accept those with positive SEC findings?

Response: The law requires that physician panels provide DOE with impartial and independent determinations as to whether the illness or death of a DOE contractor employee arose out of and in the course of employment by a DOE contractor and exposure to a toxic substance at a DOE facility. DOE's requirement is to provide the physicians with as complete a record of exposures as is possible for them to make this determination. If the physicians cannot make a determination with information provided, DOE will work with the physicians to obtain the information they feel they need, including, if necessary, dose reconstructions similar to those being performed by NIOSH.

Energy Employees Occupational Illness Compensation Program

Question 5(a). The DOE requested $16 million for the Office of Worker Advocacy to implement the nuclear workers' compensation program, yet we understand that $26 million is what your staff estimates will be needed in FY 04. Has DOE requested sufficient funds in the FY 04 budget request to eliminate the DOE's backlog of claims in the next 12-18 months?

Response: The Department has requested sufficient financial and personnel resources in its FY 2004 budget to meet its goals of processing 100 claims per week through the physician panels and processing all claims currently on hand and to be received within five years. We expect to meet this milestone in August, 2003. We are developing options for further accelerating the rate with which we process claims.

Energy Employees Occupational Illness Compensation Program

Question 5(b). How many staff are required (both contract and federal) to eliminate the backlog in the next 12-18 months?

Response: The Department has requested sufficient financial and personnel resources in its FY 2004 budget to meet its goals of processing 100 claims per week through the physician panels and processing all claims currently on hand and to be received within five years. We expect to meet this milestone in August, 2003. We are developing options for further accelerating the rate with which we process claims.

Energy Employees Occupational Illness Compensation Program

Question 5(c). What is the carryover funding from FY 02 into FY 03 for the Office of Worker Advocacy? What is the projected carry over funding for FY 03 into FY 04?

Response: Carryover funding from FY02 amounted to approximately $3.9 million. At the current time, the Department expects no carryover into FY04.

Energy Employees Occupational Illness Compensation Program

Question 6. What is the source of funds for paying D claims where DOE does have a willing payor? What is the expected outlay in 2003, 2004 and 2005? Will DOE use line program funds or is there a separate line item for paying these claims in the budget?

Response: The Department expects that claims under Subtitle D will be paid in the same manner as current State workers' compensation claims. If a worker who has an illness caused by DOE work exposure to toxic substances, the worker may file a claim for a physician panel review. If the worker receives a positive finding from the Panel, and the worker files a State workers compensation claim, DOE will support the claim. When DOE is able, it will order DOE contractor employers to accept rather than deny the claim for state benefits. Claims paid by the contractor employer will be reimbursed from DOE Program funds. DOE pays its contractors an amount sufficient to cover all workers' compensation claims. The Department will continue to evaluate this need as it gains more experience in processing Subtitle D claims and can better estimate the cost of claims.

Workers' compensation costs are covered in current contracts. If DOE contractors require additional funding, it will be identified to DOE. It is difficult to predict, at this time, how many claimants have lost wages and have unpaid medical bills, and in which facility and state those claims will be made.

Occupational Safety and Health Rulemaking

The FY 03 Defense Authorization Act (Section 3173) contained a requirement for DOE to cover its worker health and safety orders for industrial and construction safety into regulations and begin enforcing these through the DOE's Office of Enforcement within a year. The Armed Services Committee members that worked on this provision intended that the DOE's new safety program would mirror the existing Price Anderson nuclear safety enforcement program, with clearly defined safety requirements specified in the rules based on the requirements of the DOE's existing Order 440.1A and OSHA. Since DOE is responsible for safety, the legislation and report language did not intend for the DOE contractors to be defining minimum requirements for safety in plans they would be proposing.

Question 7a. What type of approach is the DOE taking in implementing this requirement?

Answer 7a. Pursuant to section 3173 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Section 234C of the Atomic Energy Act, 42 U.S.C. 2282c), DOE is preparing proposed regulations for worker safety and health at DOE facilities that will incorporate all of the requirements mandated by section 3173. As required by this section, these regulations will be promulgated by notice and comment rulemaking under the Administrative Procedures Act. DOE intends to issue a final rule that meets the statutory mandate to "provide a level of protection for workers at such facilities that is substantially equivalent to the level of protection currently provided to such workers at such facilities" and to provide for enforcement of the rule by assessment of civil penalties or contract fee reductions.

Occupational Safety and Health Rulemaking

Question 7b. What is the schedule for a draft rule being issued? What will be the basis for minimum safety requirements, DOE's rules or plans proposed by contractors?

Answer 7b. DOE is working diligently on a notice of proposed rulemaking that would be issued on a schedule that would provide promulgation of a final rule by December 2, 2003, as provided by section 3173 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Section 234C of the Atomic Energy Act, 42 U.S.C. 2282c). DOE is still considering the details of the proposed rule and will review comments on the proposed rule after publication in the Federal Register.

INSERT OFFSET FOLIOS 12 TO 49 HERE

COMPREHENSIVE NATIONAL ENERGY POLICY

WEDNESDAY, MARCH 12, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:30 p.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Shimkus, Shadegg, Radanovich, Walden, Issa, Otter, Wynn, Allen, Markey, Brown, and Dingell (ex officio).

Staff present: Jason Bentley, majority counsel; Andy Black, policy coordinator; Peter Kielty, legislative clerk; and Sue Sheridan, minority counsel.

Mr. BARTON. The subcommittee will come to order. Without objection, the subcommittee is going to proceed pursuant to Committee Rule 4(e) which governs opening statements by members and the opportunity to defer them for extra questioning time. What that means in layman's term, members that are here that with to give a 3-minute opening statement will be allowed to do so. Under the rules, if they wish to defer, they get an extra 3 minutes on the question period. Is there any objection to that?

Mr. ALLEN. No objection.

Mr. BARTON. Hearing no objection, I will recognize myself for a 5-minute opening statement. Today the subcommittee is going to continue its hearings on a comprehensive energy policy. We will hold another day of hearing tomorrow which will focus on electricity and gasoline. Today we are going to focus on hydropower and hydroelectric relicensing.

I want to thank the four witnesses that are going to be before us today for being here to comment on the hydro issues and on Title III of the discussion draft that I have circulated to members of the subcommittee.

The hydro provisions in the draft that has been circulated from H.R. 1013, which is legislation sponsored in the House by Congressman Radanovich and Congressmen Towns and Walden. Last Congress, the House Energy Bill had a hydro title that made a few small reforms to the current relicensing process. During the energy conferences, I became familiar with the Senate hydro section. I believe it to be superior to what we had started with in the House. Revisions in the draft today build on the Senate language from the last Congress.

Hydroelectric power is our Nation's leading renewable energy resource. The process for relicensing FERC's licensed dams has become very distorted into one that threatens the future of hydroelectricity as a viable means of producing power. Hydropower project owners are facing higher costs, loss of operational flexibility, and loss of generation due to new operating constraints imposed during the relicensing. These do not effectively balance our energy needs with important environmental goals.

The typical hydro project can take from 8 to 10 years to weave its way through the licensing process, and cost millions of dollars. After legislation which was passed by this committee in 1986, the Federal Energy Regulatory Commission, or FERC, has been required to give, and I quote, "Equal consideration to a variety of factors when issuing hydro project licenses and relicenses." This authority requires the FERC to consider the power, economic, and development benefits of a particular project, as well as energy conservation and the protection and enhancement of fish and wildlife. The courts have interpreted the Federal Power Act, however, as amended, to prevent effective balancing from taking place. The courts have given Federal natural resource agencies and others the authority to set mandatory conditions on FERC licenses, conditions that are automatically made a part of the final license. FERC has no opportunity to question the basis of these mandatory conditions set by the agencies. The net result is that no one is balancing, no one has the authority to look at the big picture that hydro fits into our National Energy Policy.

The draft before the subcommittee restores this balance, in my opinion, giving certainty and accountability to the licensing process, while leaving Federal Resource Agency conditioning authority intact. It provides an opportunity once mandatory conditions are drafted, for an agency hearing on the record of any disputed issues. The draft would allow a licensee to propose a cost-saving or energy-saving alternative condition, an alternative that the Federal Resource Agency would have to accept if that agency determined that it met the existing statutory requirements for environmental protection.

The draft would also require Federal Resource Agency to document that it gave equal consideration to the economic, environmental and other public impacts of the mandatory conditions before imposing them on licensees, something the agencies are not now doing. It would also provide for a nonbinding dispute resolution process should FERC find a final mandatory condition to be inconsistent with the requirements in the existing Federal Power Act.

Over half of all FERC-regulated hydroelectricity capacity is due to be relicensed in the next 15 years. If the current trends continue, the Nation could lose substantial hydropower generation and, with it, enormous clean air reliability, drinking water, flood control, irrigation, and recreation benefits. Additionally, electricity consumers could face higher energy costs as hydro facilities are replaced or closed. Given the enormous role that hydro plays, and must, in my opinion, continue to play in our national energy electricity grid, the time for balancing is now.

This new hydro language has bipartisan support in the House and the Senate. I know it is not the work of the agreement of the

Ranking Member of our subcommittee and full committee Chairman. I and Chairman Tauzin will welcome any and all ideas as we move through the process, and we hope that we achieve both a consensus and a bipartisan consensus on needed reforms to the relicensing process. It makes a difference for consumers.

With that, I would be happy to recognize Mr. Allen for an opening statement, if he is prepared to give it.

Mr. ALLEN. I am. Thank you, Mr. Chairman. Thank you for holding this hearing today on hydropower and the hydroelectric relicensing title of the chairman's draft legislation. I understand that this title represents a significant departure from what this subcommittee agreed to before I joined the committee, and I am disappointed that the draft abandons the bipartisan negotiated title that required so much effort and compromise last year.

Our experience in Maine suggests that the draft hydroelectric relicensing title would not be consistent with our commitment to protect the public interest. Maine has more than 31,000 miles of rivers and 111 hydroelectric dams. We also have a fishing industry employing thousands in a State with some of the most spectacular wild rivers in the world.

This draft legislation attempts to rubberstamp licenses on the West's massive hydro dams, but in the process it sweeps up Eastern hydropower which has a different history. Some Eastern dams have powered industry since the 18th Century. They are generally quite small, 78 percent of Maine's hydro dams have generating capacities under 10 megawatts, and the power they produce is sometimes of less economic value than the fisheries and natural resources that they disrupt.

I support relicensing dams because hydroelectricity is a clean renewable source of power, but the law should acknowledge that damming our rivers can inflict real and significant costs to our environment and our fisheries. No matter where we live in this country, we share a broad public interest in balancing the need for hydropower with the help of our riparian ecosystems. The relicensing process should not, as this draft does, weaken the ability of citizen groups and Federal agencies to participate effectively in the administrative process.

The current system has had its successes. Due to the concern of Maine citizens, in 1997 FERC decided for the first time not to renew a dam license for the Edwards Dam which had blocked fish passage and reduced water quality on the Kennebec River since 1837. The commission concluded that the benefits of removing this dam outweighed its usefulness.

I was present at the breaching of this dam in 1999. Within months, valuable striped bass were spawning in the newly reopened river section, and in 2000 the State DEP declared that the Kennebec had significantly improved water quality. Under the legislation proposed today, the Edwards Dam would still be degrading 17 miles of the Kennebec River.

Dam removal has only occurred in exceptional cases under the current relicensing system. Dozens of Maine's hydro facilities have been relicensed over the past decade, and the process has not significantly decreased hydropower production in our State, but it has dramatically improved our fisheries and riparian ecosystems.

Dam owners do not own our rivers. Rivers have been and must remain the waters of the United States. The public interest must remain the priority when we license private companies to rent our rivers to produce power.

Unfortunately, the bill before us today equates private interest with public interest in the waters of the United States. First, it limits the public's access to the relicensing process, ensuring that the private dam owner has more opportunity to influence the administrative outcome than citizen users of our rivers. Second, the bill increases FERC's authority while decreasing the influence of the Fish and Wildlife Service. Third, it changes the standards that dam owners must meet in order to protect the natural required migratory routes of fish species that are often depleted and sometimes endangered. The dam owner no longer has to provide fish passage under this bill, as long as the fish resource can be protected by other means. This standard would allow the dam owner to artificially stock the river if providing adequate passage is too expensive.

I hope that during this hearing we will weigh the inevitable tension between private interests and the common good, and I hope that this subcommittee will craft legislation that will maximize the long-term public value of our rivers. Thank you.

Mr. BARTON. Thank the gentleman from Maine. I would now recognize the gentleman from California, Mr. Radanovich. Do you wish to give an opening statement?

Mr. RADANOVICH. I do wish to comment.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. RADANOVICH. Thank you, Mr. Barton. I don't want to go into the details of the bill because you did such an excellent job of outlining the basic tenets of the bill, and I appreciate the comments from the gentleman from Maine. However, when it was mentioned seeking a balance between the economics and the environment of some of the dams in the West, particularly in California where we are facing an ever-increasing energy shortage, it is this legislation we believe that will achieve that balance because—I am not sure what the gentleman from Maine's experience has been with the Federal resource agencies on relicensing, but the ones that we have experienced have been completely out-of-balance, and we need this legislation in order to bring balance back to it by more FERC involvement in the permit process.

We have got some licenses and permits that have been going on for 10 or 15 years in the relicensing project, and it is creating quite a disincentive on an industry that is much in need in my State.

So it is my hope and my desire to achieve the balance that Federal resource agencies are mandated to provide in the relicensing process that is not there, and these changes are much necessary in order to bring that balance back.

So I appreciate these comments but, for my part of the United States, this is legislation that will bring balance back to our policy for energy, and look forward to the hearing and the comments from folks out there.

Mr. BARTON. Thank the gentleman, as one of the co-sponsors of the underlying bill.

I would recognize the distinguished full committee Ranking Member, the former chairman and good friend from Michigan, Mr. Dingell, for 5 minutes.

Mr. DINGELL. Mr. Chairman, I thank you for your courtesy to me and for holding this hearing and for coordinating with the Minority on witness participation. That is all very important, and I am appreciative.

I wish this subcommittee had been afforded more time to consider this issue. Since we were unable to arrange for the full panoply of witnesses that this important subject warrants within the time afforded, but I understand you are under substantial time constraints imposed by our leadership, and regrettably we will then have to do the best we can under the circumstances.

Mr. Chairman, I also note with regret your decision to include Section 3001 in your draft energy bill sends a clear signal that you are not inclined to advance the compromise hydropower language which was developed in committee during the 107th Congress. That is regrettable, since it is a compromise that arose from a process involving give-and-take by all relevant parties, something which I do not believe should be lightly thrown away.

In fact, I would like to request that the subcommittee accept for the record a letter to you dated July 9, 2001——

Mr. BARTON. Without objection, so ordered.

Mr. DINGELL. [continuing] signed by the Hydroelectric Licensing Reform Task Force, the National Hydropower Association, the Edison Electric Institute, and the American Public Power Association, indicating support for last year's compromise, recognizing that while it does not represent their ideal bill it nonetheless is a positive step. I would also like to introduce into the record a letter to you dated July 10, 2001, signed by the American Rivers, the Hydropower Reform Coalition, and Trout Unlimited, indicating support for the same provisions.

Mr. BARTON. Without objection, so ordered.

Mr. DINGELL. Mr. Chairman, it is regrettable that the draft bill upends this compromise, and seems in fact to abandon hope for a consensus on hydropower policy. Section 2001 tips the procedural and substantive balance to the hydropower industry, undercutting the resource agencies' ability to impose necessary conditions on hydropower projects and giving license applicant's "super party" status in license proceeding. I am not aware of a reason that that should be done.

This language would give the industry alone procedural rights unavailable to other parties. This is something that will cause an explosion, I think, on the floor, something that I am not aware has been done in other statutes bearing on public health and safety. Specifically, it allows industry proposals that conflict with resource agency decisions an unprecedented advantage. It allows an applicant's proposal for resource protection to trump the agencies' proposals unless the Secretary of the Interior can show in court that the industry proposal is inadequate. If that is to be the way we run our decisions in this area, it is perhaps open to question whether we ought to even bother having the resource management agencies or the protections that they have afforded our citizens with regard to questions of safety, protection of natural resources, protection of

fish and wildlife and other things, which are values of great importance to our people.

Mr. Chairman, I hope you will listen closely to the testimony today, and it is my hope that you will be persuaded to return to the compromise which we worked out together during the last Congress with participation of all relevant parties. That is a good way to begin and will save a lot of unnecessary fighting and ill will. The hydroelectric provisions before us today will undercut the prospects for bipartisan support of this important energy bill. Thank you, Mr. Chairman.

[The prepared statement of Hon. John D. Dingell and the letters follow:]

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for holding this hearing and for coordinating with the minority on witness participation. I wish this Subcommittee were afforded more time to consider this issue, since we were unable to arrange for the full panoply of witnesses this important subject warrants within the time afforded for planning the hearing. But I understand you are under severe time constraints imposed by your leadership, and regrettably we will have to do the best we can under the circumstances.

Mr. Chairman, I also note with regret that your decision to include section 3001 in your draft energy bill sends a pretty clear signal that you are not inclined to advance the compromise hydropower language developed in Committee during the 107th Congress. That is a shame, since that compromise arose from a process involving give and take by all the relevant parties, something not to be lightly thrown away.

In fact, I would like to request that the Subcommittee accept for the record a letter to you dated July 9, 2001, signed by the Hydroelectric Licensing Reform Task Force, the National Hydropower Association, the Edison Electric Institute, and the American Public Power Association indicating support for last year's compromise, recognizing that while it does not represent their ideal bill it nonetheless is a positive step. I also would like to introduce into the record a letter to you dated July 10, 2001, signed by American Rivers, the Hydropower Reform Coalition, and Trout Unlimited indicating support for the same provisions.

It is regrettable that the draft bill upends this compromise, and seems in fact to abandon the hope for a consensus on hydropower policy. Section 3001 tips the procedural and substantive balance to the hydropower industry, undercutting the resource agencies' ability to impose necessary conditions on hydropower projects and giving license applicant's "super party" status in license proceeding. The language would give to industry alone procedural rights not available to other parties—something I am not aware has been done in other statutes bearing on public health and safety. Specifically, it allows industry proposals that conflict with resource agency decisions an unprecedented advantage. It allows an applicant's proposal for resource protection to trump the agencies' proposals unless the Secretary of the Interior can show in court that the industry proposal is inadequate.

Mr. Chairman, I hope you will listen closely to the testimony today and be persuaded to return to the compromise we worked out together during the last Congress with the participation of all the relevant parties. The hydroelectric provisions before us today will undercut the prospects for bipartisan support of this important energy bill.

AMERICAN RIVERS, TROUT UNLIMITED,
HYDROPOWER REFORM COALITION
July 10, 2001

The Honorable JOE BARTON, *Chair*
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable RICK BOUCHER
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

DEAR CHAIRMAN BARTON AND REPRESENTATIVE BOUCHER: Our organizations sincerely appreciate the effort you and your staff have made to work with Representative Dingell, the hydropower industry and conservation groups to craft an alternative to the environmentally damaging rollbacks of hydropower regulation proposed by the Federal Energy Regulatory Commission and some members of Congress. The results of this discussion thus far have avoided much of the demagoguery and finger-pointing that has characterized this debate in the past.

We have reviewed Title II of the "Consensus Staff Draft" of the Energy Advancement and Conservation Act of 2001. While it offers nothing in the way of additional environmental protection in the hydropower licensing process, it does offer the potential for improving federal agency conditions and prescriptions without the damaging rollbacks of environmental standards that had been included in earlier proposals.

In this light, we are prepared to offer limited support for this language, with the following understandings:

1) There will be no amendments adopted to alter this language during Subcommittee consideration, full Committee consideration, or on the House floor.
2) There will be language included in the report on the bill that clarifies that the process for considering alternatives to Federal Power Act section 4(e) and 18 conditions will be incorporated into the agencies' existing procedures for devising preliminary and modified conditions and prescriptions, in order to avoid any additional delays in the licensing process.

Again, thank you for your efforts to bring closure on this contentious issue.

Sincerely,

S. ELIZABETH BIRNBAUM
Director of Government Affairs, American Rivers

STEVEN MALLOCH
Counsel, Trout Unlimited

ANDREW FAHLUND
Chair, Hydropower Reform Coalition

cc: The Honorable Billy Tauzin
The Honorable John D. Dingell

THE HYDROELECTRIC LICENSING REFORM TASK FORCE
July 9, 2001

The Honorable JOE BARTON
Chairman
Energy and Commerce Subcommittee on Energy and Air Quality
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515-6115

DEAR CHAIRMAN BARTON, on behalf of our four organizations, we are writing to you, Chairman Tauzin, Ranking Member Dingell and Ranking Member Boucher to express our support for the hydroelectric licensing provisions (Sections 201 and 202) of "The Energy Advancement and Conservation Act of 2001."

For much of the last decade, the hydroelectric industry has worked to focus the attention of Congress on the need to improve the Federal Energy Regulatory Commission (FERC) hydroelectric relicensing process. Indeed, the record compiled in

oversight and legislative hearings on this issue over the previous two Congresses demonstrates that legislative reform of the FERC hydroelectric relicensing process is needed if our nation is to preserve consumer access to clean, reliable and cost-efficient hydropower.

While we believe that more comprehensive legislative reform is necessary to fully address the problems inherent in the current FERC hydroelectric relicensing process, Sections 201 and 202 of "The Energy Advancement and Conservation Act of 2001" represent a positive first step. Accordingly, we support these sections and agree to oppose any and all amendments that might be offered to Sections 201 and 202 of "The Energy Advancement and Conservation Act of 2001" in subcommittee, in full committee, or during consideration by the full House of Representatives.

We remain committed to pursuing more comprehensive legislative reform of the FERC hydroelectric relicensing process and are pleased with the commitment recently made by both majority and minority staff of the Committee on Energy and Commerce to revisit the issue later in the 107th Congress.

Thank you for your efforts to date. We look forward to continuing to work with you and your staff in the weeks and months ahead on this most important issue.

Sincerely,

JOEL MALINA, *Executive Director*
Hydroelectric Licensing Reform Task Force[1]

REBECCA K. BLOOD, *Senior Legislative Representative*
American Public Power Association

JOHN NEUMANN, *Vice President, Government Affairs*
Edison Electric Institute

LINDA CHURCH CIOCCI, *Executive Director*
National Hydropower Association

Mr. BARTON. We thank the gentleman from Michigan, and look forward to working with him on this issue.

The Chair would recognize the gentleman from Oregon, Mr. Walden, who again is co-sponsor of the underlying bill that we put in the discussion draft. Mr. Walden.

Mr. WALDEN. Thank you very much, Mr. Chairman. I would like to commend you for having this most important hearing on an issue that of course is of vital importance to the Pacific Northwest, the State of Oregon, and my congressional district.

Mr. Chairman, this hearing will examine hydropower relicensing provisions included in your draft proposal which would add some balance to the incredibly time-consuming and costly process that investor-owned utilities, municipalities, and public or people's utility districts must wade through when they seek to relicense a facility with hydropower generation.

My district alone will account for 82 percent of the power that is generated from non-Federal hydropower facilities in the State of Oregon and subject to relicensing under the Federal Power Act. Over 99 percent of the hydropower generated comes from facilities up for renewal over the next 3 years. Together these projects have the cumulative potential to produce up to 1,602.36 megawatts. To put it in perspective, Mr. Chairman, it takes approximately 1,000 megawatts to power a million homes, or it is enough power to serve the load needs of everyone with a home in the Pacific Northwest

[1] Task Force members are drawn from the memberships of the American Public Power Association, the Edison Electric Institute and the National Hydropower Association and include: American Forest and Paper Association, Carolina Power & Light, Chelan County Public Utility District, Cowlitz County Public Utility District, Douglas County Public Utility District, Duke Engineering and Services, Duke Power, Grant County Public Utility District, Idaho Power, Kaukauna Electric & Water, Louisville Gas & Electric, New York Power Authority, PacifiCorp, Portland General Electric, Sacramento Municipal Utility District, Santee Cooper, SCANA Corporation, Snohomish County Public Utility District, Southern California Edison, Southern Company, and the Vermont Public Power Supply Authority.

cities of Portland, Seattle, and Spokane. Hydropower is extraordinarily important to our region.

In the Pacific Northwest region as a whole, the hydro relicensing situation concerning non-Federal isn't much better. Seventy-six percent of the power generated from non-Federal projects in Oregon, Idaho and Washington is up for relicensing over the next 15 years.

Since 1986, the Federal Energy Regulatory Commission has been required, as you know, under the Federal Power Act, to give equal consideration to a variety of factors when issuing these hydropower licenses and relicenses. This authority requires FERC to consider the power, economic and development benefits of a particular project, as well as energy conservation and the protection and enhancement of fish and wildlife.

Unfortunately, the courts have interpreted the Federal Power Act in a manner that prevents any effective balancing from taking place. Moreover, the courts have given Federal natural resource agencies the authority to set mandatory conditions on FERC licenses. We are here today to try and fix that problem, Mr. Chairman.

In the Northwest, we have seen 43 percent rate increases last year, proposed 15 percent rate increases this year. If hydro licensing and relicensing isn't cleaned up and done properly, we are going to suffocate in the Northwest from high power rates. And it is ironic since this is the renewable energy source in America. I don't know how you get more renewable than hydropower. Solar and wind, we are doing that, too, and geothermal in my district. But the Northwest is so unique and so dependent on hydropower, this is an issue of great significance to all of us out there.

I commend you for this hearing, and my colleague, Mr. Radanovich, for introducing the legislation that is contained in the underlying bill. Thank you, Mr. Chairman.

Mr. BARTON. Thank you Congressman Walden, we look forward to working with you. The Chair would now recognize Mr. Issa for a 3-minute opening statement, or do you wish to defer?

Mr. ISSA. Defer.

Mr. BARTON. Okay. The Chair would recognize Mr. Shadegg, or does he wish to defer?

Mr. SHADEGG. I just would make a statement, Mr. Chairman.

Mr. BARTON. The gentleman from Arizona is recognized for 3 minutes.

Mr. SHADEGG. Thank you, Mr. Chairman, and only because I am afraid that if I offer to speak less than 3 minutes, I will wind up breaking that offer. I am not going to make that promise at this point.

I do want to commend you for holding this hearing. I think it is extremely timely and important. As the chairman knows, I have been involved in and interested in hydroelectric issues for quite some time.

I want to reiterate the point just made by my colleague, Mr. Walden. The reality is hydropower is the ultimate renewable resource in the sense that we have already figured out how to harness it and it is, in fact, renewable.

Beyond that, Mr. Chairman, I have tried to make the point in prior hearings, one of which I think the chairman will recall where I brought in the hydrologic chart which proves that this truly is a renewable resource. But beyond that, it can be an environmentally sensitive renewable resource.

I listened only in part to the Ranking Member's remarks and the remarks of the Ranking Member of the full committee, and I know there are genuine concerns about the environmental impact of hydroelectric power, except that I think it is very important to note that we can deal with those concerns, and particularly it is possible with today's technology to do several things. One, to add turbines to facilities where there are not turbines now, without environmental impact. Two, to improve the efficiency of turbines in facilities where we already have turbines and the environmental impact has already occurred it is possible to put in place more efficient turbines where we can generate electricity without any additional environmental impact, and we need to be looking into that. Three, it is possible to add hydroelectric generating capacity to in-stream flows in ways that we couldn't have done in the past. In years gone by, the only way to produce hydroelectric power was to build a dam holding back a supply of water with the consequent environmental impacts that that caused.

I remain a supporter of hydropower dams and think they are necessary, and have opposed the efforts in this Nation to drain some of those dams where they are vitally important, but I think it is important to note that our technology today allows us to insert hydroelectric generating capacity in the in-stream flows where you don't even have to build a dam.

So, I commend you, Mr. Chairman, for holding this hearing. I think it is vitally important that we move forward on this topic, and that we do so with open minds, and that we try to find an accommodation. We cannot continue to remain as dependent as we are on foreign sources of energy.

Mr. BARTON. Thank the gentleman from Arizona. The Chair would now recognize one of the workhorses of our committee and subcommittee, the gentleman from Ohio, Mr. Brown. Does he wish to give an opening statement?

Mr. BROWN. Yes, I do, Mr. Chairman. Thank you.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. BROWN. Last year's energy policy debate had few moments of true bipartisan cooperation. One moment, however, was the hydroelectric relicensing provisions of last year's bill, which was agreed upon in advance of our markup, as a result of long and hard work by the chairman's staff and by the Minority staff, and for that we are all appreciative.

It is particularly disappointing, therefore, that the Energy Bill discussion draft makes significant changes to that carefully crafted compromise language. The hydro relicensing provision of this discussion draft would allow only power companies to submit alternative license conditions for review by Federal Environmental Protection Agencies. This is a vast and troubling departure from last year's agreement which also would have let environmental groups and States and other advocates to propose such alternatives.

The discussion draft also seems to significantly lower the bar for review of alternative conditions. Under the bipartisan agreement, alternative conditions had to provide no less protection than the conditions proposed by the government. Under this draft, no less drops to adequate, and the long-standing goal of protection is muddled with the potentially conflicting objective of utilization.

If an environmental agency rejects what well may be a less protective alternative condition but the power company disagrees, FERC can force the cabinet agency to explain itself to FERC's own dispute resolution service. No such FERC power-grab is included in last year's bipartisanly crafted bill.

Mr. Chairman, the law recognizes that using America's rivers as sources of electric power requires delicate balancing of competing concerns and interests. The bipartisan provision was seen by many on this subcommittee as facilitating the licensing process while maintaining that balance.

The discussion draft provision seems to upset that balancing, giving the interest of power production much greater weight than the equally valid interest of environmental protection. I hope our witnesses will further illuminate this important issue. Thank you, Mr. Chairman, I yield back the balance of my time.

Mr. BARTON. We thank the gentleman from Ohio. The Chair would recognize one of our new subcommittee members, the Congressman from Idaho, Mr. Otter. Does he wish an opening statement, or to defer?

Mr. OTTER. Thank you, Mr. Chairman. I have nothing at this time.

Mr. BARTON. The gentleman defers his 3 minutes for opening statement.

Seeing no other members present, all members not present, without objection, have the right to put a written opening statement in the record.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. W.J. "BILLY" TAUZIN, CHAIRMAN, COMMITTEE ON ENERGY AND COMMERCE

Thank you, Mr. Chairman. This Subcommittee will soon conclude the hearing we began last week on a National Energy Policy and move on to marking up legislation.

None of the elements we are proposing in our draft energy policy are new. Hydroelectric power licensing, a topic we will consider today, is one of those issues with a long history in this Committee. In fact, this Committee was responsible for important reforms in the Federal Power Act in 1986 and 1992 that recognized the environmental impact of hydropower projects and sought to address their potential harm.

I appreciate the need for such protections. Those of you who know me know that I, like the Ranking Member Mr. Dingell, am an avid fisherman. I know the importance of protecting fish habitat. I know what water quality means to commercial and sport fishermen. I've fished all over the country, and I know the effect hydropower projects can have on the environment.

I also know that a balance can be struck between energy production and environmental protection in a way that both win. We demonstrate this in Louisiana every day.

The fact of the matter is that many of these dams have been around for 50 years or more. We've come to rely on them as clean, affordable sources for about 12% of our Nation's electricity. If the government is imposing conditions that force them out of business, we will have to make up that power somewhere. If there are ways we can meet our environmental objectives and keep these dams operating, we should pursue them.

What is at issue today is the ability of a resource agency to impose mandatory conditions on hydropower projects irrespective of the impact on energy production or costs. This Committee gave the agencies—Fish and Wildlife Service, Forest Service, and others—that power. However I think they now exercise it in a way that we probably didn't expect. There is little accountability in their decision-making, and the chance to review their decisions only comes very late in the process.

We've had bipartisan legislation introduced in the House and marked up in this Subcommittee in recent Congresses that would fundamentally change that authority. But that is not what we included in the energy bill last Congress, and that is not what we are talking about in the discussion draft today.

What the discussion draft proposes, and what I think we can agree is good public policy, even if we don't yet agree on the specific language, is to require the resource agencies to give greater consideration to the impacts of their decisions. If they can achieve their mission for resource protection and use in a way that costs less or allows better power production, then they should adopt that approach.

If we can agree on this principle, as we generally did in the last Congress, then I think we can come to agreement on the language. I think we can achieve this without eroding the ability of the agencies to protect the resource.

We had productive discussions on this issue in the energy conference. It is my hope that we can build upon those discussions, learn from them, and come to agreement on a strong House position for this Congress, stronger than last Congress.

Thank you, Mr. Chairman, I look forward to hearing the testimony of our witnesses today on that subject, and yield back the remainder of my time.

Mr. BARTON. We would like to call forth our panel now. We have Mr. J. Mark Robinson, who is the Director of the Office of Energy Projects of the Federal Energy Regulatory Commission. We have Ms. Julie Keil, who is Director of Hydro Licensing and Water Rights of Portland General Electric. We have Mr. Rob Masonis, who is the Director of the Northwest Regional Office for American Rivers. And we have Mr. Leon Szeptycki, who is the Eastern Conservation Director and General Counsel of Trout Unlimited.

The Chair would welcome our witnesses, and make one point of personal privilege. I have former staffer in the audience, Ms. Doreen Williams. We are glad to have you here observing the hearing. And we are going to recognize you, Mr. Robinson, and we will just go right down the row and give each of you such time as you may consume, but we would hope that you all would try to limit your opening statements to 5 or 6 minutes. So, welcome to the subcommittee and, Mr. Robinson, you are recognized.

STATEMENTS OF J. MARK ROBINSON, DIRECTOR, OFFICE OF ENERGY PROJECTS, FEDERAL ENERGY REGULATORY COMMISSION; JULIE KEIL, DIRECTOR OF HYDRO LICENSING AND WATER RIGHTS, PORTLAND GENERAL ELECTRIC; ROB MASONIS, DIRECTOR, NORTHWEST REGIONAL OFFICE, AMERICAN RIVERS; AND LEON SZEPTYCKI, EASTERN CONSERVATION DIRECTOR AND GENERAL COUNSEL, TROUT UNLIMITED

Mr. ROBINSON. Mr. Chairman and members, my name is Mark Robinson. I am the Director of Energy Projects at the commission. We support the commission in the areas of interstate natural gas pipelines certification, liquid natural gas terminaling, and also, more importantly today, hydropower licensing and administration.

I will just make two points today in this oral portion. I would like to bring you up to speed on what the commission has been doing in developing a new licensing process, and then comment on Title III. I will say from the outset that both of these efforts that

are going on, one at the commission and one here, will act to improve the licensing process.

Starting with the efforts on developing a new licensing program at the commission, around 1997 a number of groups started discussing how we could improve licensing at the commission, and that continued for a number of years in several different venues, including all stakeholders that you can imagine.

This past summer it clearly had reached critical mass. It was time for the commission to take some action to improve the licensing process. So, in September our commission issued a notice that started us on a 1-year journey of trying to develop a new licensing process.

We, from the outset, wanted to make this the most open commission proceeding that we could imagine. We included in this 1-year effort regional forums across the country, drafting sessions that included all stakeholders, inviting the agencies in to help draft the actual rule, and then just a continuous review and feedback to all parties to make sure that nothing would be a surprise.

I am happy to tell you today that we have now issued a Notice of Proposed Rule on what has become known as the "integrated licensing process." And I can also assure you there were no surprises. Everyone knew what was going to be in that NOPR and it in fact it is there.

From here on out, we will continue that open process to finalize the codification of the integrated licensing process. We will include the agencies in redrafting that rule to make it final. We will include all stakeholders with another series of regional forums. We are well on the way to administratively improving the licensing process, and I look forward to that conclusion. That is only, however, half the game.

The ILP, integrated licensing process, will do nothing directly to improve the quality of the content of mandatory conditions and fishway prescriptions. That is where Title III comes in. These two efforts are complementary, they are not redundant in any way, and I don't believe that they are in any way in conflict.

Title III has two aspects that I want to point out specifically—accountability, which is added to the mandatory conditioning and fishway prescription process, and also a standard of review which has been lacking to this point. By accountability, what I mean there is—I have worked at the commission—let me just diverge here for a second. I have worked at the commission for 25 years, and one thing I have learned is that if somebody is looking at what you produce, it certainly sharpens your pencils. I think the agencies will have the same effect—the same thing will affect them. The personnel who are developing these mandatory conditions and fishway prescriptions will have their pencils sharpened by knowing that what they produce is subject to review. So that accountability I think is an important component of Title III for those two requirements.

The second is the standard of review. To this point, the agencies don't have a standard of review in any way similar to what the commission has in issuing a license for a hydropower project. That standard of review roughly can be stated as equal consideration to developmental and nondevelopmental values. Things like irriga-

tion, navigation, flood control, power production, have to be looked at in the same vein as environmental protection, fish and wildlife protection, water quality protection, recreational development. That standard of review has worked well for the commission in developing balanced licenses. I think providing the same sort of standard for the review of mandatory conditions and fishway prescriptions will add that same sort of—it will make them more amenable to insertion into a license that has as its overall purpose to ensure that the public interests are served across the board. Right now what we have are conditions that are mandatory and prescriptions which are mandatory, which are single-purpose, they fit the bill for what they are trying to do. Integrating that into a license that has every other consideration as its basis is sometimes very difficult and sometimes impossible, as the commission has noted in several of its orders.

So, in summary, I would just say the commission is making great progress, I believe, in improving the licensing process. And, Mr. Chairman, I think that your efforts on Title III serve that same goal. Thank you very much.

[The prepared statement of J. Mark Robinson follows:]

PREPARED STATEMENT OF J. MARK ROBINSON, DIRECTOR, OFFICE OF ENERGY PROJECTS, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Committee: My name is Mark Robinson and I am the Director of the Office of Energy Projects at the Federal Energy Regulatory Commission (Commission). I appreciate the opportunity to appear before you to discuss Title III of Chairman Barton's legislative discussion draft relating to the Commission's hydropower licensing program. As a member of the Commission's staff, the views I express in this testimony are my own, and not those of the Commission or of any individual Commissioner.

The Commission currently regulates over 1,600 hydroelectric projects at over 2,000 dams pursuant to Part I of the Federal Power Act (FPA). Together, these projects represent 57 gigawatts of hydroelectric capacity, more than half of all hydropower in the U.S., and over five percent of all electric generating capacity in the United States. Hydropower is an essential part of the Nation's energy mix and offers the benefits of an emission-free, renewable energy source.

The Commission's hydropower activities generally fall into three categories. First, the Commission licenses and relicenses hydroelectric projects. Relicensing involves projects that originally were licensed 30 to 50 years ago. The Commission's second role is to manage hydropower projects during their license term. This post-licensing workload has grown in significance as new licenses are issued and as environmental standards become more demanding. Finally, the Commission oversees the safety of licensed hydropower dams. This program is widely recognized for its leadership in dam safety.

My testimony today will provide brief overviews of the current hydroelectric licensing activity and the licensing process. I will then focus on Title III, Section 3001, of the proposed legislative draft.

I. CURRENT HYDROELECTRIC LICENSING ACTIVITY

The Commission will process 218 relicense applications this decade. These projects include many large capacity and complex projects, and have a combined capacity of about 22 gigawatts, or 20 percent of the Nation's installed hydroelectric capacity.

New opportunities to balance competing resources

Relicensing of projects, upon expiration of the current license, is of particular significance because it involves projects that originally were licensed up to 50 years ago. In the intervening years, enactment of numerous environmental, land use, and other laws, as well as judicial interpretation of those laws, has greatly affected the Commission's ability to control the timing and conditions of the licensing process. Under the standards of the FPA, projects can be authorized if, in the Commission's judgment, they are "best adapted to a comprehensive plan" for improving or devel-

oping a waterway for beneficial public purposes, including power generation, irrigation, flood control, navigation, fish and wildlife, municipal water supply, and recreation. The Electric Consumers Protection Act of 1986 (ECPA) amended the FPA to require the Commission to give "equal consideration" to developmental and non-developmental values.

Integrating need for power and stakeholder concerns

The Commission integrates, and weighs the concerns of, the licensee, resource agencies, non-governmental organizations (NGOs), tribes and other members of the public in its licensing process to ensure that relicensed projects are consistent with the public interest. Toward this end, the Commission also considers the need for sustainable power provided by these projects.

While the Commission's responsibility under the FPA is to strike an appropriate balance among the many competing developmental and environmental interests, as required by the public interest standards of Sections 4(e) and 10(a) of the FPA, various statutory requirements give other agencies a significant role in licensing cases. Several entities have mandatory authorities that limit the Commission's control of the cost and time investments for licensing. For example, Section 4(e) of the FPA authorizes federal land-administering agencies to provide mandatory conditions for projects located on federal reservations under their jurisdiction. Further, Section 18 of the FPA gives authority to the Secretaries of the Departments of the Interior and Commerce to "prescribe" fishways. And, Section 401(a)(1) of the Clean Water Act precludes the Commission from licensing a hydroelectric project unless the project has first obtained state water quality certification, or a waiver thereof.

The Commission also must ensure compliance with other statutes, including the Coastal Zone Management Act, Endangered Species Act (ESA), Federal Land Policy and Management Act, Wild and Scenic Rivers Act, National Historic Preservation Act, and Pacific Northwest Electric Power Planning and Conservation Act, each with its own procedural and substantive requirements. Compliance with all these requirements involves a multitude of different processes ancillary to licensing, which has lengthened the time required to obtain a license.

Complexities and regional variation in relicenses

Primary issues being addressed at those 218 projects with applications for relicensing filed this decade vary by region, but include power, water use, fish passage, endangered species, recreation, shoreline management, reservoir level fluctuation, and instream flows. Water quality and cultural resources are concerns in all regions. The projects are distributed about equally between the eastern and western United States, but are concentrated in the Northwest and Southeast regions.

Many of the projects will involve more than one state, and in a few instances, Canada, in the licensing process. Each governing entity is likely to expand the scope of concerns and regulatory goals that must be considered in licensing. Following is a discussion of the primary complexities in this decade of relicensing, by region.

In the Southeast, projects have many large reservoirs with considerable shoreline area. For example, in 2005, Alabama Power Company will be filing applications to relicense nine projects in the Coosa River Basin with a combined capacity of 1,160 MW. These projects have 103,000 acres of reservoir area with 2,000 miles of shoreline. Another example is Duke Power Company's Catawba-Wateree Project with a capacity of 841 MW, whose filing for relicensing is due in 2006. The project has 11 reservoirs and over 1,700 miles of shoreline. Therefore, shoreline management can be expected to be a major issue in relicensing, and numerous waterfront property owners and other water users can be expected to participate in the licensing process.

Hydropower issues in the northwestern United States and California often concern federally listed threatened or endangered salmonids (salmon, trout, and char). Most relicensing proceedings in these regions require formal consultation with resource agencies under the ESA.

At the beginning of 1996, the National Marine Fisheries Service (NMFS) had listed four strains (geographically distinct groups of a species) of salmonids. Today, there are 33 strains of salmonids listed by NMFS and the U.S. Fish and Wildlife Service (USFWS). There is a significant overlap in the range of the listed salmonid strains and the concentration of hydropower sites in the Northwest and California (e.g., about 130 licensed projects in these regions are located within the geographical boundaries of listed chinook salmon and steelhead trout). Thus, these listings, often requiring formal consultation under the ESA, have added considerable complexity to the processing of relicensing applications.

In addition to the complexities associated with listed salmonid species, California has significant issues related to conflicts in water use (e.g., municipal water supply, irrigation, flood control, power, recreation, and fisheries). For example, in 2005, we

expect a relicense application for the Oroville Hydroelectric Project. The reservoir for this project, Lake Oroville, is also the principal water storage facility of the State Water Project, which conserves and delivers water to over two-thirds of California's population and almost 1,000,000 acres of farmland.

In the northeastern U.S., a variety of issues prevail, ranging from re-establishment of runs of Atlantic salmon and clupeids (i.e., shad and alewife) to water quality issues. Recreation use of project waters and riparian areas is a primary issue in this region. In addition, two large projects on the Canadian border are undergoing relicensing during this decade, the 912 MW St. Lawrence-FDR (filed in 2001) and the 2,755 MW Niagara (to be filed in 2005) Hydroelectric Projects, which complicates the relicensing process in resolving cross border issues like American Eel protection.

Measures to efficiently process projects

Staff at the Commission has undertaken numerous measures to efficiently process these complex projects. Toward that end, the Commission has held hydropower licensing status workshops to move stalled cases, held licensing workshops with state agencies on integrating state processes, introduced electronic filing, implemented an improved *ex parte* communications rule, and provided numerous guidance documents for stakeholders on our web page, in addition to proposing a new hydropower licensing process, developed with sister agencies, in a recent rulemaking discussed below.

II. THE COMMISSION'S LICENSING PROCESS

The traditional licensing process

The Commission currently uses two different processes in licensing: the "traditional" process and the "alternative" process. Under the traditional process, three to three and one-half years prior to filing an application, license applicants must consult with federal and state resource agencies, affected land managing agencies, Indian tribes, and state water quality certifying agencies to provide these entities with information describing the proposed project. The applicant must also conduct studies necessary for the Commission staff to make an informed decision on the application. Under the Commission's detailed regulations concerning prefiling consultation and processing of filed applications, the formal proceeding does not begin until the license application is filed with the Commission. As a result, the Commission staff does not generally participate in pre-filing consultation under the traditional process.

After an application is filed, two years prior to license expiration, the federal agencies with responsibilities under the FPA and other statutes, the states, Indian tribes, and other participants have opportunities to request additional studies and provide comments and recommendations. Federal agencies with mandatory conditioning authority also provide their conditions. The Commission staff may ask for additional information that it needs for its environmental analysis. All of this information is incorporated into the Commission staff's environmental review under the National Environmental Policy Act (NEPA) upon which the Commission bases its licensing decision. Because of the sequential nature of the traditional process and the frequent need to gather further information after the application is filed, the traditional process can be lengthy. The median processing time after application filing is 47 months.

The alternative licensing process

In an effort to improve the efficiency and the timeliness of the licensing process without sacrificing environmental protection, the Commission embarked on a journey of administrative and regulatory licensing reform. Beginning in 1997, the Commission altered its regulations to provide for an alternative to the traditional licensing process. The alternative licensing process adds efficiency by combining the prefiling consultation process with the environmental review process under NEPA. Using this process, participants, and in some cases Commission staff, work collaboratively prior to the filing of the application to develop, in most cases, a preliminary draft NEPA document. Participants in the alternative licensing process generally anticipate that their efforts will culminate in a settlement agreement. The alternative process has been successful in reducing the post-filing processing time to a median of 16 months.

Integrated licensing process

Even in light of successes associated with the use of the alternative licensing process, stakeholders have continued to develop additional procedural modifications to the more formal traditional process that would further improve the efficiency and

timing of licensing while maintaining environmental protections. In 2001, senior managers from the Commission staff and the Departments of the Interior, Commerce, and Agriculture formed the Interagency Hydropower Committee. This committee developed a proposal for an integrated licensing process. Another integrated licensing process proposal was developed by the National Review Group (NRG), a multi-stakeholder forum consisting of representatives from the hydropower industry and NGOs.

An integrated licensing process would integrate an applicant's prefiling consultation with resource agencies, Indian tribes, and the public into the Commission staff's NEPA scoping process. This approach, however, would differ from the alternative licensing process in several respects, such as ensuring Commission staff involvement at all stages, and better integrating the licensing process with the actions and processes of other federal and state agencies and Indian tribes.

The Commission is now engaged in an open rulemaking proceeding whereby the Commission is seeking public input on a new licensing process. Our open proceeding allows for public and tribal input, both before and after the issuance of a Notice of Proposed Rulemaking. This proceeding also allows for joint drafting of rule language by Commission staff and the federal agencies with mandatory conditioning authority under the FPA.

This rulemaking proceeding was initiated in September 2002, when the Commission and the federal agencies with mandatory conditioning authority under the FPA issued a notice requesting comments on the need for a new licensing process. The notice also established a series of open regional public and tribal forums to discuss issues and proposals, including proposals for an integrated licensing process.

Following the regional forums and submission of written comments in early December 2002, the Commission hosted public drafting sessions in which discussion of the results of the regional forums and comments was followed by a broadly-based collaborative effort to develop consensus recommendations on an integrated licensing process and, where possible, develop preliminary draft regulatory text. Subsequent to the December public drafting sessions, the Commission staff and staff from the federal agencies with mandatory conditioning authority worked together to develop regulatory language for a proposed rule.

Based on written and oral comments and the public drafting sessions, the Commission issued a Notice of Proposed Rulemaking on February 20, 2003. In that notice, the Commission circulated for public comment a proposal for an integrated licensing process. The new integrated process would be added to the traditional and alternative processes as an option. The integrated process would be the default. The Commission's proposed integrated approach improves both the efficiency and timeliness of the licensing process by merging pre-filing consultation with the Commission's NEPA scoping; enhancing consultation with Indian tribes; improving coordination of processes with federal and state agencies, especially those with mandatory conditioning authority; increasing public participation during pre-filing consultation; and developing a study plan and schedule, including mandatory, binding study dispute resolution. Further, unlike the more sequential traditional licensing process, an integrated process would allow for these multiple federal and state processes to take place simultaneously in a more parallel fashion. With these features, the Commission's proposed process should make it much more likely that the Commission, federal agencies with mandatory conditioning authority, and state agencies or Indian tribes with water quality certification authority obtain all the information they need to carry out their respective statutory responsibilities by the time the application is filed.

We believe that the efficiency and timeliness of the proposed integrated licensing process will reduce costs associated with the license application process by minimizing the redundancy and waste caused by the often duplicative information needs of the Commission and the various federal and state agencies associated with the hydroelectric licensing process.

To obtain further public input on the proposed rule, we are currently engaged in a series of six regional workshops. These regional workshops, co-hosted by Departments of the Interior, Commerce, and Agriculture, will be geared toward members of the hydropower community, federal and state resource agencies, environmental organizations, Indian tribes, and the general public. As part of the workshops, Commission staff will facilitate a session where workshop participants will be asked to identify and discuss key issues associated with the proposed process. Following conclusion of the regional workshops, the Commission will again host a four-day public drafting session at the end of April to begin developing final rulemaking language. At the conclusion of the public drafting session, Commission staff, with the assistance of the federal agencies with mandatory conditioning authority, will draft the

final rule language. I anticipate that the Commission will issue a final rule codifying a new integrated licensing process in July of this year.

III. COMMENTS ON TITLE III OF THE LEGISLATIVE DISCUSSION DRAFT

Section 3001 would amend Section 4(e) [mandatory conditions] and Section 18 [fishway prescriptions] of the FPA. Section 3001(a) would amend FPA Section 4(e) to provide that, where an applicant for a hydroelectric license proposes an alternative to a mandatory condition proposed by the Secretary with supervision over a reservation on which a hydropower project is located, the Secretary shall accept the alternative condition, if the Secretary determines that the alternative would provide adequate protection of the reservation and will either cost less or result in improved project generation as compared to the original condition. In making the decision, the Secretary must give equal consideration to power and other developmental purposes as well as preservation of environmental quality. Further, if the Secretary does not accept an alternative condition and the Commission finds the Secretary's original condition to be inconsistent with law, the Commission could refer the dispute to the Commission's Dispute Resolution Service for an advisory opinion.

The provisions of Section 3001(b), which amends FPA Section 18, basically mirror those for mandatory conditions but provide that the basis for the Secretary of the Interior or Commerce's decision on accepting an alternative fishway prescription is if it would be no less protective of the fish resources than the fishway initially prescribed.

As discussed previously, the FPA requires that the Commission can authorize projects that are best adapted to a comprehensive plan for improving or developing a waterway for beneficial public purposes, including power generation, irrigation, flood control, navigation, fish and wildlife, municipal water supply, and recreation, giving equal consideration to developmental and non-developmental values. Aligning the criteria that the agencies must use to more closely parallel the Commission licensing criteria under the FPA should act to minimize conflict between mandatory conditions and the Commission's conditions recommended to reflect the public interest.

For example, in the order relicensing the Holyoke Hydroelectric Project (MA), the Commission required measures to enhance fish passage set forth in the water quality certification and fishway prescriptions, even though, in the Commission's judgement, a number of the conditions entail measures that are very costly in light of their benefits, and therefore do not reflect a balancing of developmental and environmental considerations. Presumably, the proposed legislation would help to minimize this type of conflict.

I support the idea of greater interaction between the resource agencies and the licensees in the development of environmental measures, which Section 3001 would encourage. I believe that both the language for mandatory conditions and fishway prescriptions would add a degree of accountability that currently does not exist. As Congress considers any legislation, however, it should be careful to ensure that any procedures that could add time or expense to the process are justified by improved outcomes.

Thank you. I will be pleased to answer any questions you may have.

Mr. BARTON. Thank you.

Ms. Keil?

STATEMENT OF JULIE KEIL

Ms. KEIL. Chairman Barton, Congressman Allen, members of the subcommittee, thank you so much for inviting me to speak to you today. I would also like to note and especially thank Congressman Walden from my home State, and Congressman Radanovich, for their leadership on this issue. My name is Julie Keil. I am the Director of Hydro Licensing and Water Rights for Portland General Electric. We are an investor-owned utility located in Portland, Oregon. I am responsible for the licensing actions surrounding our five FERC hydro licenses, and all of the water rights and other things that go with that. Those are the cornerstone of our ability to provide economical and efficient service to our customers.

I am the company's front-line negotiator with tribes, conservation groups and agencies with regard to the terms and conditions of those licenses.

The issue I am here to talk to you about today is one of our favorites in the Northwest, thought of in its broadest terms the balance between energy production and environmental protection, a discussion that has been going on in many forums for a very long time in the Northwest.

That tension is nowhere more apparent than in the relicensing of federally licensed hydro projects. I have appeared before Congress three times now, this will be the fourth time, to talk about this issue. I am back again today because the issue has become more urgent with the passing of time rather than less.

Over the next 15 years, as Congressman Walden pointed out, over one-half of all the non-Federal hydroelectric capacity, over 30,000 megawatts of power, must undergo the relicensing process. PGE alone is in the process of relicensing more than 600 megawatts all before the year 2006. The fact is, hydropower has played and must continue to play a vital role in our Nation's energy policy and energy supply. And absent legislation reforming the FERC hydro relicensing process, that role is in jeopardy.

Hydropower is our largest, most flexible and most reliable renewable resource. It is low-cost, efficient, and truly domestic. More than any other form of power production, it also provides a myriad of other benefits that you have heard already this morning, or this afternoon, including recreation, flood control, water supply, and irrigation. It is also emissions-free, which cannot be overlooked in a time of ongoing concern over greenhouse gases and other pollutants.

All across the West, utilities continue to struggle to provide the reliable power that is the engine of economic growth, and I will tell you today that the margin for error is perilously thin. In these circumstances, hydro's unique capabilities become even more important. Unlike most thermal projects, hydropower projects can be turned on and off almost instantaneously. This is a critical component of a system that must match generation-to-load every minute of the day, every day of the week.

Despite these benefits, America is in danger of losing substantial hydropower capacity and operational flexibility at a time when it is most needed. Characterized by excessive cost and delays, the Federal hydro licensing process threatens to reduce generation capability and operational flexibility at projects throughout the Nation.

So, how did we get to this point? Simply put, the process fails to properly balance the environmental impacts of hydro projects with the crucial energy and on-energy values of the resource. It suffers from a dispersed decisionmaking authority and an inability to weigh competing values.

The net result of the existing statutory scheme is that no one has the authority to balance in the public interest. No one has the authority to look at the broader picture and make sure that important energy benefits are considered in the exercise of resource agency mandates. To call the process a three-ring circus does not do justice to the complexity we face.

To take the analogy one step further, in my role I juggle several interests. I am charged with providing reasonably priced and reliable electricity to PGE's customers. I must ensure that PGE's investors receive a reasonable return on their investment. And I must negotiate terms and conditions which reflect PGE's deeply held environmental stewardship ethic. Our goal in relicensing is to make the environmental footprint of our projects as small as possible while maintaining a viable project.

To meet all of my responsibilities requires creativity and innovation. My agency counterparts, on the other hand, often juggle only one ball, that of the protection of natural resources. As a result, they have no incentive to think creatively about how to meet the interests of others. This fundamental disparity is at the core of the hydro licensing conundrum.

You will undoubtedly hear the argument that problems with the FERC relicensing process can be solved solely through administrative means. I disagree. My experience is a good example of industry's commitment to seek reform in every available forum. I was a member of the Federal Advisory Committee that worked with the InterAgency Task Force toward improvements in the hydro licensing process. I was a member of the EPRI National Review Group that also explored administrative improvements. And I am participating in the current FERC rulemaking. In each one of these forums, our goal has been a more efficient and more effective process.

Nonetheless, I cannot help but conclude that administrative reforms cannot fully address the fundamental flaws in the process. The problems are embedded in a statutory scheme that is outdated, encourages delay, and serves no one's interest. It certainly doesn't serve the interest of energy production and, I would argue, ill serves the environment as well, as environmental protection delayed is environmental protection denied.

The process encourages all involved to spend money on lawyers rather than on the environment. To craft a process that truly advances all interests, energy and environment, legislative solutions are necessary.

For the hydro industry, the No. 1 legislative priority is to reinject balance into the relicensing process to make sure, if you will, that everyone is required to juggle multiple and perhaps conflicting interests and needs. I believe that the language in Title III of Chairman Barton's discussion draft which echoes that of the Radanovich/Walden/Towns bill successfully addresses this priority in a reasonable and environmentally responsible manner. The Barton discussion draft offers a fair and reasonable approach to reform, one that would restore balance, certainty and accountability to the licensing process, while leaving the Federal resource agency conditioning authority fully intact.

As I mentioned earlier, this is not a new issue, it has been considered now in multiple sessions of Congress. Through those years of debate, the solutions have evolved. From the industry perspective, this evolution came about through careful consideration, deliberation, and compromise. The result is a bill and a discussion draft that we believe achieves the admittedly difficult and delicate balance between clean energy needs and environmental protection.

With hydropower licensing improvements, resource enhancement and protection will continue, but they must continue in a process that also recognizes and protects the value of the product that is the subject of relicensing in the first place. We can and must achieve balance in this arena. We strongly believe that healthy rivers and hydropower can co-exist, and we continue to work toward that end. Thank you.

[The prepared statement of Julie Keil follows:]

PREPARED STATEMENT OF JULIE KEIL, DIRECTOR OF HYDRO LICENSING AND WATER RIGHTS, PORTLAND GENERAL ELECTRIC COMPANY

Chairman Barton, Ranking Member Boucher, Chairman Tauzin, Ranking Member Dingell, Members of the Subcommittee, thank you very much for giving me the opportunity to appear before you today to discuss the hydropower licensing language contained in the Subcommittee's discussion draft.

I appear before you today in two capacities. First and foremost, I am Director of Hydro Licensing and Water Rights for Portland General Electric Company. PGE is an investor owned utility based in Oregon, serving more than 700,000 customers in the Portland metropolitan area and the Willamette Valley. PGE owns 5 FERC-licensed hydroelectric projects. Like most energy companies that possess hydropower assets, the capabilities of these projects form the cornerstone of our ability to provide efficient and economical service to our customers. They are vital to the successful operation of my company, as indeed hydropower is essential to the entire Western power grid.

I am also here representing a broad cross-section of the hydropower industry. As a former President of the National Hydropower Association, I have participated over the years in hundreds of discussions with industry colleagues and non-industry stakeholders as to the challenges and opportunities facing hydropower in the 21st century. At the local level, I have participated in numerous task forces aimed at improving state participation in the hydro relicensing process. I have also played a lead role in federal efforts to bring about administrative improvements to the relicensing process, as a member of the Federal Advisory Committee that worked with the Interagency Task Force, as a member of the Electric Power Research Institute (EPRI) National Review Group that also explored administrative relicensing process reform, and as a stakeholder in FERC's present hydropower rulemaking.

As you know, the issue of hydro relicensing improvement is not new to this Subcommittee. In fact, it's an old issue. In numerous oversight and legislative hearings held before this Subcommittee during the previous three Congresses, a detailed record has been compiled as to the complexity, costs, delays, and conflicting mandates inherent in the FERC relicensing process. Committee members have learned that the process is broken and that, more importantly, almost every hydropower stakeholder wants to see it repaired. The energy issues that continue to impact California and the Pacific Northwest have only underscored the need for, and importance of, Congress acting as soon as possible to reform the relicensing process so we can preserve consumer access to clean, reliable, domestic, and cost-efficient hydropower.

The urgency surrounding this issue has not changed with the passage of time. In fact, with each passing year the stakes increase considerably. Today, as we look at the next 15 years, over one-half of all non-federal hydroelectric capacity—over 30,000 MW of power (enough to serve approximately 30 million homes)—must undergo the FERC relicensing process. This includes 296 projects in 37 states, much of it the West. PGE alone is in the process of relicensing nearly 600 megawatts, all before 2006. We are not unusual in this respect.

What has changed, however, is the bipartisanship that now characterizes efforts to improve the relicensing process. All of us within the hydropower industry are encouraged by this shift towards a bipartisan consensus on this issue. The fact that last year both the Democratic-controlled Senate and Republican-controlled House passed energy bills with hydro licensing improvement titles is a testament to the important consumer benefits to be gained from relicensing reform. We are hopeful that this year we can finally see hydro licensing reform legislation enacted into law. I want to especially thank Congressman Walden of my home state for his commitment to this issue. The fact is, hydropower has played—and must continue to play—a key role in our nation's energy policy; and absent legislative reform of the FERC relicensing process, that role is in jeopardy.

Hydropower is currently the most abundant and lowest-cost renewable energy technology in the United States. The benefits of hydropower, and its continued importance to our nation's environmental and energy policy objectives are well documented. Hydropower is a purely domestic resource and it provides Americans with abundant recreational opportunities, as well as many flood control, water supply and irrigation benefits. What's more, it is also an emissions-free resource, which cannot be overlooked in a time of ongoing concern over greenhouse gases and other pollutants.

In 1999, hydro displaced the emissions of 77 million metric tons of carbon; that is the equivalent of removing 62.2 million passenger cars, nearly 50% of the current fleet, from our nation's roadways. In addition, hydropower generation helps us avoid significant amounts of Nitrogen Oxide, Sulfur Dioxide, and Mercury, which are all major contributors to decreased air, river and lake quality. The importance of hydropower to our nation's clean air goals cannot be overstated. We must prevent issues, such as a broken licensing process, from weakening hydropower's ability to contribute to air quality for us and for future generations.

Another major benefit of hydropower, its reliability, has taken on increased importance over the past few years. The management of the nation's electric grid depends upon fast, flexible generation sources like hydropower to meet peak power demands to maintain level system voltages and to restore service after a blackout. Hydropower's ability to go from zero power to maximum output quickly and predictably makes it exceptionally good at meeting changing loads and providing ancillary electrical services.

Despite these multiple benefits, our supply of hydropower is waning and America is in danger of losing substantial hydropower capacity and operational flexibility at a time when we feel it is most needed. As we face uncertainty in energy markets, increased levels of pollution, reliability concerns, and a real need for more domestic and renewable resources, we must consider ways to counter these trends. In short, now is the time for policymakers at the federal level to fix the hydro relicensing process, for it is this process that poses the greatest threat to the future viability of this important, renewable resource.

As documented in Congressional hearings and by FERC in its May, 2001 Section 603 Report, the relicensing process suffers from dispersed decision-making authority and an inability to balance competing values. The bottom line is that costs, delays, and conflicting mandates greatly undermine this process.

How did we get to this point? Why such a dysfunctional process? While there is no shortage of explanations, most of it can be boiled down to one unfortunate reality: the relicensing process fails to properly balance the environmental impacts of hydro projects with the crucial energy and non-energy values of the resource.

Since 1986, FERC has been required, under the Federal Power Act, to give "equal consideration" to a variety of factors when issuing hydro project licenses and relicenses. This balancing authority requires FERC not only to consider the power, economic, and development benefits of a particular hydro project, but also to consider energy conservation and the protection, mitigation of damage to, and enhancement of fish and wildlife. In other words, under Federal law, FERC has the responsibility and authority to strike a balance between power and environmental values.

If this were the provision of the Federal Power Act that governed in this situation, relicensing might have a chance to succeed. The courts, however, have interpreted the Federal Power Act so as to prevent any balancing from taking place. The courts, in effect, have given Federal resource agencies unilateral authority to set "mandatory" conditions on FERC relicenses. FERC has no opportunity to question the basis of mandatory conditions set by the agencies, or to fit those conditions into the final license.

This would not be as much of a problem if federal resource agencies, when imposing a mandatory condition, considered the many factors that FERC is required to examine pursuant to the Federal Power Act. However, this is simply not done. While all of the agency personnel with whom I have worked over the years have been intelligent, well-intentioned people, their statutory mandates simply do not require them to look beyond the narrow resource areas they are charged to protect. The net result is that no one is balancing. No one has the authority to look at the big picture of how hydro fits into our national energy policy. I go back to my earlier observation: in today's uncertain energy climate, where every megawatt counts, this is a situation that must be remedied, and remedied soon.

Some have suggested that the problems with the FERC relicensing process can be solved solely through administrative, rather than legislative means. I disagree. And I draw that conclusion after having invested considerable time and energy in recent years in search of substantive administrative remedies.

While I am 100% committed to exploring and securing administrative reform, I have come to the following conclusion: properly developed and implemented administrative remedies can certainly help on a number of fronts and should be encouraged. But taken alone, administrative reforms can not fully address the fundamental and substantive problem with the process: the fact that federal resource agencies mandate restrictive conditions on the operations of hydropower projects without either comprehensive analysis of their impacts or an independent review of the conditions.

These thoughts were echoed by FERC in its aforementioned Section 603 Report:

> "...changes in regulations, policies, and procedures, while expected to alleviate the situation, are no substitute for legislative action. They are, at best, partial mitigation for the unorthodox legislative scheme."[1]

Let me say once again: legislative fixes are necessary if we are to truly reform the hydroelectric relicensing process.

So, what legislative fixes are needed? For the hydro industry, the number one priority is to re-inject balance into the relicensing process—a balance between important environmental protection and the valuable energy and non-power benefits of hydro projects. I believe that the language in Title III of Chairman Barton's discussion draft, which echoes that of the Radanovich, Walden, Towns bill (H.R. 1013), successfully addresses this priority in a reasonable and environmentally responsible manner. And as you heard from Commissioners Brownell and Massey last week, they agree as well.

As mentioned earlier, the FERC licensing process suffers from dispersed decision making authority. The process is splintered among multiple federal and state agency decision makers, ranging from the U.S. Departments of Interior and Agriculture under Federal Power Act section 4(e), the U.S. Departments of Interior and Commerce under Federal Power Act section 18, and state water quality agencies under Clean Water Act section 401, among others. This fractured license decision-making authority essentially prevents FERC from being an ultimate arbiter of how well individual license conditions fit into an overall license and from being able to ensure that the end result of the licensing process is reasonable. It also makes FERC's ability to manage the licensing process a real challenge.

Many would argue that the most effective solution to this fundamental problem would be to bring the ultimate decision-making authority back to FERC, where it originally resided under the Federal Power Act. While such a solution has merit, the Barton discussion draft offers an alternative approach, one that would restore balance, certainty and accountability to the licensing process while leaving federal resource agency conditioning authority fully intact. The idea behind the Barton discussion draft is to ensure that at least the federal agencies involved in setting license conditions under sections 4(e) and 18 of the Federal Power Act take a broader perspective in setting those conditions, as FERC itself must do in setting license conditions under Part I of the Federal Power Act.

Title III of the Barton discussion draft would allow a licensee to propose a cost and/or energy-saving alternative condition—an alternative that the federal resource agency would have to accept if the agency—*and the agency alone*—determined that it met its existing statutory requirements for environmental protection. While this concept is similar to the provisions of the House-passed H.R. 4 from the 107th Congress, there are some significant differences.

Last Year's Bill Too Restrictive to Allow for Acceptance of Reasonable Alternatives

For mandatory conditions having to do with management of federal lands (Section 4(e) conditions), last year's bill would have created a new environmental standard for alternative conditions, to be set on a case-by-case basis by agency personnel exercising delegated authority. This, in turn, would bind the hands of the Secretary to consider reasonable alternatives.

By contrast, the Barton discussion draft simply mirrors the existing environmental protection standard found in Section 4(e) of the Federal Power Act, and upon which federal land management agencies base their environmental conditions. This language would ensure the protection of environmental resources while giving an applicant some added flexibility to save water or power, or keep costs down.

For mandatory prescriptions for fish passage (Section 18 prescriptions), last year's bill would have restricted the Secretary's consideration to a narrow range of prescribed alternatives. By contrast, the Barton discussion draft takes a more goal-ori-

---

[1] "Report on Hydroelectric Licensing Policies, Procedures, and Regulations: Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000"; Federal Energy Regulatory Commission Staff, May, 2001.

ented approach that permits the Secretary to determine and set a protective goal and decide whether the licensee's alternative meets that goal.

In both cases (4e and 18 conditions), the Barton language ensures that the decision-making authority remains with the Secretaries of the federal resource agencies.

Barton Discussion Draft Provides Reasonable Treatment of Applicant and Third Party Alternatives

The Barton discussion draft allows *any* party to propose alternative conditions or prescriptions; but a license applicant's "least-cost" or "more power" alternative would have to be accepted if the Secretary determines that it satisfies the environmental protection standard. Given that the licensee and the electric consumer ultimately bear the cost of license conditions, it is appropriate and reasonable that a Secretary be required to accept a licensee's alternative if the Secretary determines that it satisfies the environmental protection standard.

By contrast, last year's bill would have invited conflict, confusion and further delay. It would have required resource agencies to accept any and all alternative conditions or prescriptions (regardless of who proposes them) if they were found to meet the specified criteria, and without providing a mechanism for resolving competing alternative proposals.

Barton Discussion Draft H.R. 1013 Contains Sunshine Provisions; Holds Government Agencies Accountable

The Barton discussion draft contains a number of "good government" provisions aimed at providing accountability in agency decisions and returning balance to the licensing process through the recognition of the many public benefits served by hydropower projects, such as water supply, flood control, irrigation, pollution-free energy, and recreation. Specifically, the Barton discussion draft would:

- provide an opportunity—once mandatory conditions are drafted—for an agency hearing on the record on any disputed issues of material fact;
- require agencies to document that they gave "equal consideration" to the economic, environmental and other public impacts, to the extent the information is available, of their mandatory conditions before imposing them on licensees and/or rejecting alternative mandatory conditions—something that agencies are not doing now;
- require agencies to submit into the public record all studies and data that are available and relevant to their decisions; and
- provide for a non-binding dispute resolution process should FERC find a final mandatory condition to be inconsistent with its requirements under the Federal Power Act.

By contrast, last year's bill had no such sunshine provisions.

Over the last decade, Portland General Electric and—indeed—the entire hydropower industry, has devoted significant time and energy to finding the appropriate, legislative fix to the ills of the current FERC hydro licensing process. In that time, I have witnessed a steady evolution; an evolution both of the industry's increasing dedication to the issue as well an evolution of the legislative vehicle that would best solve the problem at hand.

In the 106th Congress, the Towns bill laid out a comprehensive blueprint for reform. In the 107th Congress, this subcommittee led the way in putting forth a new approach, that of an alternative mandatory condition; an approach that the Senate last year built upon and that has been further refined this year with introduction of the Radanovich, Walden, Towns bill (H.R. 1013), whose language mirrors that of Title III of the Barton discussion draft.

From the industry perspective, this evolution came about through careful consideration, deliberation and compromise. The result is a bill (H.R. 1013) and a discussion draft that we believe achieves the admittedly difficult and delicate balance between clean energy needs and environmental protection.

In conclusion, I would like to offer the following thoughts on the relationship between energy priorities and natural resources. The river and fisheries resources administered by hydro project operators are very important ones, and essential and long-lasting commitments are being made in relicensing processes. Portland General and the hydropower industry as a whole take seriously their role as stewards of the rivers we are privileged to use. Licensees go to great lengths to involve stakeholders and members of the public in licensing and relicensing processes. These consultations take years and, without question, natural resource issues constitute the bulk of those discussions. Ultimately, the majority of direct and indirect expenditures made by licensees are spent on environmental protection, mitigation and enhancement measures.

Some rhetorically argue that the hydropower industry wants to "roll back" environmental regulations in this process. That is absurd. With hydropower process improvements, resource enhancement and protection will continue. But they must continue in a process that also recognizes and protects the value of the product that is the subject of the relicensing in the first place. We can and must achieve balance in this arena. We strongly believe that healthy rivers and hydropower can coexist and we continue to work toward that end.

Time is short. As we look to self-sustaining energy strategies, now is the time for policymakers to better incorporate hydropower into the nation's energy mix. We urge you to pass Title III of the Barton discussion draft. The language will bring efficiency, certainty, accountability and transparency to the licensing process. Its provisions will benefit hydro producers, the environment and energy consumers, and, as such, is public policy that all Americans should support.

Thank you.

Mr. BARTON. Thank you, Ms. Keil.

We now would recognize Mr. Masonis for his statement.

STATEMENT OF ROB MASONIS

Mr. MASONIS. Good afternoon, Mr. Chairman, Congressman Allen, and members of the subcommittee. I appreciate the opportunity to appear before you this afternoon. My name is Rob Masonis. I am the Regional Director of the Northwest of American Rivers, a national river conservation group. We also chair the Hydropower Reform Coalition, a coalition of 117 national and local organizations dedicated to improving the licensing of hydropower projects.

Hydropower produces about 10 percent of total generation in the Nation, but it is important regionally in the Pacific Northwest, where I live, supplying about 70 percent of our electricity.

As the President's 2001 Energy Plan acknowledged, it is not an environmentally benign power source. Hydropower dams can block fish, drown rivers and riverside wildlife habitat, and radically change water temperatures. Some projects completely dewater rivers for miles at a stretch. Some increase river flow from nearly nothing to thousands of cubic feet per second, and reduce it again to a trickle, decimating the finely turned ecology of rive ecosystems. For example, the Hells Canyon complex, a series of three large dams in the Snake River along the Idaho-Oregon border, blocks access of Snake River salmon and steelhead to their spawning grounds, including 85 percent of the Chinook spawning grounds in the Snake River basin.

Idaho Power's original license required it to provide fish passage as a condition of the dams' construction, but attempts to pass fish failed and were ultimately abandoned shortly after the dams were built. The loss of these fish and their decaying carcasses at the end of their spawning cycle has had a ripple effect throughout the ecosystem, robbing headwater streams and forests of a valuable source of nutrients. The project also drowned critical wildlife habitat and alters flow and water quality for hundreds of miles downstream.

Scores of hydro projects were licensed before modern environmental standards and an adequate understanding of river ecology existed. Relicensing represents our first opportunity to place conditions on these dams that will protect and restore our rivers for our children and grandchildren. Relicensing hydropower projects has produced some spectacular successes. My own electric utility, Seattle City Light, finished relicensing its large Skagit River project

in 1996, and it resulted in a settlement agreement with diverse parties. The company was so proud of the results for Skagit River salmon and steelhead that just last month it published an Op Ed in the Seattle Times touting its success, and I quote. "Research indicates these salmon also owe their comeback to changes in the way City Light operates its hydroelectric dams." As the Op Ed further noted, "When the cost of salmon restoration finally gets to the City Light's customer's bill, it seems reasonable, about 20 cents per customer each month." American Rivers helped negotiate that settlement. In the past 10 years, many similar settlements have produced both river restoration and profitable power generation for utilities.

The current licensing process is far from perfect. When the process takes too long, modern environmental conditions for the project are delayed and the environment suffers as a result. In the Pacific Northwest where I live, an example is the Cushman Hydroelectric Project in the State of Washington, where the license expired in 1974, yet today it still operates under antiquated license terms, with no immediate relief in site.

As Mr. Robinson pointed out, for the last 5 years we have been working with industry, Federal and State agencies, and the commission to improve the hydropower relicensing process. Those efforts resulted in a proposed rule issued just last month. The commission estimates that this rule would reduce the time for licensing by 30 months and reduce applicant costs significantly as well.

Unfortunately, Title III of the chairman's discussion draft would increase delays in the relicensing process, abandon the basic Federal Power Act principle of public participation on equal footing, unduly burden the natural resource agencies, and harm the environment. The current draft is based on language that was negotiated last Congress and agreed to by representatives of the conservation community and the hydropower industry, but the current proposal bears only a passing resemblance to that negotiated language. The new language would add at least 4 months to licensing, create four new administrative processes, and requiring Federal resource agencies to consider 11 new factors in developing their environmental conditions. Many natural resource agencies already have inadequate resources to do the work currently required, let alone the much more onerous analysis that would be required by Title III as currently drafted.

The current draft would establish a new environmental standard that would invite litigation and judicial second-guessing of resource agency decisions. The worst aspect of Title III is the preferential treatment offered to license applicants. Currently, the Federal Power Act creates an open equitable process in which the applicant starts the proceedings, but other interested stakeholders have equal rights to participate and have their comments weighed equally by the agencies and the Federal Energy Regulatory Commission.

Title III would upset this balance by giving only the applicants the right to compel the resource agencies to adopt different conditions or to review their evidentiary record and cutting a host of other interested parties out of the process, not just conservationists but also State agencies, Tribal interests, irrigators, neighborhood landowners, and recreationists. And although the bill says other

parties may also offer alternative conditions, the clause is meaningless without equal footing to present those alternatives.

Being a good environmental steward is a legitimate cost of doing business. We urge the committee not to make environmental protection the scapegoat for licensing marginal projects, nor to allow utilities that have never adequately mitigated for their environmental impacts, to continue to benefit from a sweetheart deal at the public's expense.

The rulemaking currently underway that would establish an integrated licensing process holds the promise of fairly streamlining the process while not tipping the scales in favor of the hydropower industry, as Title III of the chairman's discussion draft would most certainly do.

Those of us in the environmental community, and especially the Pacific Northwest, understand and appreciate the value of hydroelectric power, but the benefits it provides have come at a very high cost to our Nation's rivers and the fish and wildlife and human communities that depend on them.

In the Pacific Northwest, it has profoundly harmed salmon and salmon-dependent communities and, I would add, unlike power which can be generated in a number of ways, salmon and other fish and wildlife need healthy, functioning rivers to survive. There is no substitute. I appreciate your time and attention.

[The prepared statement of Rob Masonis follows:]

PREPARED STATEMENT OF ROB MASONIS, DIRECTOR, NORTHWEST REGIONAL OFFICE, AMERICAN RIVERS

I. INTRODUCTION

Good afternoon, Mr. Chairman, Congressman Boucher and members of the Subcommittee. I appreciate the opportunity to appear before you here today. My name is Rob Masonis, and I am the director of the Northwest Regional Office of American Rivers, a national conservation organization dedicated to protecting and restoring the nation's rivers. American Rivers has more than 33,000 members across the country, and works in partnership with more than 4,000 river and conservation organizations. American Rivers also chairs the Hydropower Reform Coalition, a coalition of 117 national and local organizations dedicated to improving the licensing of hydropower projects by the Federal Energy Regulatory Commission.

There are three basic messages in my testimony:

1. Hydropower relicensing significantly improves environmental quality at little cost to power generation.
2. Administrative reforms are working to make the licensing process more efficient.
3. Title III of the Chairman's draft would further complicate and increase the cost of the licensing process, interfere with full participation by states, tribes and the interested public, and diminish environmental quality.

Hydropower represents an important part of the nation's energy mix, producing about 10% of total generation nationally, depending on the water year. It is more important regionally in the Pacific Northwest where I live, supplying about 70% of our electricity capacity. Nationally, about 9% of our electricity comes from hydropower and about half is generated by non-federal producers and regulated by the Commission. The licensees pay nothing for an essentially free and renewable fuel—river water—and well below market value for the use of federal lands. (Hydrowire, May 20, 2002)

Although hydropower can generate flexible, emission-free electricity, it is not an environmentally benign power source. Hydropower projects include dams that can block fish, sediment and water flow; drown rivers and riverside wildlife habitat; and radically change water temperatures. They include bypass canals that may completely dewater rivers for miles at a stretch. They may be operated to meet daily peak demand for electricity, increasing river flow from nearly nothing to thousands of cubic feet per second, then reducing it again to a trickle at night. And they depend on turbines that destroy aquatic life entrained in their spinning blades.

For example, the Hells Canyon complex on the Snake River along the Idaho-Oregon border blocked access of Snake River salmon and steelhead to their spawning grounds, including blocking approximately 85% of the spawning habitat for fall Chinook salmon. Idaho Power's original license required them to construct fish passage as a condition of the dams' construction, but sadly this construction was never carried out. The loss of these fish and their decaying carcasses at the end of their spawning cycle has had a ripple effect throughout the ecosystem, robbing headwater streams and forests of a valuable source of nutrients. The project also alters flows and water quality for hundreds of miles downstream and occupies and affects significant tracts of public lands managed by Forest Service and Bureau of Land Management. This hydropower complex further drowned critical wildlife habitat and greatly diminished animal populations.

The President's 2001 Energy Plan plan acknowledged and catalogued the impacts of hydropower dams on natural resources. "Hydropower, although a clean energy source, does present environmental challenges. Unless properly designed and operated, hydropower dams can injure or kill fish, such as salmon, by blocking their passage to upstream spawning pools. Innovations in fish ladders, screens, and hatcheries are helping to mitigate these adverse impacts. Ongoing dam relicensing efforts are resulting in community involvement and the industry's application of the latest technologies to ensure the maintenance of downstream flows and the upstream passage of fish. These efforts also have been successful in identifying and removing older, nonfunctioning dams and other impediments to fish movements." (President's Plan, 3-8)

The harmful effects of hydropower projects can be reduced or mitigated, but this requires careful review and oversight by federal and state agencies that are responsible for protecting the affected natural resources. The Federal Power Act's licensing process is designed to ensure that the impacts of hydro projects are fully evaluated, that lands, fish and wildlife are protected, and that each project is suited to the river where it is installed. The license for each project expires every 30 to 50 years—once a generation—so that we can evaluate again the impacts of the project and the terms under which it should operate for the next generation. In the Hells Canyon example, the project license is currently under review and is scheduled to expire in 2005.

Unfortunately, the scores of hydroelectric licenses scheduled to expire over the next decade were licensed so long ago that modern environmental standards had not yet come into play and our understanding of complex ecological systems was in its infancy. For decades, these projects have been operating with minimal environmental controls. Current relicensing represents our first opportunity to review these dams, canals and turbines, and to place conditions on them for the next 30 to 50 years that will improve our rivers and protect fish and wildlife for our children and grandchildren.

Relicensing hydropower projects has already produced some spectacular successes. My own electric utility, Seattle City Light, finished relicensing their Skagit River project in 1996. The resulting changes to the flows from these three dams have produced significant and tangible improvements to the Skagit River salmon runs—in fact, Seattle City Light was so proud of the results that just last month it published an Op Ed piece in the Seattle Times touting its success. "(R)esearch indicates these salmon also owe their comeback to changes in the way City Light operates its hydroelectric dams." (A copy of that Op Ed is appended to my testimony.) Importantly, these changes, among the most expensive required of any hydropower licensee in the past several years, have proven to be affordable. As the article noted, "These measures cost money. The Skagit system provides about 25 percent of Seattle's electricity. Managing flows for fish sometimes means water must be released in ways that may result in less electricity generation. That means the utility must find more power elsewhere that is likely to be more expensive. However, when the cost of salmon restoration finally gets to the City Light customer's bill, it seems reasonable: about 20 cents per customer each month." This and other examples of improved river health are the real story of hydropower relicensing.

Over the past ten years, settlements have been commonplace and resulted in both ecological restoration and profitable power generation. New England Power Company signed two major settlement agreements with resource agencies, conservation groups, and other stakeholders on the Deerfield and Connecticut Rivers, leading to tremendous growth in rural economies. The Menominee River in Wisconsin and Michigan is another river where collaborative relicensing yielded significant benefits and was accomplished prior to license expiration. In New York State, Niagara Mohawk Power Company, resource agencies, and other stakeholders have worked river basin by river basin to settle Niagara Mohawk's numerous dam relicensings. In the past ten years, several significant settlement agreements have been signed, affect-

ing a total of 35 dams on six major river basins across the state. And in Maine, settlements have not only resulted in fish passage and restored flows, but parties agreed to support expansion of the hydropower facilities to enable increases in power generation. Each of these was accomplished under existing law.

II. RELICENSING—AN IMPORTANT BALANCING ACT

The relicensing process is necessarily complex. Because rivers are public resources with many competing interests and significant environmental issues, the licensing process for hydropower dams involves multiple stakeholders. Unlike most electricity generating technologies, hydropower does not have "end of pipe" standards to ensure that the dam's operations do not unduly damage the environment. This is because every dam and every river is different, and generic standards cannot be applied to each project. Individual conditions suited to each project must be established.

The Federal Power Act (FPA), although commonly considered an energy statute, also occupies an important role in environmental protection. The statute was amended in 1986 to require the Commission to give "equal consideration" to power (electricity generation) and non-power (fish and wildlife protection, recreation, etc.) benefits of the river. The FPA contemplates that the economics of the hydropower facility will be taken into account by the Commission in this process.

However, this balancing requirement is not the sole environmental constraint placed on of hydro projects. Congress determined—and rightly so—that some basic environmental protections must be afforded at every dam, and should not be balanced away to promote cheap hydropower. Under these statutory requirements, expert federal and state resource managers establish conditions, based on substantial evidence to protect public trust resources. These basic protections form a floor above which FERC then establishes license conditions in the public interest.

Sometimes referred to as mandatory conditions, the statutory requirements assure that:

(1) Fish can be passed upstream and downstream of a dam (FPA Section 18);
(2) If a nonfederal dam is located on federally owned land, the purposes of the federal land are protected (FPA Section 4(e)); and
(3) The dam complies with state-developed water quality standards (CWA Section 401).

Both fish passage and federal lands protection have been part of the relicensing process since enactment of the Federal Power Act in 1920.

Section 18's mandate, setting fishways apart as a special consideration, is in keeping with the law and practice that came to us from Europe at the time of settlement. Millers—dam owners—have provided fishways at their own expense for many hundreds of years, reflecting the understanding that fish are important to commerce and have substantial non-commercial value.

Section 4(e)'s grant of authority to land management agencies to ensure that projects on their lands meet current management goals and objectives is simple and is based on common sense. Projects located on federal or tribal lands are already getting the benefit of cheap rent. In order to adequately manage the lands entrusted to them and ensure that hydro projects do not interfere with other uses of the land, federal land management agencies must be able to constrain how these projects are operated.

The protection of water quality is a responsibility that has been delegated to the states since the Clean Water Act was adopted 30 years ago. Section 401 ensures that private hydro projects will not interfere with state standards, by requiring that each federally licensed project obtain a state certification that the project is consistent with state standards, including the designated uses for each water body. The Supreme Court confirmed in *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700 (1994), that these standards may be numeric or narrative and include chemical, physical, and biological parameters.

These laws establish the simple rule that a project must meet basic environmental standards before we allow it to operate on our rivers—just as we would not allow a coal-fired plant or a nuclear plant to operate without basic protections for the environment, so too we must not license hydro plants without this basic level of protection.

III. IMPROVEMENTS TO THE RELICENSING PROCESS CAN WORK

On the other hand, American Rivers would be the first to acknowledge that the current licensing process is far from perfect. Agency environmental reviews are not well coordinated and agencies frequently experience significant delay in getting the necessary information to establish environmental conditions. In many cases, the process takes too long. Unfortunately, it is the environment that truly suffers from

delays in relicensing. When a license expires the dam owner receives "annual licenses" that maintain status quo conditions at the project until a final license is issued. The longer the process takes, the longer it takes to set modern environmental conditions for the project.

In May 2001, FERC issued a report to Congress reviewing "policies, procedures, and regulations for the licensing of hydroelectric projects to determine how to reduce the cost and time of obtaining a license."[1] The report shows that Section 4(e) and 18 requirements by federal resource agencies are not a major cause for relicensing delays. (Report at pg. 38) In cases where agencies have been late with conditions it is often because licensees have not provided adequate information and the Commission has not required it.

For the last five years, American Rivers and members of the Hydropower Reform Coalition have been working with industry, federal and state agencies, and the Commission to make administrative improvements to the hydropower licensing process. We have made steady progress in a number of areas including federal agency actions and procedures to ensure consistency, timeliness, and coordination. The past year those efforts have culminated in the development of a proposed rule, issued by the Commission just last month. The proposed rule draws heavily from proposals developed by two very different groups—the National Review Group, a coalition of hydropower interests and environmental groups, and the Interagency Hydropower Committee, a federal interagency working group—and reflects a remarkable degree of consensus.

The Commission estimates that the proposed rule would reduce the average time it takes to complete the licensing process by 30 months, cutting down 47 months of preparation and processing time to 17 months. Further, it estimates that the proposed process would reduce the cost of licensing for a project under 5 megawatts by $150,000 and for a project greater than 5 megawatts by $690,000. (Testimony by Commissioner Brownell before the House Energy and Commerce Committee).

According to the Notice of Proposed Rulemaking the proposal, referred to as the "integrated" process, would become the Commission's primary licensing process. The highlights of the proposed rule are:

- increased assistance by Commission staff to potential applicants and stakeholders during the development of license applications;
- greater coordination among the Commission and federal and state agencies with mandatory conditioning authority;
- coordinated environmental scoping between the Commission and the applicant's pre-filing consultation;
- increased public participation in the pre-filing consultation process;
- clear and rational schedules and deadlines for all participants, including Commission staff;
- development of a Commission-approved study plan, with informal resolution to study disagreements, followed by mandatory, binding study dispute resolution, if necessary;
- elimination of the need for post-application study requests; and
- creation of a new Commission Tribal Liaison, to be the point of contact for American Indians' concerns regardless of the proceeding or issue.

In addition, the traditional licensing process would be modified by increasing public participation, and by establishing mandatory, binding dispute resolution for necessary studies.

The Commission will obtain public input through written comments and regional workshops around the country in March and April 2003 to discuss stakeholder reaction to the proposed rule. A four-day collaborative drafting session is scheduled in April in Washington to draft language for the final rule. While we continue to advocate improvements to the proposed rule, American Rivers and the members of the Hydropower Reform Coalition believe that the Commission is on the right track toward making lasting improvements to the hydropower relicensing process without jeopardizing public participation or environmental quality.

IV. CURRENT PROPOSALS WOULD HURT THE PROCESS AND THE ENVIRONMENT

The legislative proposal contained in H.R. 1013 and Title III of the Chairman's discussion draft would increase delays in the relicensing process, abandon the basic Federal Power Act principle of public participation, unduly burden the natural re-

[1] Report on Hydroelectric Licenseing: Policies, Procedures, and Regulations. Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000." FERC Staff, May 2001.

source agencies, and harm the environment. It should be rejected in favor of support for the Commission's ongoing rulemaking process.[2]

The current draft is based on language that was negotiated last Congress and agreed to in writing both by representatives of the conservation community and by representatives of the hydropower industry. Unfortunately, the current proposal bears only a passing resemblance to that agreed-upon language. Rather than providing a simple fix to the industry's complaint that the resources agencies sometimes fail to give adequate consideration to lower-cost alternatives for resource protection, this language would blow a hole in the entire resource agency process by: 1) giving hydropower interests preferred treatment in the management of a public resource over states, tribes and the interested public; 2) reducing standards for environmental protection; and 3) creating a new referral to middle-tier Commission staff to review the agencies' conditions.[3]

The legislative proposal before the Committee contains detailed revisions to an aspect of federal hydro licensing that is foreign to most. Rather than walk through the bill step by step, my testimony will describe several of its most obvious problems. For a complete critique of the bill, see the attachment to this testimony.

A. Title III will make a complex process more so.

Efficiency in the hydropower relicensing process is a constant challenge because of the complexity of the issues and the number of stakeholders involved. The Commission's rulemaking proposal makes a good first effort at addressing this challenge. Unfortunately, Title III would make a complex process more so. It adds four new administrative processes at a time when FERC and the same agencies are struggling to streamline licensing. It further requires federal resource agencies to consider eleven new factors in developing their environmental conditions, and establishes a new standard that invites litigation and both staff and judicial second-guessing of resource agency decisions.

Many of the new procedures and considerations placed on resource agencies are redundant with the Commission's role in relicensing. Title III would require the agencies to consider several factors beyond the scope of their resource protection responsibilities and well beyond their expertise. Evaluation of these factors currently falls to the Commission under the FPA and NEPA with the cooperation and input of federal agencies on issues where they add expertise—in this case fisheries and land management. Having the agencies undertake this additional evaluation would be redundant, but it would also fundamentally realign the agencies' role in the licensing process, which is currently to establish necessary and appropriate environmental protections—a floor of environmental protection—and to leave the balancing of power development versus other factors beyond those basic protections to the Commission.

Title III's requirement that the natural resource agencies consider eleven additional factors also places a virtually impossible burden on the resource agencies. At present, many of the relevant state and federal agencies do not have sufficient staff dedicated to relicensing. As a result, a range of individuals (few of whom are trained in the relicensing process) may participate in different parts of a relicensing proceeding as time allows, or the appropriate staff is overburdened and cannot spend the time to conduct an adequate review of the environmental needs at the site or participate constructively in the relicensing. Because of the complex nature of the proceedings, and because of the new, more productive trend toward collaborative relicensing efforts, a consistent presence of qualified staff with an appropriate workload would make agency efforts more efficient and productive.

The staffing problem in the state of Alabama, where licenses for 12 dams on three major rivers will expire by 2007, is instructive. Relicensing these projects will involve regular meetings, extensive studies, and detailed negotiation. Currently, the U.S. Fish and Wildlife Service, which must make recommendations under section 10(j) as well as prescribing fishways under section 18 of the FPA, has only one staff person to cover this area. His situation is not unique. Without additional resources, there is a risk of inefficient or incomplete participation on the part of the Fish and Wildlife Service and potential disruption or delay in the process. This can be avoided with additional resources.

One potential solution is Section 1701(a) of the Energy Policy Act of 1992, which provides authority for FERC to reimburse resource agencies for their costs associated with licensing FERC projects. The provision calls for FERC to pass these costs

---

[2] Barnes, FERC's *"Class of '93": A Status Report,* Hydro Review (October 1995).

[3] Report on Hydroelectric Licensing: Policies, Procedures, and Regulations. Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000." FERC Staff, May 2001.

on to licensees through annual fees. Since 1992, FERC has been collecting fees from licensees for some of the federal resource agency relicensing expenses, but this money has not found its way back to these agencies. Instead, it has gone to the Treasury where these reimbursements to federal and state resource agencies have not been made available through annual appropriations from Congress. This system is not working. To provide adequate resources to these agencies and facilitate more efficient relicensings, section 1701(a) should be implemented so that monies collected on behalf of state and federal natural resource agencies are reimbursed directly to those agencies.

Title III offers even further complexity to the process via the curious step of establishing an appeal to Commission staff if the license applicant continues to disagree with the agencies following their detailed internal alternatives analysis. While this process is non-binding, it asks the Commission's Dispute Resolution Service, currently a facilitation group, to make a finding regarding this appeal. Such an action would be a significant departure for the Dispute Resolution Service, given their traditional role as simply a facilitator. Staff in this part of the agency are neither equipped nor positioned with adequate seniority to make such determinations. This office is accustomed to creating process, not issuing opinions. In addition, this appeal would add 90 days to the licensing process—over all, Title III can be expect to add more than four months to the time necessary for adoption of resource agency conditions.

B. Title III would give hydro applicants unprecedented power.

Currently, the Federal Power Act's hydropower licensing provisions create an open, equitable process in which the applicant starts the proceedings, but other interested stakeholders have full rights to participate and have their comments weighed equally by the Commission and other relevant agencies. Title III would drastically alter this process, by giving only the applicants the right to compel the resource agencies to adopt different conditions under sections 4(e) and 18.In offering this new authority only to license applicants, this legislation

would cut a host of other interested parties out of the process—not just conservationists, but also state agencies, tribal interests, irrigators, neighboring landowners and recreationists. The agency would be required to adopt the applicant's proposal if it met the statutory criteria, regardless of whether another alternative was more efficient or more beneficial to the environment. And although the bill says other parties may also offer alternative conditions, there is not requirement that they be considered by the Secretary. It is obvious that nothing would prohibit others from proposing alternatives but the clause is meaningless unless there is equal footing on which those alternatives may be heard. The preferential treatment of hydropower interests is patently inconsistent with every other element of the Federal Power Act and runs counter to the right of the public to maintain control over the nation's rivers.[4]

C. Title III would diminish environmental quality

The compromise language agreed to last Congress would have ensured that the alternative license conditions established under this new procedure would provide equivalent protection to those originally proposed by the agencies. The language of Title III eliminates that basic guarantee, establishing a new standard that invites administrative and judicial second-guessing of the protections for fisheries and federal lands. In addition, it forces the resource agencies to give private costs the same level of consideration as the protection of public resources.

The new standard for section 4(e) conditions requires simply that the new condition "provides for adequate protection and utilization" of the federal lands. While this is the standard used in the underlying section of the Federal Power Act, its inclusion here has the perverse consequence of inviting the courts to second-guess the land management agencies' assessment of what is necessary for the protection and utilization of their lands. The language adopted by this Committee last year, requiring that the alternative "provides no less protection" than the condition proposed by the resource agency, properly defers to the agencies' expertise with regard to their own lands. Judicial review of that standard would start with the condition initially developed by the agency. Under Title III a court would be invited to make a de novo interpretation of what conditions are "adequate."

The standard for section 18 alternative conditions is even more harmful. Rather than requiring the installation of a fishway, this proposal would establish a stand-

[4] "The public must retain control of the great waterways. It is essential that any permit to obstruct them for reasons and on conditions that seem good at the moment should be subject to revision when changed conditions demand." President Teddy Roosevelt, 1908

ard that the alternative be "no less protective of the fish resources" than the fishway originally proposed by the fishery agency. This language appears to be directly intended to allow the substitution of hatcheries, habitat restoration, or even mitigation funds, which will not serve the purpose of a fishway—to move fish past the dam. Loss of spawning habitat cannot be mitigated by hatcheries or downstream habitat improvements. There are many interests in moving fish past dams that go beyond the "protection of fish resources," such as fishing access and treaty obligations.

VI. CONCLUSION

Being a good environmental steward is a legitimate cost of doing business. Should the federal government guarantee profitability of hydropower? If a project is already unprofitable because of market forces or because it is run poorly, should it be exempted from any environmental conditions? The answer to these questions is clearly no. According to the courts, "There can be no guarantee of profitability of water power projects under the Federal Power Act; profitability is at risk from a number of variable factors, and values other than profitability require appropriate consideration."[5] We urge the Committee not to make environmental protections the scapegoat for licensing marginal projects nor to allow utilities that have never mitigated for their environmental impacts to continue to benefit from a sweetheart deal at the public's expense.

No regulatory process is perfect and this one is no exception. Many in the environmental community believe that there should be stricter environmental conditions at hydropower projects, while many in the industry believe that there should be fewer. Perhaps that is a signal that things are working. Whichever position one believes, Title III would only make the relicensing process more complex and litigious and would threaten public trust resources that already bear the brunt of relicensing delays.

We urge the Committee to defer to the Commission's ongoing rulemaking to truly improve the hydro licensing process. If the Committee wishes to adopt a section on alternatives to resource agency conditions, we urge it to agree to the negotiated compromise from last Congress. Anything undercutting environmental protections or placing the voice of license applicants over that of other parties invites wholesale opposition from the broad range of interests affected by hydropower licensing.

Those of us in the environmental community and especially in the Pacific Northwest, understand and appreciate the value of hydroelectric power. It is a valuable source of emissions free energy and provides numerous other benefits including being the cheapest source available. Unfortunately, its legacy of impacts to our region's and nation's rivers has been neglected too long. Now is the time to bring these dams up to modern environmental standards, not to continue the status quo.

Mr. BARTON. We thank you, sir. We now will hear from our last witness, Mr. Szeptycki. Your statement is in the record, and you can elaborate on it.

STATEMENT OF LEON SZEPTYCKI

Mr. SZEPTYCKI. Mr. Chairman, my name is Leon Szeptycki, and thank you very much for giving me the opportunity to testify today on behalf of Trout Unlimited volunteer members across the country.

For those of you who don't know, TU is a nonprofit organization with more than 125,000 members organized into approximately 450 chapters. Our mission is to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. Over the last 10 years TU volunteers and staff have participated in numerous hydroelectric relicensings from California to Maine, and I assure all of you here that I am not the usual face of Trout Unlimited participating in those processes. The typical TU participation in the hydroelectric relicensing is done by our volunteer members. Typically, an angler or group of anglers in a community with a

[5] *Wisconsin Public Service Corp. v. FERC,* 32 F.3d 1165, 1168 (7th Cir. 1994)

river affected by a hydropower dam, who care enough about that river to devote significant amounts of their free time to attempting to approve the way the dam affects the river's biological functioning.

That gets me to two of the most important concerns of our members with respect to the FERC relicensing process. The licensing process has to be structured to give members of the public, including those volunteer TU members, early and meaningful input into the process. I would submit that this is not just something our members want for their own selfish fishing concerns, but something that makes the whole process more efficient and contributes to a better overall result in the relicensing process.

Now, in terms of fish passage, our members' second priority is high quality fish passage because, without fish passage, the rivers and the fisheries simply won't function. Many of our local chapters are located on waters that are just a shadow of their native fisheries. I do most of my work in the East and a great deal of it in Maine, and I can't really improve on the way Congressman Allen described the situation in Maine, but in that State entire runs of Atlantic salmon and sturgeon are near extinction, runs of shad and alewives are a fraction of their historical numbers, and the single greatest cause of these depressed fisheries, some of them potentially highly valuable commercial and recreational fisheries, is inadequate fish passage at dams, many of them hydroelectric dams.

Poor fish passage on hydro dams has been an unfortunate fact on many rivers in this country, and good fish passage should be one of the bare minimum goals of every relicensing. Now, TU has been most effective in accomplishing its goals in relicensing by participating in collaborative settlement negotiations. And this is why we believe that the discussion draft H.R. 1013 could not have come at a worse time.

Over the last several years, the trend in relicensing has shifted strongly away from traditional adversarial relicensings toward collaborative settlements. These collaboratives give organizations like TU and other community members meaningful input into the process and the result of the relicensing, and also gives licensees better control over the final terms of the license. As that trend continues, we are getting better at reaching settlements more quickly and more efficiently. To further promote efficient collaborative settlements, FERC is working on the rule that a number of people here have already discussed today, and that rule would increase the incentives to settle these cases, increase the incentives to negotiate, and make that process move much more quickly.

Trout Unlimited opposes the discussion draft before the subcommittee today because this proposal runs absolutely contrary to the primary concerns of TU members around the country. The draft will reduce public participation in the relicensing process, and it will reduce substantially protections for fish passage.

We also have a deep concern that the discussion draft would derail existing efforts and the existing evolution to move the relicensing process toward collaborative processes and would cut that evolution short.

Now, everyone has discussed, and it is in our written testimony in great detail, all the additional procedures required by the discus-

sion draft, and I won't go over them again here. But I would like to make the point that these steps, by their very nature, will serve to cut the public out of the relicensing process in a number of ways. The language of the bill itself does not provide for public participation in any of the new required procedural steps, and those procedural steps are precisely the kinds of government processes that our volunteer members find it most difficult to participate in, things like a trial-type hearing or a FERC-sponsored dispute resolution.

More importantly, however, I think, is the fact that the procedures fundamentally alter the balance of power in relicensing, and will substantially reduce the incentive of applicants to enter into meaningful settlement discussions, the type of discussions that we found most productive at achieving the results that work for everybody.

In those collaborative processes, our Trout Unlimited members and other member of the public can have real and early input into things like the early studies that drive the whole relicensing process. And among the factors that motivate license applicants to sit down in the first place and enter into those negotiations and enter into those collaborative processes are the requirements of Section 4(e) and Section 18 as they are currently drafted. Changing those requirements even procedurally will change the delicate balance that is driving the evolution of the relicensing process toward more collaborative settlements.

The draft Title III does more than just change the procedures, however, it would significantly weaken the protections that Federal prescriptions now provide for rivers and fisheries. Currently, Federal agencies are charged with developing license conditions that provide certain basic levels of protection that every dam has to meet. Hydropower facilities should not undercut the purposes of Federal land that they impact, and they should provide for basic effective fish passage. Agencies are not required to balance these basic protections against the profitability of the applicant or against other factors.

H.R. 1013 would fundamentally change the nature of Federal conditioning authority by requiring the agency to balance required measures against—I think the number that has been thrown out—11 other factors. Although this balancing is couched in terms of a procedural requirement, it changes the substance of the statute. And I should add that in requiring hydroelectric dams to meet certain basic measures of environmental protection is no different than the statutes that apply to coal-burning power plants, to facilities that dump pollution into waters. All of these facilities, including most other facilities that generate electricity have certain basic minimum environmental requirements that they are required to meet.

In conclusion, what I would like to do is assure you that our organization's concerns are not just about fish, they are also about people and also about money. The rivers of this Nation provide more than 557 million days fishing for 34 million anglers who spend $41 billion a year in pursuing their hobby. This is why a group of State fish and wildlife agencies, sport fishing groups, and other fishing industry groups have all signed on in opposition to

H.R. 1013, continue to heed their views and reject the proposed hydro title as currently drafted. Thank you.

[The prepared statement of Leon Szeptycki follows:]

PREPARED STATEMENT OF LEON SZEPTYCKI, GENERAL COUNSEL, TROUT UNLIMITED

My name is Leon Szeptycki, and I am the Eastern Conservation Director and General Counsel of Trout Unlimited. I am testifying today on behalf of TU's volunteer members around the country. Trout Unlimited ("TU") is a nonprofit organization with more than 125,000 members around the country organized into approximately 450 local chapters. Our mission is to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. Over the last ten years TU volunteers and staff have participated in numerous hydroelectric relicensings from California to Maine. Numerous TU chapters have as their home waters a river affected by one or more hydroelectric facilities, and the impacts of those facilities are almost always the primary focus of those chapters' volunteer activities.

TU agrees that reforms to the hydroelectric relicensing process are needed, but we do not agree that legislative changes to the Federal Power Act are necessary or appropriate to bring about those reforms. The last ten years have seen a major evolution of hydroelectric relicensing under the Federal Power Act. The trend has shifted strongly away from traditional, adversarial relicensings, towards collaborative settlements that serve the interests of all the participants. As that trend continues, we are getting better at reaching settlements more quickly and more efficiently. To further promoted efficient collaborative settlements, FERC is currently working on rules that would make the relicensing process more streamlined and that would further promote collaborative settlement as the preferred mode of relicensing. The hydropower industry and the conservation community are both actively engaged in this rulemaking, and we are very optimistic that the final rule will be one that improves the process and that all sides support.

Trout Unlimited opposes H.R. 1013, which has been incorporated into the discussion draft energy bill as Title III (I will refer to the proposal throughout as H.R. 1013). H.R. 1013 would create more red tape and delay and would severely reduce protections for rivers and fisheries impacted by hydroelectric generation. We also have a deep concern that H.R. 1013 would derail existing efforts to reform the relicensing process and cut short the current trend towards collaborative settlements of relicensing cases.

1) TU has used the existing process to work cooperatively with some license applicants to improve dam operation for valuable fisheries.

TU has been involved in some of the earliest and largest settlements of relicensing cases. To name just two early examples, our Idaho and Montana councils were at the center of a deal with what is now Avista to relicense a series of dams on the Clark Fork River. In the East, our Maine council played an active role in reaching a deal to relicense dams then owned by Central Maine Power on the Rapid River, one of the state's best brook trout fisheries. In these settlements, along with others we have worked on in the last five years, the applicant was able to work collaboratively with anglers, boaters, local communities, state agencies, and federal resource agencies to obtain their license promptly and cost effectively. The deals reached in those cases preserved the profitability of the projects while at the same time enhancing river health and the opportunities for river recreation.

The road has been bumpy at times, and not all collaborative settlements have worked as well as others. However, everyone involved in the process has learned a tremendous amount about how to make collaborative relicensings work better, and are now implementing what they have learned. This body of knowledge is improving ongoing relicensings and influencing the current FERC rulemaking.

A common feature of successful settlements has been the willingness of the applicant to sit down early in the process and receive input from all interested parties, including volunteers and community members. The willingness of the licensee to listen to the views of these concerned citizens on preliminary issues, most notably the studies that drive the relicensing process, ultimately paves the way for a smoother relicensing and a faster settlement. These relicensings can only settle if all participants understand, based on the studies done during the process, the impact of a settlement on their particular interest, be it fishing, recreation, or the ecological health of the river.

TU has a particular concern about the need to facilitate the participation of volunteer community members in the process. Most of TU's participation in relicensings is driven by concerned volunteers who devote extensive hours to what are for them very intimidating proceedings.

Relicensings have generally gone badly—taken too long or gotten stalled out entirely—when applicants have refused to listen to the views of stakeholders and take them into consideration. People are unwilling to settle when they do not trust the information produced by the process or when the information simply does not give them a basis to make a sound judgment.

2) Collaborative settlements are becoming more efficient, and are becoming the preferred mode of hydropower relicensings.

The use of collaborative settlement is increasing, and is producing positive results for applicants and for river health. In one of the first significant collaborative processes, parties were able to reach a settlement with Washington Water Power (now Avista) to resolve licensing issues for a multiple dam project on the Clark Fork River in Idaho. The settlement will allow the projects to function profitably and will provide a host of benefits for watersheds affected by the project. Most notably, over the life of the license more than $20 million will be spent to improve habitat in the basin for bull trout, cutthroat trout, and other species.

Just last month, and at the other end of the spectrum in terms of magnitude, Pacificorp announced a settlement in a relicensing of a project on the American Fork River in Utah. The settlement, which included TU, the National Park Service, and the U.S. Fish and Wildlife Service, will allow the very small (one megawatt) American Fork project to operate until 2006, at which time it will be decommissioned. The agreement will restore river habitat on the American Fork for Bonneville cutthroat trout, recreational opportunities in the American Fork canyon, and opportunities for the public to enjoy the Timpanogos Cave National Monument.

The collaborative licensing process is flourishing. Around the country licensees are reaching settlements that allow them to continue to function profitably and that bring significant benefits to the rivers that drive their turbines. In some cases, these settlements are reopening long closed-off spawning for habitat migratory fish such as salmon and steelhead trout. Other examples of successful settlements over the last several years include settlements with PGE on the Sandy River in Oregon, with PacifiCorp on the White Salmon River in Washington, with the City of Tacoma on the Cowlitz River in Washington, with Florida Power and Light on the Upper Kennebec River in Maine, and with New England Power and Gas on the upper Connecticut River in New Hampshire.

Further evidence of the growing success of collaborative settlements comes from California. California is currently faced with a flood of relicensings. Over the next 15 years hydroelectric licenses for approximately 150 dams will expire in that state. The California relicensings are overwhelmingly being done as collaborative settlements. Applicants are pursuing collaborative relicensings, with the goal of settlement, on the Pit 3, 4, 5 Project (Project No. 233), the Klamath Project (Project No. 2082), the Stanislaus-Spring Gap Projects (Projects No. 2130, 2005, and 2067), and the Big Creek Projects in the Upper San Joaquin Basin (extensive project numbers), to name just four. Moreover, two California projects that were among the most protracted relicensings on FERC's books recently reached settlements through collaborative negotiations. Both the Rock Creek Cresta project and the Mokelumne project recently used the collaborative licensing process to break logjams that had made those licenses more than ten years overdue.

3) FERC has proposed new rules to improve the relicensing process, and H.R. 1013 would undermine that rulemaking and the trend towards negotiated relicensings.

To further the momentum of these successful collaboratives, FERC is currently engaged in a rulemaking to improve the relicensing process. On February 20, FERC issued a draft rule that would create a new, default relicensing process know as the "Integrated Licensing Process," or ILP. The ILP incorporates many of the practices that have driven the most successful settlements, including early consultation between FERC, the applicant, resource agencies, and other parties; early, prefiling input from stakeholders and resource agencies on studies; better integration of NEPA analysis, the licensing process, and federal conditioning; and strict timetables. TU is particularly pleased that the new rules would appear to facilitate the early participation of citizen's groups in the relicensing process. While comments on the rule are not due for a month, and we do not yet know how various relicensing participants will react to all parts of the proposed rule, the proposal has great promise to accelerate the current momentum towards a more streamlined and collaborative process.

In this context legislation is simply not needed. The hydropower relicensing process is being reformed by its primary participants, and H.R. 1013 would impede the progress towards reform. Currently the balance of interests struck by the Federal

Power Act drive license applicants, the conservation community, recreational interests, and resource agencies to negotiate because of the risks to all parties posed by the traditional relicensing process and the benefits of the collaborative process. H.R. 1013 would profoundly disturb this balance, and a would create a process so favorable to project owners, and so unfavorable to the health of fisheries, that applicants would have far less incentive to negotiate and to take the steps early in the licensing process needed for meaningful settlement negotiations. H.R. 1013 as now drafted would produce relicensings that take longer, cost more, and fail to protect our nation's rivers and their fisheries.

4) Specific Problems with H.R. 1013.

H.R. 1013 has three critical flaws. First, it creates additional procedures that will make relicensings lengthier and more cumbersome. Second, those additional procedures severely reduce the amount of environmental protections currently afforded rivers under the Federal Power Act. Third, the processes created by the bill are heavily weighted in favor of applicants and would tend to cut the public out of key parts of the conditioning process.

a. H.R. 1013 would create delay and unneeded red tape. H.R. 1013 would add three significant steps to the process of federal conditioning under both section 4(e) and section 18 of the Federal Power Act. First, any applicant who proposes an alternative condition is entitled to a trial type hearing before the federal agency. This type of hearing would potentially consume huge amounts of time and resources. Second, the conditioning agency would be required to submit to FERC a written statement explaining the basis for its decision and demonstrating that the agency gave equal consideration to a variety of factors, including energy supply, cost, navigation, and flood control. This provision would create duplicative and wasteful effort, as FERC already spends a great deal of time in each relicensing examining these factors. Requiring the resource agencies to look at these factors also sets them up for failure, as they simply do not have the expertise or the resources to devote to these issues. Third, if the resource agency fails to adopt the applicant's proposed conditions, FERC can refer the matter to its Dispute Resolution Service, which must issue an advisory opinion within 90 days. Again, this simply would add more time and expense to the process, and is unnecessary in light of the strides that are currently being made towards negotiated settlements of these issues.

To make it clear, I do not mean to suggest that the section 4(e) and section 18 conditioning process is not in need of improvement. For example, TU would have no objection to requiring a better administrative record and allowing all parties access to a streamlined appeal process. The procedures outlined in H.R. 1013 simply go to far. TU is particularly concerned about this aspect of the bill, because so much of our participation in hydropower relicensings is handled by volunteer members with limited time and, except in very rare cases, no money. Effectively run collaborative negotiations provide a real opportunity for input from volunteer citizens and the local community. Trial type hearings, cumbersome appeals, and FERC-run dispute resolutions tend to shut out these critical voices.

b. H.R. 1013 reduces the environmental protections provided by sections 4(e) and 18. H.R. 1013 would substantially reduce the environmental protections current law provides for rivers affected by hydropower, and would result in a long term barrier to the health of those rivers. Sport fisheries, recreational opportunities, and aquatic health would all suffer.

Section 4(e) and section 18 currently function to set the basic, minimum level of environmental protection that must be in place at hydropower projects. Section 4(e) requires conditions that are "necessary for the adequate protection and utilization" of the federal lands impacted by a project. Section 18 requires the construction, maintenance, and operation of fishways required by the Departments of Interior or Commerce. When it passed these provisions, Congress made the correct judgment that federal lands, rivers, and fisheries are public resources, and that federally licensed hydropower dams should include a minimum level of mandatory protection for those public resources.

The core licensing provisions of the Federal Power Act require the balancing of power generation with other values. It is entirely appropriate, however, that this balancing be buttressed by certain basic levels of environmental protection. Ensuring that no dam degrade the core purpose of federal lands and requiring that every dam include some measure to allow fish to migrate should remain basic minimum safeguards.

The issue of fish passage is one that is particularly important to the more than 125,000 trout and salmon anglers that belong to TU. Throughout the country countless fisheries have been impaired or even extirpated because of hydroelectric dams with inadequate fish passage. In New England, for example, power generating dams

utterly destroyed the region's runs of Atlantic salmon, shad, and sturgeon. Maine once supported a robust commercial fishery for Atlantic salmon; now, even sport fishing for the tiny remnant population of this fish is forbidden. The single most significant cause of this decline are the hundreds of dams that impede fish passage on the state's rivers. Section 18 of the Federal Power Act is absolutely critical to restoring depleted fisheries and preserving those migratory fisheries that remain. The improvement of fish passage has created some of the most exciting conservation successes we have seen in recent years. On the Sandy River in Oregon, the Cowlitz and White Salmon rivers in Washington, the Kennebec River in Maine, and others, improved fish passage is making possible the restoration of entire watersheds and their fisheries.

H.R. 1013 would alter the fundamental requirements of section 4(e) and section 18. The current statute requires agencies to set conditions that protect the core purposes of federal reservations and provide for fish passage. H.R. 1013 would require those agencies to demonstrate that they have given "equal consideration" to a host of other factors. This language, included in the amendments to both sections 4(e) and 18, represents a straightforward roll back of the protections of these important provisions. In addition, as discussed previously, the procedural burdens imposed by H.R. 1013 would fundamentally alter the balance of power in negotiations and the licensing process generally.

The notion that cost, power generation, and these other factors play no role in the current conditioning process is simply not true. In the numerous licensings that are now being handled through multi-party collaborative processes, the cost concerns of license applicants, as well as the other concerns enumerated in H.R. 1013, shape the fishway requirements and other conditions on the license that become part of the settlement signed and supported by all the parties. This is the best and most efficient way of dealing with these issues and balancing the various demands place on the river. Dramatic legislative intervention in the way this process is evolving risks placing a club in the hands of license applicants, use of which may suddenly seem more attractive than negotiating a settlement.

The committee should also be skeptical of the claim that fishway requirements and section 4(e) prescriptions are dramatically reducing available power by closing down otherwise profitable projects. Certainly, good fish passage costs money, and can affect the operations of a project. Although there have been cases where the need for fish passage has contributed to making a project unprofitable, that has only happened in cases where the projects have generated small amounts of power and been economically marginal to begin with. The most celebrated example of recent dam removal is an excellent illustration of this. The Edwards dam in Maine was a small, uneconomical project that had blocked passage upriver for more than 100 years. It was clear that fish passage was needed at the dam, and it was equally clear that, for such an economically questionable project it was cheaper to remove the dam than put in fish passage and keep generating. All the parties reached a negotiated settlement that opened up 18 miles of river to salmon, shad, stripers, alewives, and sturgeon, effectively bringing a major stretch of river back to life. Economical projects that generate meaningful amounts of electricity are simply not being compromised by sections 4(e) and 18. The proposed changes to section 18 would dramatically increase the chance that potentially major and economically valuable fisheries would be sacrificed to keep small, marginal projects operational.

c. H.R. 1013 would cut the public out of key parts of the licensing process. All of the processes created by H.R. 1013 dramatically favor the applicant, and tend to cut the public out of critical phases of the relicensing process. H.R. 1013 would allow applicants to propose alternative conditions, which in turn would trigger the series of additional administrative processes discussed above. While other parties are not prohibited from proposing alternative conditions, only conditions proposed by the applicant are entitled to any procedural protections. Under H.R. 1013 the federal agency would not even be required to read conditions proposed by a citizens group or local community. This fundamental disparity is exacerbated by the nature of the various new procedures created by H.R. 1013. The statute does not provide for the participation of other parties in any of the additional procedures—the "trial type" hearing on the alternative conditions, the written statement to FERC, or the participation of the FERC Dispute Resolution Service. Even if public participation was a requirement, the time, expense, and required expertise for these proceedings (particularly given the demands of the existing process) would tend to exclude nonprofessional citizens groups, local residents, and communities. Even state agency professionals, given limited resources available for the states, will almost certainly not be able to participate.

5) Conclusion.

H.R. 1013 could not have been introduced at a more inopportune time. Collaborative settlements are flourishing. FERC has just proposed a significant new rule that will both streamline the relicensing process and allow for more meaningful public participation. H.R. 1013 would derail these processes and produce more difficult, adversarial, and burdensome relicensing processes.

Using rivers to generated power has had a negative impact on the health of this nation's rivers for over one hundred years. Anglers, boaters, and others around the country are denied countless opportunities to recreate because of hydropower facilities. In light of this historical and ongoing impact to public resources, sections 4(e) and 18 of the Federal Power Act provide perfectly reasonable and wise basic minimum protections for our nation's rivers. Congress should reject any effort to water down these important provisions of the Federal Power Act.

Mr. BARTON. Thank you. The Chair would now recognize himself for first question period of 5 minutes. Mr. Otter and Mr. Issa will be recognized for 8 minutes when it is their turn because they deferred their opening statements.

Mr. Robinson, how many Federal agencies could, if they want to, under the current law, place a 4(e) mandatory condition on a relicensing application before your agency?

Mr. ROBINSON. Well, at least the Forest Service for forestlands, and the Department of Interior, in many instances for Tribal reservations, and at times we also get other bureaus of the Department of Interior doing mandatory conditions.

Mr. BARTON. So at least four, and there could be more than that.

Mr. ROBINSON. Yes.

Mr. BARTON. And under current law, if an agency places a mandatory restriction or condition—I shouldn't say restriction, it doesn't necessarily have to be a restriction—mandatory condition, FERC has no ability to request that that be modified or reviewed.

Mr. ROBINSON. No.

Mr. BARTON. You just have to accept it or reject it, is that correct?

Mr. ROBINSON. Well, we have to accept it. We don't have a mechanism to reject it. We can not issue the license, but for a relicense that is not really a viable option.

Mr. BARTON. Now, I note that your agency expressly declined to tackle the issue of mandatory conditioning in this Notice of Proposed Rulemaking that has been alluded to by some of our witnesses, and that the staff, in its Section 603 report, states that changes in regulations, policies and procedures while expected to alleviate the situation, are no substitute for legislative action—and I quote that—"no substitute for legislative action." It would seem that your agency's position seems to be pretty clear legislation is needed if we are to fix the licensing and relicensing process, is that correct?

Mr. ROBINSON. As I said in my opening statement, I think that there are two things that are going on right now that will help to improve, one is the effort that we have in developing the integrated licensing process, but that goes to administrative relief. On the legislative relief, yes, I do believe that the Title III is the only way to try to bring some semblance of coherence to the licensing process where you have mandatory conditions and fishway prescriptions being brought into the license without any ability to review them at the commission.

Mr. BARTON. This subcommittee is aware of the complaints that Section 4(e) conditions encompass geographic and species issues that are beyond the actual Federal land area supporting the condition. Among other problems such action places the 4(e) agency in direct conflict with other Federal agencies or State agencies having jurisdiction over project lands, including the Federal Energy Regulatory Commission and State Clean Water Act certifications. This is particularly troublesome when a small or very small parcel of Federal land may be located within hydroelectric project boundaries.

Would FERC favor an amendment to the proposed Barton discussion draft that would require 4(e) conditions to be proportional and restricted to the area of Federal land located within a project boundary?

Mr. ROBINSON. Yes.

Mr. BARTON. Long question, short answer. Now I want to speak to you, Mr. Masonis. I don't want you to feel unloved here, and we appreciate your testimony.

In your written testimony—and I think I am quoting this correctly and, if I am not, correct me—you state, or your group states, that fish passage in Federal lands protection are minimum environmental requirements that every dam operator on a public river must meet regardless of cost.

Now, I don't have a problem with the first part of your statement, fish passage in Federal lands protection are minimum environmental requirements, but I do have a little bit of a problem, or a lot of a problem, which is "regardless of cost." Do you not think that there should be some consideration of the cost?

Mr. MASONIS. Mr. Chairman, I do think there should be some consideration of the cost, and my experience working in relicensings with respect to fish passage in particular has been that the agencies are painfully aware of the cost of alternative fish passage designs when they go through the process of mandating those.

Our point in the testimony was to suggest that fish passage is a fundamental element of a healthy river ecosystem since these fish need to migrate. Even resident fish that do not go out to sea, they often migrate in their life history. And there is really no substitute for that. You can't substitute something that is not fish passage for effective fish passage, and that was the point we were trying to get across.

Mr. BARTON. And, last, but certainly not least, Mr. Szeptycki, where I come from TU is an Aggie term that we refer to the University of Texas when we are trying to be derogatory. I know your group is a very positive group, and when you said you represent TU, my head kind of jerked up, so that's my condition reflex.

Mr. SZEPTYCKI. Well, as a graduate of the University of Kansas, I apologize.

Mr. BARTON. What we are trying to do in the proposed draft, we are not trying to take groups like yours out of the loop. In fact, I think you are a very positive influence in the discussions. But under the current law, if a Federal agency sets a mandatory condition, there is nothing that can be done about it. I mean, it is just there. And what we are looking for—and maybe the discussion draft is not the perfect way to do it—but what we are looking for

is some way to maintain input, but put some sort of consideration of what we call cost-benefit analysis into it so that there is some give-and-take. And right now, unless it just happens—I think you are the one that said there have been great discussions in a collegial nature and the discussion draft disrupts that—there is no process that guarantees give-and-take under the current law.

Does your group oppose the principle of changing the current system so that there has to be some give-and-take while maintaining your right to participate?

Mr. SZEPTYCKI. I guess I have a couple of responses to that question. One is that the give-and-take is occurring. Most of these relicensings are being handled through collaborative settlements, and there is a lot of back and forth about the precise nature of the fish passage, the cost of different alternatives, and the efficacy of different alternatives. And even in relicensings that aren't being handled formally through the collaborative process, there is a lot of back and forth between the license applicants and the agencies setting out the prescriptions. But I think that the thing that drives these discussions—and, in particular, you started out, Mr. Chairman, talking about the participation of Trout Unlimited—being careful not to use the abbreviation—in these relicensings, and you have got to understand, these people are not professional fish conservationists. They know a lot about the river, they know a lot about fish, but they are devoting their free time to this. And if it is an adversarial, highly bureaucratic government process, they really can't participate in it.

What happens in these collaboratives is the licensees sit down with stakeholders, including the Trout Unlimited members, and receive their input on how the whole licensing is going to go, including the studies that they are going to do that are ultimately going to drive the conditions on the license, including the fishway prescriptions and the 4(e) conditions, and one of the things that is motivating them to sit down and talk is their need to have control over the process and the balance struck under the Act, as currently drafted, including those minimum environmental protections that are in Section 4(e) and Section 18. And what our concern is that those prescriptions—if provisions weren't in there setting out those basic conditions that have to be met, that licensees wouldn't have the same motivation to sit down at the beginning in order to start crafting a result that will work for everybody, and sit down at the beginning and receive input from the whole community, including our members.

Mr. BARTON. Thank you. The Chair would recognize Mr. Allen for 5 minutes.

Mr. ALLEN. Thank you, Mr. Chairman, and thank you all for your testimony here today. Mr. Robinson, you have done this integrated relicensing process, you have been through it. How much does FERC estimate that its new rule will accelerate the licensing process, and by how much do you estimate it will reduce costs for applicants?

Mr. ROBINSON. Our objective with the ILP is to have the licenses issued within the 2-year timeframe that extends from the period that the application must be filed by statute, and the expiration of the license. We are looking at about 17 months to get the ILP li-

censes issued so that we don't have annual licenses being issued on these projects. That will happen if everyone cooperates. We are hopeful that people will, agencies will—State agencies in particular—but we will have to see how that works out. That is the way it is designed.

Mr. ALLEN. What would you say is the current average?

Mr. ROBINSON. Currently, for the traditional licensing process, our median processing time is about 47 months, 3½ years approximately, so it is a significant savings there.

We are a multi-shop place, you can pick your method. Our alternative licensing process has a median timeframe of around 16 months from the application being filed. That is used on approximately 30 percent of our relicense applications today.

Mr. ALLEN. And the reduction in cost that you estimate for applicants, once you have done this integrated relicensing process, there is a significant reduction of cost to the applicant, is that right?

Mr. ROBINSON. That is correct, and I am afraid to try to do that from memory, I will have to provide that number. But the ILP is designed to have a significant savings to the applicants, and everybody involved in the process for that matter.

[The following was received for the record:]

Cost and Time Estimate for Licensing Process

Proposed Rule RM02-16-000 estimates the following time and costs to prepare a license application:

Project Size	Time (hours)	Cost (dollars)
Traditional Licensing Process (TLP)		
Projects greater than 5-MW	46,000	2,300,000
Projects smaller than 5-MW	10,000	500,000
Integrated Licensing Process (ILP)		
Projects Greater than 5-MW	32,200	1,610,000
Projects Smaller than 5-MW	7,000	350,000

Expected reductions in time and cost for use of the ILP process are a result of: (1) integrating application preparation with environmental scoping; (2) early coordination among the Commission and federal and state agencies and tribes; (3) firm schedules and deadlines for all participants; (4) early development of a study plan and early resolution of any study disagreements; and (5) increased involvement of Commission staff throughout the licensing process.

Mr. ALLEN. Well, I want to commend you, first of all, because that change, just by itself, that administrative change clearly should make the process of relicensing, which has suffered significant problems, move much more smoothly. And clearly that is an important step.

Ms. Keil, in your testimony where you referred, I think, to the last compromise that was hammered out last year—I am not sure if you did, I think it was in there somewhere——

Ms. KEIL. I am not sure I did, but you could ask me about it anyway.

Mr. ALLEN. I can ask you about it anyway. Do you now oppose enactment of Title IV of H.R. 4, as passed by the House during the 107th Congress?

Ms. KEIL. I think it is important, Congressman Allen, to look at the evolution since the last Congress and the improvements that have been made to that bill. From the industry's perspective, the standard that has been inserted is one that mirrors the statutorial language. If we look at the one for 4(e), for instance, ''protect and utilize the reservation'' is indeed the language of the statute. We believe that mini-trial type hearings and other provisions are good

Sunshine, good government provisions, and what has been referred to as the "super status" for the applicant is one that we think is justifiable and important.

Applicants come to the table are licensees with the most information of any party about the license that is before the commission, and are really in the best position to propose least cost alternatives.

I would like to point out that nothing here reduces the amount of public participation that would occur earlier in the process, and indeed that is vast, and we value the participation of folks who come to our licensings. We actually provide support to American Rivers and TU in our licensing so that they can come to the table as equal participants, and we would anticipate continuing to do that.

Mr. ALLEN. But they would have less leverage—under the proposed legislation, they would have less leverage than they have at the present time.

Ms. KEIL. At that final step, I think that is right. Earlier in the process, I would disagree.

Mr. ALLEN. Mr. Robinson, are you arguing that FERC should be able to substitute its judgment for that of the resource agencies? The chairman was asking you a question in which you conceded there were at least four other agencies which could impose mandatory conditions. And the question is does FERC—what expertise does FERC have to judge the adequacy of license conditions for fish passage and protection of Federal lands, and isn't giving FERC the responsibility to make those decisions as illogical as giving the Department of the Interior authority to be the final arbiter of economic issues?

Mr. ROBINSON. Title III, of course, doesn't do that at all, it keeps the authority with the Secretary. But if the idea was to give the commission some review of those conditions, I would just say this. It takes two aspects, two areas of expertise to license a project. One involves folks—I am an aquatic ecologist myself—people who are trained in those fields, who spend their entire professional career dealing with hydropower projects and how they affect natural resources. I have a staff of probably 60 or so people that do that day in/day out. They have the expertise and knowledge of how hydropower projects affect fish, wildlife, and everything in between. On the other side, what you need is the local knowledge, those folks who deal day-to-day with those resources, maybe don't have the expertise in hydropower impacts or hydropower mitigation or protection measures, but do know the resource. That is why we have to work cooperatively together to try to find solutions for these projects, the types of mitigation measures that come into play. So I think we do have that expertise, but so do the agencies and so do others.

Mr. BARTON. The Chair would recognize Mr. Radanovich for 5 minutes.

Mr. RADANOVICH. Thank you, Mr. Chairman. Mr. Robinson, I again would like to go over the need for legislation at least from my view of the perspective of sort of our experience on relicensing and the court involvements and the court decisions that lead to

what I view as somewhat of a narrow view of the regulations that govern relicensing without economic input.

The work that is being done on the collaborative remedies within the department still belies, in my view, the need for the legislation that corrects that. Can you give me a better dynamic about how the courts and court judgments have kind of skewed the process so a more balanced interpretation isn't the result of it?

Mr. ROBINSON. For better or worse, I have been at the commission long enough to see this progression of events that go to how the commission can treat mandatory conditions and prescriptions. When I first started at the commission, they were inappropriately, I think, viewed as just recommendations to be treated as you will. Over time, the courts have taken it sort of to the other extreme where the commission is now in a position where they have no potential to interact or discuss the relative merits of a mandatory condition or a prescription, and at times that puts us in a posture where we have to issue a license where the record may not, in the commission's view, support those conditions which we must, by the nature of the statutes and the interpretation of the court, must include.

I would like to, if I could, just take one more second to talk about the cost issue. It occurred to me after I finished with Mr. Allen. There are actually two components to cost to relicensing. One is the process itself, and the other is the outcome, those measures that are required as the result of that process.

One thing we did look at was to see what the costs are associated with what are called protection, mitigation, and enhancement measures for projects where you have 4(e) authority and prescriptions and projects where 4(e) prescriptions were not imposed because there are no reservations involved. Those numbers, as I have in here, where there are no 4(e) requirements is around $418 per kilowatt on average for projects. For those projects that did have those conditions in them, it was $590. I think it was 2.7 times more expensive to, as a result of licensing where you had 4(e) in prescriptive authority. There are projects currently before us right now where I think we have some issues with the agencies about whether or not very costly measures are in fact needed, but will have no opportunity to make a modification of that or change it. They will go in if they are prescribed or submitted to the commission.

Mr. RADANOVICH. Thank you very much. Mr. Masonis, thank you for being here, and I want to preface my question a little bit because under the law FERC must take into account a wide range of factors, including not only the environment of the situation, but also energy economics, clean air, flood control, drinking water, irrigation and transportation. And in a recent article of Inside FERC, I think you were quoted as saying that if there is any objection to the mandatory decisions, that they can be challenged in court, when asked about FERC's recourse if disputes over licensing conditions arise.

It seems to me at least—and, again, I think we all want to kind of do what the law says, and that is seek a balance—and, yet, it seems to me that a lot of your constituency or the environmental community will find a sympathetic court to, at least in my view, give an unbalanced decision, which seems to be the history to me,

which is why I feel the need for the legislation. Is it something that we should just go to the courts and do, and find out where we can get a sympathetic judge and where we can't, and is that what we are up against here, if we are really looking for balance, I think, on our approach, which would lead to timely consideration it permits as well.

Mr. MASONIS. I appreciate the question. I think that there are ways to find that balance in the process as it exists now. There are clearly cases that do end up in court where issues regarding mandatory conditions have not been resolved. I don't want to suggest that is not the case, but what I do want to suggest is that the process itself has plenty of opportunity right now, and it is improving with the rulemaking that Mr. Robinson has been discussing with members of the subcommittee today, to identify those conditions that are necessary in order to protect fish and wildlife and the environmental values of rivers, taking fully into account the other issues that you mentioned. Sometimes parties disagree about that, but that dialog is taking place.

I think another part of my answer is that one of the critical flaws that we see in this legislation is the fact that groups like ours are not there at that critical final stage, as drawn out in Mr. Allen's question. Last year I believe we had legislation that included an opportunity for groups like American Rivers and Trout Unlimited and Tribes and other interested parties to also offer alternatives to a mandatory condition and have a full airing on equal footing with the utility. That is not the case under this current legislation.

Mr. RADANOVICH. Thank you. If I may ask other questions later, if possible.

Mr. BARTON. We will do a second round. Mr. Walden is recognized for 5 minutes.

Mr. WALDEN. Thank you, Mr. Chairman. Ms. Keil, I welcome you back before the Congress and appreciate your testimony, as well as that of the other witnesses. Can you talk a little bit about some of the relicensing that you have been engaged in, and some of the dam removal efforts that Portland General Electric has been involved in as well, and just the costs associated there, what that means to the average ratepayer?

Ms. KEIL. Sure. As I mentioned in my testimony, we have five projects. One of them is going to be removed. That removal is the result of a forecast by the utility of an unacceptable license coming down the road, and will cost PGE's customers upwards of $20 million by the time we are done with that removal.

Mr. WALDEN. $20 million?

Ms. KEIL. $20 million, not including the loss of 22 megawatts of hydropower from that project.

Mr. WALDEN. Will you have to go acquire that power in the open market then?

Ms. KEIL. Yes. PGE is a company that is short—that is to say we already don't have enough native resources to serve our load. And so we will be out buying that power in the market from whatever resource we can get it from, which is a serious disadvantage to PGE as a company and to its customers.

The other four projects are going forward in relicensing, and those costs will range—probably the most expensive one of those

will be upwards of $30 million of process costs alone by the time we are done. And for the smaller projects, my guess is I will bring them in around $15 million worth of process costs. That has nothing to do at all with protection mitigation and enhancement measures that will follow on.

Mr. WALDEN. What is the total price tag with the process cost and what you anticipate will be the cost put on the projects?

Ms. KEIL. A couple of the projects are a little too early to guesstimate the eventual cost, but if I was to guess, the one that we have farthest along is probably going to be $150 million worth of enhancements. The other ones will be somewhat less because the projects are smaller, but I wouldn't doubt that they will crest $50 million.

Mr. WALDEN. So you are looking at several hundred million dollars then in project enhancements?

Ms. KEIL. Yes. And that is just to maintain the production we have, not to add anything to the system.

Mr. WALDEN. Will you be able to maintain the same level of output, do you thin?

Ms. KEIL. No. We will start to lose production, we are going to lose flexibility. One of the projects we will lose probably close to 20 percent of production as a result of licensing.

Mr. WALDEN. Twenty percent of production.

Ms. KEIL. About 20 percent.

Mr. WALDEN. And that is not the dam you are going to remove.

Ms. KEIL. That is not the one we are going to remove, that is right. That is one we are keeping.

Mr. WALDEN. Do you think the language in the Barton bill fully resolves the problems you face?

Ms. KEIL. You know, Congressman Walden, I don't think you could ever fully resolve this issue. There is a natural tension here, and there will always be a natural tension here.

Mr. WALDEN. And there should be, frankly.

Ms. KEIL. Yes, and there should be. I think it leads to creative solutions on all parts when interests can come to the table. I think this bill makes a significant step forward in allowing more information to come to the table and to encourage parties who currently have no interest in negotiating to come to the table and try and reach a solution that solves not only their problems, but also those of the utility's customers.

Mr. WALDEN. Mr. Masonis, I am just curious about your views on the bill and your comment these requirements should take place regardless of cost. Obviously, in the Northwest, as you well know, the big debates of the Columbia and Snake system and the passage along the Snake River dams especially. What is the position of your organization relative to either breaching the Snake River/Columbia River dams, which ones, if any, do you think that is the solution to, and do you support removal of?

Mr. MASONIS. Congressman Walden, we support—when the Federal salmon plan was being issued in 2000, we were supportive of removing the four lower Snake River dams, and continue to be supportive for the reason that based upon our assessment of the science regarding Snake River salmon recovery, it is impossible to recover those stocks with those dams in place.

Mr. WALDEN. And you don't believe there is a fish passage or a trap-and-haul that would work?

Mr. MASONIS. There is fish passage at each of the four dams. The problem is that the cumulative mortality is so great and we have actually spent, as a region, primarily as ratepayers but also as taxpayers—the price tag most recently I saw was somewhere around $3.5 billion. A lot of that cost has been associated with——

Mr. WALDEN. Are there any Columbia River dams you think should be removed, or your organization?

Mr. MASONIS. No, Mr. Walden.

Mr. WALDEN. Just the Snake River. Okay, thank you.

Mr. BARTON. The Chair thanks the gentleman. Mr. Otter is recognized for 8 minutes.

Mr. OTTER. Thank you, Mr. Chairman. I want to associate myself with the remarks of those members before me who thanked the panel for being here today.

Mr. Masonis, let me begin with you. In your testimony, you mentioned a dam that had not been relicensed even though there had been quite a few years in the process. How many years was that?

Mr. MASONIS. Since 1974 when the license expired.

Mr. OTTER. And what dam was that?

Mr. MASONIS. That's the Cushman Hydroelectric Project.

Mr. OTTER. And what is the reason it hasn't been?

Mr. MASONIS. There have been disputes regarding the natural resource measures, among others, that should be included in the new license issued for that project. That project is somewhat unique in the sense that it was never properly licensed to begin with. When it was originally built, it was built only with, I believe, authorization for an occupation of Federal land, but the project works were actually not authorized to be built. And there is also a Tribe, the Cicomas Tribe, which has Tribal lands adjacent to the project site, and there have been a number of issues associated with the Tribe's interest as well.

Mr. OTTER. Would that be a candidate for being torn out then?

Mr. MASONIS. No, it is not.

Mr. OTTER. Should it be?

Mr. MASONIS. No. In the view of my organization and others who have been participating with the conservation interests, our primary goal is to get flows below that project that are adequate to support the listed salmon species below the project, as well as to maintain the river channel and have a healthy river system.

Mr. OTTER. I see. Mr. Robinson, do you agree with that assessment?

Mr. ROBINSON. The commission actually issued a license for that project for its continued operation. It was remanded by the courts. I think that is still the position of the commission, that it can be licensed.

Mr. OTTER. So are we still in the courts then? We have been in the courts since 1974?

Mr. ROBINSON. No sir, not since 1974. Uniquely, that project had about, I think it was, 8 acres of National Park Service land on it, and it took an Act of Congress to remove those acres before we could go forward with licensing, and that took a considerably long time to do that.

The issues now before the commission, that were reviewed by the courts, went to flows below the project for migratory fish purposes, and other environmental issues. And I believe the status of that is that it is back in front of the commission again.

Mr. OTTER. I see.

Ms. KEIL. Congressman Otter, if I might——

Mr. OTTER. You certainly can.

Ms. KEIL. I think what Mr. Robinson said about Cushman points out how flawed the current system is for reaching resolution of these things. If you send an intensely fact-based dispute like this off to the Court of Appeals, the likely result is it is going to come back to the commission with some instruction to do it right. So you have the serious risk of creating a do-loop, if you will, that just sort of goes around. And I think one of the beauties of the legislation that is in front of you is it has the potential to put those disputes—more clearly focus them and to put them back into the licensing process where they belong.

Mr. OTTER. I thank you for that intervention, it is most helpful. Mr. Robinson, if Title III was adopted in its present form, what guarantee would we have, or is there any kind of guarantee that we would have, that there would not be certain interest groups that would be excluded from the process?

Mr. ROBINSON. Well, actually, I think that is kind of a false path on this. The process will still be the same. The licensing process will still be the same. All the participants will have every opportunity. The only thing that Title III would do would be where there was an alternative condition proposed by the licensee, it would allow that agency, whichever one it was, to review it, the Secretary to review it and come back with an alternative.

Currently, there is nothing other than the FERC process to allow people to be involved in development of those conditions, and that would not change. So, I don't see how there is any potential for excluding the public. It basically functions the same way it does now with another review process factored in.

Mr. OTTER. Well, under our present law, especially those that we issued from the Federal level, your agency isn't the only one that operates under those conditions. I mean, the Federal Highway System, we have got $14 billion in highway projects right now that are being held up, which would create, I might add, 400,000 construction paying jobs. And in this economy, Lord knows we could use it. But because of some environmental consideration that hasn't been satisfied, or some mitigation that hasn't been agreed to, in my State alone where we still killed 32 people on one little stretch of highway, we have got $58 million worth of projects being held up because those agencies that have requested certain mitigation haven't been satisfied. But we will continue to kill 32 people a year, I suppose, and that is—I don't know if that is a mitigation cost that those folks want to talk about. So why should your agency be any different, or should we ask that all Federal agencies that have certain oversights over other Federal agencies, like FERC, like the Federal Highway System, like the Forest Service, like BLM, should we ask that perhaps we have this same consideration for every one of those agencies and not just FERC?

Mr. ROBINSON. I am a firm believer that if you have authority vested in an agency, that they have to have accountability, and they should have a standard of review that is imposed by a body like Congress in using that authority. I think what Title III does is just exactly that for those two issues, it will make those agencies more accountable and more consistent in exercising the authority that they have been granted by Congress.

Mr. OTTER. I would certainly agree. Mr. Szeptycki, on the Columbia/Snake River runs, we have right now I think there is 24 out of 28 steelhead or salmon species or subspecies that are considered either threatened or endangered. We know that only four of those species actually went over the lower four Snake River dams.

If the four lower Snake River dams should be a candidate for removal and those other 18 species are endangered or threatened, shouldn't the dams on down the Columbia River then also be candidates? Wouldn't they also be candidates?

Mr. SZEPTYCKI. Let me preface my comments by saying that we have got a whole group of people out in our Portland office who are working very hard on the Columbia and Snake River issues, and it is not my primary area of expertise. But I will say this. The biology of each of those salmon runs is different, and the fish passage challenges that they face, depending on where they are going to spawn, are different. And the downstream fish passage challenges when they are returning from their native streams out to the ocean to grow, for each run of salmon, depending on where they go, at what time of year they come into the rivers, what time of year they leave the rivers, are different.

And what I do know about those Snake River runs is that the biologists have taken a good, long, hard look at those runs and concluded that the only way to restore those particular runs—and I should add they were extremely robust runs of salmon and steelhead that used to make it all the way up into Idaho—the only way to restore those runs is by removing those dams. And as Mr. Masonis commented, there has just been a huge amount of money spent on measures short of removing the dams that have failed. And it is my understanding that with respect to the other runs of fish that you are talking about, that that type of conclusion has not been reached about the need to remove the dams.

Mr. OTTER. I understand. Thank you, Mr. Chairman.

Mr. BARTON. Thank you. We will now start our second round, and we will start with the gentleman from Maine, Mr. Allen, for 5 minutes.

Mr. ALLEN. Thank you again, Mr. Chairman. A couple of questions, Mr. Robinson. The industry, in the past, has testified that America is in danger of losing substantial——

Mr. BARTON. Would the gentleman defer? We just—in the nick of time, Mr. Markey has come. Could we let Mr. Markey do his first round, then we will recognize you as the first member for the second round.

Mr. ALLEN. Absolutely. Thank you.

Mr. BARTON. If the gentleman is ready, we will recognize Mr. Markey.

Mr. MARKEY. I am ready, and I thank the gentleman from Maine very much for his forbearance.

Ms. Keil, hydropower is a pretty important, indeed vital, part of your company's business, isn't it?

Ms. KEIL. Yes, it is.

Mr. MARKEY. Now, Ms. Keil, Portland General Electric is a wholly owned subsidiary of the now-bankrupt Enron Corporation, is it not?

Ms. KEIL. Yes, it is.

Mr. MARKEY. Now, isn't it true that the FERC staff has found that Enron and Portland General Electric, amongst others, manipulated electricity and natural gas prices in California and the Pacific Northwest?

Ms. KEIL. You sound like you are speaking from more knowledge than I have. You know, I have not been involved in the trading side of the company. They let me do my job and I like the hydroelectric project, so I really couldn't comment on what has been happening on the trading side.

Mr. MARKEY. Well, the answer is yes, but let me read a few passages from an August 13, 2002 FERC press release about Portland's involvement in Enron's manipulation. It says "The Federal Energy Regulatory Commission today launched following investigations into instances of possible misconduct by Avista Corporation and Avista Energy, Inc., El Paso Electric, and three Enron corporate affiliates, Enron Power Marketing, Enron Capital, and Trade Resources Corporation, and Portland General Electric Company. The key finding is"—this is from the Federal Energy Regulatory Commission. "The key findings and recommendation of the staff factfinding investigation are there exists sufficient evidence to warrant formal investigations of possible violations of the Federal Power Act by Portland General Electric Company."

Is it possible that some of Portland's hydroelectric facilities might have been involved in these manipulations?

Ms. KEIL. It is possible, but very unlikely. PGE's hydroelectric projects are operated to the benefit of PGE's customers in the Portland Metropolitan Area and in the Willamette Valley. Most of the trading operation happens around resources other than PGE's hydro projects, and the benefits of those hydro projects were effectively walled off by the Oregon Public Utility Commission at the time Enron acquired us. So, from an accounting perspective and a benefit perspective, PGE operates its own resources for the benefit of its customers and to meet the environmental standards that they expect of us.

Mr. MARKEY. But since we can't tag electrons to their source, we really can't readily determine whether Portland's hydro and other generation facilities were utilized to carry out the manipulations that Enron and Portland carried out, isn't that correct?

Ms. KEIL. All you can tell, Congressman Markey, is where the money flows, and electrons flow where electrons are going to flow, and I would tell you again that from an accounting perspective, PGE's customers have been guaranteed the benefits of those projects by actions of the Oregon Public Utility Commission. And to be honest, the magnitude of our hydro resources is small enough that I doubt that it was a key portion of the trading philosophy that was going on at the time.

Mr. MARKEY. Let me read to you a passage from the August 2002 FERC staff report, starting on page 78. ''Enron's corporate culture which permeated all of its affiliated companies including those affiliates such as Portland, which are not currently in bankruptcy, fostered a callous disregard for the American energy consumer and demonstrates the need for more explicit prohibitions as well as aggressive market monitoring and enforcement.'' Now, I agree with that, Ms. Keil.

Ms. KEIL. I certainly wouldn't argue with the statement, sir, because I don't have the facts to say so. But I think everyone in this room who has worked with Portland General Electric's hydro side of the company would tell you that they have not seen a change in philosophy or culture as a result of our ownership by Enron.

Mr. MARKEY. So the question for this committee and for the Congress is why should Congress grant regulatory relief to an Enron subsidiary that the FERC staff believes may have been manipulating prices in the West and energy markets?

Ms. KEIL. No disrespect, sir, but I fail to see the connection. What we are looking for is a system that will allow project benefits to flow to PGE's customers as they do now, and to insert a reasonable consideration of cost in environmental measures as we go forward. I really don't see the connection between the two.

Mr. MARKEY. Well, there is. Thank you, Mr. Chairman.

Mr. BARTON. Thank the gentleman from Massachusetts. Before we recognize Mr. Allen, I would just make a comment. I think the gentleman's questions were appropriate to the bill in general because we have provisions on transparency and increased civil and criminal penalty enforcement by the FERC, and market manipulation. So those are all very relevant issues that need to be addressed. There will be three panels tomorrow in which any of those questions could be addressed.

This panel was supposed to talk about a more mundane topic of just hydro relicensing.

Ms. KEIL. And I am not coming back tomorrow. That was bad enough.

Mr. BARTON. If Mr. Markey wants you to come back, you may get to come back. But, anyway, I think the questions were appropriate, but maybe not directly on point to the purpose of this hearing.

Recognize Mr. Allen for a second round of questions for 5 minutes.

Mr. ALLEN. Thank you, Mr. Chairman. Mr. Robinson, there has been testimony that America is in danger of losing substantial hydropower capacity and operational flexibility at a time when it is most needed. Could you estimate how much power has been lost through relicensing over the past 10 years?

Mr. ROBINSON. I don't think I can answer the 10-year portion, but the last time we looked at it—which we looked at relicensing I think back in 1993, so it was probably about a 10-year period—in terms of capacity, installed capacity, relicensing actually resulted in a net positive, small but a net positive for capacity. In terms of generation, there was a small reduction in generation. I think the estimate was something in the 3 to 4 percent range. What we did not try to estimate because actually the complexity of it, looking across the Nation, sort of boggled our minds, and so

we just left it, was operational flexibility. And what that meant in terms of lost returns on the sale of electricity, it was too complicated to even approach, so we did not.

Mr. ALLEN. Okay. In your experience, does construction of a fishway significantly result in a significant loss, say, more than 5 percent of electricity production?

Mr. ROBINSON. There is a component of attraction flows that comes part and parcel with every fishway that is in place, but we have not made an estimate. Five percent doesn't seem unreasonable.

Mr. ALLEN. So, essentially what you are saying is that at least so far relicensing has not made a measurable difference in generating capacity? Operational flexibility is, you are saying——

Mr. ROBINSON. Operational flexibility, it clearly, on a case-by-case basis, has had extraordinary impacts on individual projects in their operational flexibility. Taking plants from peaking to run-of-river, which is a completely different kettle of fish—excuse the pun—but in terms of generation capacity, no real significant difference.

Mr. ALLEN. There was some earlier conversation about cost-benefit analysis. As I understand it, FERC isn't required by law to ensure the profitability of hydropower projects under your jurisdiction, is that right?

Mr. ROBINSON. That is correct.

Mr. ALLEN. And are applicants required to submit economic information from which you could determine that that particular project is profitable or not?

Mr. ROBINSON. We don't do a profitability estimate. What we do is a cost-to-generate-power, and what the alternative cost of power would be, so that the commission has a perspective when they issue this license, whether or not they are issuing a license that would result in power that is more expensive or less expensive than the alternatives that are out there.

Mr. ALLEN. Okay. Let me seek Trout Unlimited.

Mr. SZEPTYCKI. I can go by that.

Mr. ALLEN. Are fish conservation measures equivalent to fish passage, and if you could talk about the difference and also answer the question whether FERC staff has the expertise to review fishway conditions, in your opinion?

Mr. SZEPTYCKI. Well, taking the first part of it, the current Title III talks about—and let me just turn to the bill to get the exact language right—talks about alternatives that protect fish resources and doesn't specifically require that the applicant come up with an alternative fishway. And this lack of precision in the language is troubling because there really is no substitute for both upstream and downstream fish passage. If the fish can't get to where it normally spawns and if it can't go from where it normally spawns to the ocean or wherever else it goes, there is no substitute for that. And we have spent huge amounts of money on both coasts trying to restore fisheries with inadequate fish passage through hatcheries, through things like trapping and trucking fish, and they have uniformly performed very poorly. And there is just no substitute for a decent fishway, and it is of considerable concern to us that this imprecision in the language could lead to proposed alter-

natives that involve just stocking more fish or taking other measures short of actual fish passage because there is no substitute for it.

And in terms of FERC's expertise, I think the people that are in the best position to make a determination about fishway prescriptions are the people that Congress put that decision in charge of, and those are the resource agencies that are working on restoring those fisheries runs. They are the ones who know what the fisheries need. They are the ones who are familiar with the technology and how they would apply to that specific location, and they are really the people that should be making that decision.

Ms. KEIL. Congressman, if I might point out, the language in the bill would allow the Secretary, in the situation that Leon proposes, to reject the alternative if the Secretary truly believes that a fish passage system is required for protection of fish resources in that system.

I guess I would point out that we don't believe that a one-size-fits-all approach to this is necessarily correct, and that there may be situations in which alternatives other than fish passage structures may be the best way to protect, enhance, and mitigate for impacts on fish species.

Mr. ALLEN. Thank you all. Thank you, Mr. Chairman.

Mr. RADANOVICH [presiding]. Thank you. Ms. Keil, I want to give you the opportunity to expand on the overall generation loss issue, but first wanted to reiterate that this is a hearing on hydro relicensing, it is not—which deals with many corporations both public and private. It has nothing to do with giving advantage to business, in my view, anyway, and I think it is good to keep the topic on that. But when the question was asked about overall generation loss due to the length or problems with relicensing, it was mentioned that there was no net loss. Would you comment on that? But, also, in addition to that, I want to get your opinion—I mean, I have had in my district one relicensing that took 18 years to do, and another one that is 4 years old and nowhere near being resolved, which dramatically increases the cost of relicensing, and I would like to get you to comment about your experience on that, the added cost to hydro regeneration as a result of the length of the permit and the delays.

Ms. KEIL. Sure. Let us tackle the generation loss question first. I think the real question is more than counting up kilowatt hours, it is counting up the loss of generational flexibility and operational flexibility. PGE, for instance, counts on its hydroelectric projects to be able to come up in the morning when people get up and turn on their hair dryers and their toasters and their television sets to watch C-SPAN and see what you all are doing. And so hydro is a very important factor in our ability to do that for people, and we need to be able to do it instantaneously.

Many licenses are seeing a loss in that capability. As Mark mentioned, converting projects from what are called peaking resources to run-of-the-river may not result in a loss of kilowatt hours over the length of production because you are still dealing with the same amount of water, but it reduces your ability to have that kilowatt hour available to you when you need it, when your customers

need it. And that peaking resource has to be replaced somewhere, you simply can't run a system without it.

On the cost side, I run the largest capital budget in PGE's system, and I am not building anything. So the process costs that I see year to year only mount up and only increase the eventual cost of protection. So the more efficient and the more effective we can make that process, the better off my customers are going to be both from a cost perspective and from having us have the ability to implement the improvements that they expect us to implement.

Mr. RADANOVICH. Thank you very much. I don't have any other questions. Mr. Otter.

Mr. OTTER. Thank you. Mr. Robinson, especially during those times of tough and high energy rates and everything that went on a couple of years ago, there was as a result of the California experience which they affectionately and wrongly refer to as the results of deregulation—they weren't even close to deregulation. I don't know how you would call setting the retail price and turning the wholesale price as a free market opportunity but, anyway, during that time, our bills went up substantially. And I got letters from all kinds of folks saying to me, "What will you do about the power, the cost of power," and obviously they are not as aware—and I tried to explain that in my replay to my constituents—that there is a lot of costs that go into the cost of a kilowatt of electricity. And when you go flip on the switch, why, all of those costs come through that wire and end up going through the meter, and the result is in a month you are going to get a bill for that.

And one of the things that I am astounded when I get a second letter back, or e-mail, or whatever, is that very few people, consumers, are aware of the fact that all these mitigation costs on relicensing, many of which are set by the U.S. Fish and Wildlife, who never have to answer to an election, set by many groups, interest groups, some of them sitting right here at this table, as a result of "mitigation." What can we do along with this process of educating the consumer so that when you hear these apple pie, mother and environmental things that are going on and we are not considering the cost of some of these things, we need to start reflecting this in what is going to happen to every power bill. And maybe 20 cents to some folks isn't a lot of money, but to people that work in a processing plant in Idaho adding value to potatoes and calling them Freedom Fries at the end of the line, that means in many ways whether or not 27,000 Btus to make a pound of french fries, that means whether or not we are going to be competitive with Canada, we are going to be competitive with Chile, or any other country that produces french fries. What can we do through FERC? How can we help FERC explain to these people that when they see these passionate stories in the sports section or lifestyle section of their local newspaper, if they read it—and I am not suggesting that they should—but if they do, what can we do to convey to them that every one of these things add up? Maybe this one was just 20 cents, and this one was just a nickel, and this was just something else, but pretty soon, you know, that adds up to a much higher power bill.

Mr. ROBINSON. Congressman, I can tell you what we do. Every project that we license, we take all the mitigation measures that

are proposed either by the applicant, the 4(e) conditions, the prescriptions, the 10(j) recommendations that come from the State Fish and Wildlife Agencies, the 401 conditions from the State—there are more conditions on these licenses than you can shake a stick at—including the ones that we impose. But every single condition that we know about we publish in our environmental documents, and we make that available and make it a part of what everybody should understand in the decisionmaking process about which conditions should be included in the license.

How do you get that information more generally knowledgeable to the public? Maybe we should do more when we have our public sessions to encourage people to come, to listen, to understand what is actually at stake in the relicensing of these projects, particularly in a State like Idaho which is so clearly dependent upon hydropower generation.

Mr. OTTER. Maybe I could make a suggestion here, and you and I can talk more about this out of the confines of this meeting room, but it would seem to me to be extremely helpful if every customer of Idaho Power, or Portland Light—or whatever it is, and I apologize for not remembering the Pacific Power and Light—if every one of those customers, during that mitigation process, that said to relicense this dam for 72 megawatts is going to cost you $482 million, or which $10 million of that is going to go for a bicycle path, of which another $43 million is going to go for a fish passage, another X-number of dollars—and this is what it is going to mean on an annualized basis. You know, when we try to pass a bond issue for a school building in my county or in my school district in Idaho, we get from the County Commissioner, we get from the public school sector, here is what is going to cost you on your property taxes, here is exactly what it is going to cost you. Now, you go down that line and you tell me which one of these that you want to include.

Mr. BARTON. The gentleman needs to give him a question and let him have a chance to answer.

Mr. OTTER. My question is that during the mitigation process, why cannot we include making sure that when the power bill goes up the month previous to the finalizing of the mitigation, this is what it is going to cost, and you can expect it because each one of these items—that bicycle path is going to cost you so much, and right on down the line.

Mr. ROBINSON. That information is no doubt appropriate for people to have. Our process and what we do currently is to finish a larger figure out there of what the cost per year is going to be on power production from that plant for that type of mitigation. How you translate that to the individual customer is something that I quite honestly haven't given any thought to.

Mr. BARTON. The gentleman's time is expired. The gentleman from Arizona is recognized for 5 minutes. We welcome the gentleman from Maryland. He wishes not to ask questions. If he wished to, he would have been given the opportunity to.

Mr. SHADEGG. Thank you, Mr. Chairman, and I apologize to you and the members of the committee that I have not been able to stay in the room. I have had constituent appointments that have called me away, but let me ask some questions, if I might.

Ms. Keil, I want to start with you. I want to ask a couple of two-part questions. The first two-part question: Do you believe that we can increase America's supply of energy, electrical energy, by adding turbines to existing dams where they do not now exist, question one. And the second part of that question, do you believe that can be done without negative environmental impact?

Ms. KEIL. Yes, and yes.

Mr. SHADEGG. Would you like to extrapolate or expand a little bit? If not, I will move right along.

Ms. KEIL. No. There is clearly a great amount of untapped capacity in the country, and for most of those areas, most of the impact of the construction has already occurred. So you could add power production with relatively little or no additional impact.

Mr. SHADEGG. Great. This one is the same kind of two-part question. Do you believe we could also add to power production in this country—something I think we all agree needs to be done given the fact that we have an increasing appetite for electricity and we have grave concerns about relying upon foreign sources for energy in general—by replacing either inefficient turbines or less efficient turbines in existing dams with more efficient turbines? Question No. 1, can we do that, can we produce more electricity in that fashion? Is there opportunity there? And, second, can we also do that without environmental damage?

Ms. KEIL. Again, I would have to say yes and yes. On the first half, it is clear that for older projects, and even projects built in the 1950's and 1960's, you can gain a tremendous amount of efficiency by replacing the turbine components. I have seen increases as much as 10 percent more kilowatt hours out of existing units by replacing some of the components. Those upgrades in particular have no environmental impact. All of the construction takes place inside of the power house. It tends not to change the amount of water that goes through the units or, in most cases, even the pattern of the water flow that goes through the units. And, actually, if you have got places where entrainment of fish into turbines is an issue—that is, you have got fish going through the turbine units—sometimes newer, more efficient units are actually more fish-friendly than the other ones. So you can get a little bump in fish protection at the same time that you are getting a bump in efficiency.

Mr. SHADEGG. Last question for you, would you then recommend that this committee look at adding incentives to do both of those things to any comprehensive energy package we pass?

Ms. KEIL. We would certainly be in favor of any incentives that the committee would like to suggest.

Mr. SHADEGG. I would like to ask Mr. Masonis and Mr. Szeptycki, I consider myself, I guess, an environmentalist. I am an outdoorsman. I love rivers, I love lakes, I like to boat. I am a fisherman, although I am a lousy fisherman. My son is a better fisherman. Given your legitimate concern, with which I sympathize, and given the effort to try to—the demand for electricity, given that you both I am sure believe that there are some dams that ought to come down, some dams currently producing electricity that ought to come down for environmental reasons, are your organizations willing to look at improving generation at other dams either by

adding turbines where we are already releasing water, we just aren't running it through a turbine, or by replacing inefficient turbines with more efficient turbines?

Mr. MASONIS. I will take that question first. Congressman, I appreciate the question, and the answer to the question is we are certainly interested in looking at ways to improve efficiency at existing hydroelectric projects and generation in a way that does not result in significant environmental harm.

Mr. SHADEGG. Do you agree with the point that in some instances replacing an inefficient turbine with a more efficient turbine can also result in a more fish-friendly turbine?

Mr. MASONIS. I think that is right, that there are both environmental and economic generation benefits that can flow from such a step.

Mr. SZEPTYCKI. The only thing I would add to Mr. Masonis' answer—I mean, I would agree with him 100 percent. I think that if there is going to be a statute providing for incentives, it would have to be completely clear that additional generation not cause any additional environmental impact, and there has been a concept that has been discussed several times in this hearing about peaking generation.

I should add that I don't think the statute before the committee, the bill before the committee today, is really going to affect peaking generation. It is not typically the fishway prescriptions that get rid of peaking flows, it is other aspects of the hydroelectric relicensing process. But my only concern would be if you put a turbine where there wasn't one, and it was a run-of-river project, that the owner of that project—the peaking power is so valuable that they would become tempted to attempt to run it as a peaking project, and I think that is something that would have considerable environmental impacts that we would oppose.

Mr. SHADEGG. My time has run out. I would be happy to take a second round, if the chairman will give me one.

Mr. BARTON. Let me recognize Mr. Wynn, and we will come back to the gentleman from Arizona. The gentleman from Maryland is recognized for 5 minutes.

Mr. WYNN. Thank you, Mr. Chairman. I apologize for not being here. Unfortunately, conflicting meetings prevented me from arriving earlier.

I do have one question, or actually a couple of questions related to one topic, and that is pump storage. Mr. Robinson, can you tell me what role does pump storage technique currently play, and is there potential for growth in this area?

Mr. ROBINSON. There is a potential for growth, and what pump storage does is it provides power at peak periods when the loads are highest, by using electricity during off-peak periods to pump water uphill, store it, and then run it back down through the turbines during those periods when power is needed most. So it takes cheap power and uses it to pump water up, and it produces more valuable power during periods when it is needed.

We had a flurry of interest in pump storage projects about 5 years ago but, unfortunately, the capital investment on a pump storage project is extreme. It is very, very expensive to build one of those kinds of projects. And we didn't see, after the initial con-

tacts, initial interest, a whole lot of follow through on those projects.

Mr. WYNN. Is the basic research and development in place now, or are we still at a point where we are looking at research and development as an issue?

Mr. ROBINSON. No, not at all. I mean, you can always use more research and improve products, and that is certainly true in the hydropower industry, but it is very well understood. We have had pump storage projects in operation for—I know there was one that was under construction 30 years ago when I first got involved with hydropower.

Mr. WYNN. What about the environmental impact, if this is a better, if you will, from an environmental standpoint, approach to hydroelectric energy?

Mr. ROBINSON. You have the initial investment of lands, typically, the upper reservoir you have to do some flooding. Lower reservoirs, in many instances, take advantage of existing reservoirs or rivers. But after you have that initial investment of land, you are basically pumping, in some instances under closed systems, the same water up and down. And for those that are in open systems—by that, I mean they are on rivers or lakes or streams—you have all the mitigation measures that are available for those kinds of projects, like screens to protect fish from being impinged or coming into the system.

Mr. WYNN. So you wouldn't define it as better or worse relative to traditional hydro?

Mr. ROBINSON. I think hydro is so dependent upon the site that you are developing, but in general I would think pump storage has some environmental benefits, or can have some environmental benefits.

Mr. WYNN. But is it your conclusion that it is just not commercially viable at this point?

Mr. ROBINSON. Things change over the years. As the economics change, as other fuel sources become more or less expensive, hydropower development becomes more or less attractive. Pump storage, because it is so capital-intensive up front, has to have the right set of economics in place for energy in general to move forward, and we will see how that develops over the years.

Mr. WYNN. I don't have any further questions, Mr. Chairman.

Mr. BARTON. Thank the gentleman from Maryland, and would recognize the gentleman from Arizona for a second round of 5 minutes.

Mr. SHADEGG. Thank you, Mr. Chairman. Let me follow up on that point. We have some pump storage in Arizona on a series of lakes, and it raises an issue for me. One of the concerns in Arizona arises out of, for example, Lake Powell Glen Canyon Dam. One of the issues there is we no longer use it for peak power, or very limited amount of peak power.

My question, first for Ms. Keil, is, are you aware of any location in America, or in the world for that matter, where essentially a coffer dam has been built? You build an upper dam. You build a dam close to it downstream. Albeit you are devoting some land to environmental loss, you are changing the nature of that. You release water out of it, you hold it at the lower level, and then you have

it available to pump right back up for pump storage. You can then control the damage that peaking power would do by only releasing the peaking power water into a relatively short section of the river. If either of you could answer that question.

Ms. KEIL. Congressman, I am not aware—I am not a pump storage person, we don't have any on our system, so that I couldn't speak to. We do have a project that we use extensively for peaking, that utilizes a thing called a re-regulation reservoir, so that while the upper two parts of the project peak, all of the fluctuation is buffered in the reservoir behind the last dam in the system, and that allows us to hold the flows in the lower river steady. It is actually quite an effective system.

Mr. ROBINSON. One comes quickly to mind, and I am sure there are others because the system you describe is obviously a good concept for pump storage. The Smith Mountain Lake Project where I live in Virginia takes advantage of a downstream reservoir that is basically dedicated to holding that water and putting it back up in the upper reservoir and eventually releasing it along downstream.

Mr. SHADEGG. Mr. Masonis, has American Rivers taken a position in support of draining Lake Powell and decommissioning Glen Canyon Dam?

Mr. MASONIS. Not that I am aware of, Congressman. No is the answer.

Mr. SHADEGG. The answer is you have not. It seems to me we ought to continue these talks. I mean, I think there are legitimate concerns, there are very legitimate concerns about Glen Canyon—about Grand Canyon and the effect that Glen Canyon Dam has had on Grand Canyon. I think we could look at various creative alternatives, and there are several environmental groups in Arizona, including the Grand Canyon Trust, which has been willing to look at alternatives so that the environmental damage done by the dam can be mitigated without eliminating the dam and the huge resource that exists.

Mr. Szeptycki, has your organization looked at the fact that—taken a position on the draining of Lake Powell or decommissioning of Glen Canyon Dam, question one, and question two, is your organization aware that if you did that, one of the world's greatest trout hatcheries and fisheries below the dam, Lee's Ferry, would be wiped out?

Mr. MASONIS. We have not take a position in favor of removing that dam.

Mr. SHADEGG. Is the concept of something like Ms. Keil described or I described, that is, a series of a second dam, something that either of your organizations have looked at, and specifically in the context of saying, oaky, if there are dams we want to eliminate currently producing energy, it is an uphill fight to reduce the Nation's of energy, perhaps there are places where we can get peaking power, which is extremely valuable, or places where we can get generating capacity in general without doing significant environmental damage by buffering it through using a double-dam system.

Mr. SZEPTYCKI. In terms of using multiple dams to buffer peaking flows, I know that has been done in several instances, and it is quite effective at restoring trout fisheries in Tennessee and North Carolina below TVA dams where they have installed

buffering weirs that have dampened peaking power and it has had a positive effect on those fisheries.

I am familiar with a few pump storage projects in New England, and the one—I would agree with what Mr. Robinson said, they are incredibly capital-intensive. These are projects that have been around for a while, and they are not sort of stand-alone projects, they are projects that exist in conjunction with a series of other hydroelectric dams.

I know of one on the Connecticut River that is associated with Holyoke Dam which generates electricity, and this pump storage project is upstream of that, and it uses the reservoir from the Holyoke Dam to take water upstream, and it doesn't do anything about the fish passage concerns on the Holyoke Dam.

So, I think that there are some issues there that hold some promise, but it is extremely expensive and very site-specific and complicated.

Mr. SHADEGG. Conceptually, it is something you are willing to consider.

Mr. SZEPTYCKI. Yes.

Mr. MASONIS. Congressman, if I may, I wanted to respond to the issue of peaking in particular. There has been some discussion here today about the loss of flexibility in operating, and the bottom line with power peaking operations that result in drastic swings and flows is that they devastate the river downstream. There is no way of getting around that. And, frankly, a lot of the power peaking operations that occur today under the terms of licenses that were issued 30, 50 years ago, those license conditions were set at a time when we really didn't quite have a handle on that particular issue.

We have worked on relicensings where there have been re-reg dams, and clearly re-reg dams are a benefit. If you are going to peak, you need some way to control that flow downstream to protect the downstream resources. What is hugely problematic going forward is to see the grandfathering essentially of old license conditions that allow power peaking in new hydropower licenses, without addressing the ecological impact of those flows.

Mr. SHADEGG. If I just understand the concept, when you say a re-reg dam, a re-reg dam is a dam further downstream that could deal with that.

Mr. SZEPTYCKI. Correct.

Mr. SHADEGG. And I guess I understand the concern about grandfathering old rights. What I want to make sure is that we have an opportunity for a dialog on, well, okay, but if the Nation is now recognizing the environmental damage that is done by peaking, we still need some peaking power, is the door open to at least discuss a re-reg dam as a way of mitigating the downstream impacts so that you could kind of have your cake and eat it, too—that is, you mitigate the environmental damage of peaking, which we all recognize, but at the same time you don't eliminate the possibility for peak power.

Mr. MASONIS. And we would certainly consider that on a case-by-case basis, as my colleagues have pointed out, that these are very fact-specific, and we are willing to do that.

Mr. SZEPTYCKI. I have been involved in not FERC licensed dams, but a couple of Corps of Engineers projects that involved extreme

peaking, and there were extensive discussions about how to mitigate the effects of that. And the issue of weir or re-reg dam came up, and those were quite valuable projects. In each of those cases, the cost was just prohibitive, and there was the very difficult issue of finding the land to do it, and both of those—in the two cases I am familiar with where people thought about that, it just wasn't feasible.

Mr. SHADEGG. Thank you, Mr. Chairman, for your indulgence.

Mr. BARTON. He has had his cake and eaten it, too, his time and exceeded it, too. The Chair is going to recognize himself for a few wrap-up questions.

Mr. Robinson, under the current Federal Power Act, FERC is required to take into consideration a broad array of public interest factors to produce a balanced and reasonable license. It is my view that given the mandatory conditioning authority that the agencies have, it is difficult to do that in a balanced way. Do you agree or disagree with that?

Mr. ROBINSON. On individual projects, I would certainly agree. I think about 12 percent of the time the commission has recognized that conditions it received as mandatory or as prescriptions were not conditions that the commission otherwise would have included, given their responsibility under the Federal Power Act to issue a balanced license.

Mr. BARTON. And in your agency's view, if this section of the draft were to become law, would it be more likely to get a balanced review factor, or less likely?

Mr. ROBINSON. I think with the increased accountability and the review standard that the law would impose, it would significantly increase the likelihood of those conditions being more consistent with the balancing that goes on at the commission.

Mr. BARTON. Now, Mr. Masonis and Mr. Szeptycki, I know you all don't support the current draft, you have made that clear and I understand that. Do you oppose any legislative change—we had the proposal in the last Congress that made it to the conference, so I would hope that you would support some legislative change, you just happen to have problems with the particular draft that is on the table, am I correct?

Mr. MASONIS. From the perspective of American Rivers, that is correct, Mr. Chairman.

Mr. BARTON. So you are not opposed to any change, you just don't like what we are proposing?

Mr. MASONIS. We believe that the proposal in its current state puts interests other than the utility at a distinct disadvantage.

Mr. SZEPTYCKI. We supported the compromise draft in the last Congress, and I think we would be prepared to look at that again.

Mr. BARTON. Thank you. Well, I want to thank this panel, you all have been very gracious with your time, and we have been able today to let all the members who wished to participate, participate fully, so we have had a good exchange of views.

We will keep the record open. There may be members that have written questions they want you to answer. We are going to recess this hearing. We are going to reconvene it tomorrow at 9:30 a.m., where we will hear from three panels that deal with electricity,

gasoline and petroleum issues, and ethanol and MTB issues. So we stand recessed until 9:30 tomorrow morning.

[Whereupon, at 4:40 p.m., the subcommittee recessed, to reconvene at 9:30 a.m., Thursday, March 13, 2003.]

COMPREHENSIVE NATIONAL ENERGY POLICY

THURSDAY, MARCH 13, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Burr, Whitfield, Norwood, Shimkus, Wilson, Shadegg, Buyer, Radanovich, Walden, Rogers, Issa, Otter, Boucher, Allen, Waxman, Hall, Pallone, Strickland, Capps, Doyle, and Dingell (ex officio).

Also present: Representatives Blunt and Green.

Staff present: Jason Bentley, majority counsel; Sean Cunningham, majority counsel; Andy Black, policy coordinator; Peter Kielty, legislative clerk; and Sue Sheridan, minority counsel.

Mr. BARTON. If everybody will find your seat. Today we want to continue the hearing that we began last week and continued yesterday. We have got three panels today, a total of 19 witnesses, so we are going to have a lot of information presented to us.

Without objection, the subcommittee is going to proceed pursuant to Committee Rule 4(e) which governs opening statements by members and the opportunity to defer them for extra questioning time. What that means is if a member wishes to make an opening statement, they should be allowed to do so under the rules, but if they wish to defer, they get an extra 3 minutes during their question time. So hearing no objection to that, the Chair would recognize himself for an opening statement.

We are going to finish our hearings on a comprehensive energy policy today. We are focusing on electricity and gasoline issues. It is my hope and anticipation that this subcommittee will begin our markup next Wednesday. We are going to send notice to the members probably tomorrow or Monday on that issue.

The draft bill that has been released has an electricity title. This comes at an important time for our economy, in this sector of our economy. Today, needed investments in transmission are not occurring, plans for new power plants are being put on hold, not just because of a temporary glut in some regions of generation capacity, but also, in my opinion, because of a crisis of confidence in the utility sector. Investors are uncertain about the future of electric industry reform, wholesale purchasers of power continue to struggle with a patchwork quilt of jurisdictions from State to State, region to region and utility to utility. I am glad to have so many witnesses

here today to discuss electricity. I especially want to bring the members' attention to the testimony from our witness from Wall Street, because all consumers will benefit when private capital begins to reenter this important part of our economy.

The draft that has been released has many elements to improve transmission capacity and its operation, also to improve the operation of wholesale markets themselves. Open access transmission provision in the draft bill, referred to as FERC-lite, would take steps to harmonize the regulation of interstate transmission. Repeal of the Public Utility Holding Company Act, which we call PUHCA, would take steps to improve the flow of capital into a sector that badly needs investment. The reliability section would provide for mandatory reliability standards developed and enforced by an electric reliability organization under strong FERC oversight. The draft bill would also seek to improve procedures for siting new electric transmission lines. Just as in the last Congress, it would give States a timeline for action on proposals to relieve interstate congestion areas. The FERC would get the authority to act only if the States do not take action.

More and more I have heard that there is an equal problem in that the Federal agencies themselves sometimes refuse to act. Therefore, in the draft bill we have a timeline for Federal agency decisionmaking on critical lines or else a willing State may exercise the right to approve a right-of-way consistent with other Federal laws.

Turning to gasoline, we are working on language related to the operation of the Reformulated Gasoline Program and other matters regarding to the regulation of the fuels. In this regard, I believe that the Clean Air Act current oxygen requirement has clearly been a success at stretching fuel supply and promoting cleaner air. Having said that, there have been costs to replace the oxygen requirement with a renewable fuel standard as to well as to make other changes in the Clean Air Act. As many members know, I will only support making changes in these areas that regard reformulated gasoline and convention gasoline if I am assured that we are going to have just as clean air in the future.

Witnesses on our third panel, and I want to say bless you, because you are probably going to get on about three this afternoon, are going to be asked to comment on the use of MTBE and ethanol in the operation of the reformulated conventional gasoline market. I am very interested in hearing their testimony and views regarding what changes to our current system of fuel regulation will provide a positive impact on the availability, price and environmental performance of gasoline.

I want to welcome all the witnesses that are here today. I think we have set a record. We have 19 witnesses. That is a record for any hearing that I have chaired, and it may be a record for the Congress. With that, I would recognize my distinguished ranking member, Mr. Boucher, for a 5-minute opening statement.

Mr. BOUCHER. Thank you very much, Mr. Chairman. The hearing that we have today and the ones preceding it offer a valuable opportunity for subcommittee members to hear from a range of witnesses on the various topics addressed in energy policy legislation

and have also provided a useful forum for evaluating the provisions of the draft legislation circulated by the chairman.

Today's hearing will focus on two of the more contentious issues: electricity and a renewable fuels standard. I will focus my remarks this morning on the electricity title which is a part of the draft legislation. The House Energy and Commerce Committee has devoted 4 years to a so far elusive quest for consensus on electricity reform measures. We have found no broad agreement on proposals to amend the Public Utility Holding Company Act or PURPA, to alter the merger review authority of the FERC, to establish incentive pricing for new transmission line construction, to vest the FERC with transmission line siting authority or to legislate standards for regional transmission organization, size, membership or function.

While I appreciate the chairman's inclusion of provisions relating to net metering, to time-of-use pricing and to transmission reliability as a part of his electricity title, I still have a number of concerns relating to the electricity provisions. For example, I am troubled by the combination of provisions to repeal the Public Utility Holding Company Act and simultaneously to repeal the merger review authority of the FERC. Repeal of the Holding Company Act would inevitably lead to an avalanche of industry consolidations which would require, I think, very careful scrutiny at the Federal regulatory level. The Department of Justice currently views mergers through a lens of antitrust protections but does not have the capabilities possessed by the FERC to assess a proposed merger's effects on electricity consumers. The FERC is our expert agency about matters relating to electricity generation and transmission, and I am persuaded that its expertise in reviewing proposed mergers may be even more needed in the future than at the present time.

I am also troubled by the provisions that relate to the ability of qualified facilities under PURPA to sell excess power into the grid after the electricity needs of their industrial hosts have been met. The chairman's draft expands upon the language approved in the Senate last year and sets a number of ways in which utilities could be relieved of their mandatory purchase obligations. The provisions included in the chairman's draft set a very low bar for exemption from these purchase requirements to the potential detriment of our Nation's combined heat and power producers. Those provisions, I think, deserve a close and critical analysis by the committee.

The provision that would give the FERC preemptive authority over the siting of transmission lines is also of concern to me. I have asked many witnesses before this subcommittee for evidence that States are arbitrarily denying permission for the construction of needed new transmission, and I have heard no evidence that would justify removing the ultimate decision over this new siting from the States to the Federal level.

The issues surrounding the electricity debate, including those that I have mentioned, are complex and notwithstanding a number of years of review, we have not been able to reach a consensus on these contentious matters. We have, however, an increasingly active and imaginative FERC which has taken steps to make the wholesale market more reliable and has provoked, shall I say, a spirited debate over the proposal for a standard market design for

the Nation's transmission grid. The pendency of the SMD rulemaking obviously complicated even further the process of seeking consensus on legislation relating to the electricity market.

In view of the fact that the electricity debate bogged down progress of a comprehensive energy bill in the last Congress, the chairman may wish to consider moving the energy provisions and the electricity provisions on separate tracks. That was the chairman's choice during the last Congress, and I would not that H.R. 4, which did not contain electricity provisions, obtained broad bipartisan support in this committee with more than 50 votes for passage and broad bipartisan support on the floor of the House as well. I suggest that the chairman consider following that same time-tested and wise path during the course of this Congress. Pass this comprehensive energy measure resembling H.R. 4 minus electricity, and then give the committee the time required to assess what statutory changes to Federal electricity rules are both needed and appropriate. And if the chairman decides to pursue that course, I pledge to have my close attention to the electricity provisions that he puts before the committee.

Thank you, Mr. Chairman, and I look forward to the testimony of our witnesses.

Mr. BARTON. Thank my distinguished friend from Virginia. The Chair is going to recognize out of order the distinguished majority whip, Mr. Blunt, for a panel witness introduction.

Mr. BLUNT. Mr. Chairman, I thank you for recognizing me and for holding this hearing today. I also know that you will do a great job introducing the panel later, but I want to take my time to introduce to the subcommittee my good friend John Twitty. John is the general manager of City Utilities in Springfield. We have been friends for 20 years. He is here today on behalf of the American Public Power Association, and I am glad that this association has invited Mr. Twitty to come and speak about energy policy. Through his management, City Utilities in Springfield, Missouri has continued to provide many of the residents of my district with inexpensive and reliable power.

For more than 20 years, John has worked with Missouri utility companies. In 1983, he began his career in Rolla, Missouri with Rolla Municipal Utilities and came to City Utilities in Springfield in 1991. October of last year he was named the general manager and under his management and under the management of his predecessor, Robert Roundtree, Cities Utilities in Springfield has been a terrific example of how an energy company can work with a local community to provide reliable electricity, water and public transportation at a fair price. John's service to Springfield extends beyond his daily responsibilities at City Utilities to many community activities.

I am certainly pleased he is here today, and while I may not hear his remarks, I look forward to reading them as I read the transcript of this hearing, which I assure you, largely because John Twitty is here, I will do. Thank you, Mr. Chairman.

Mr. BARTON. We thank the whip for that distinguished introduction. We look forward to the witness' testimony. And you are welcome to stay and hear it if you wish.

Mr. BLUNT. Mr. Chairman, I would actually enjoy staying today, but for reasons you understand I can't.

Mr. BARTON. I understand. We now want to recognize the distinguished dean of the House, the ranking member of the full committee, Mr. Dingell, for an opening statement.

Mr. WAXMAN. Mr. Chairman?

Mr. BARTON. The gentleman from California?

Mr. WAXMAN. Mr. Dingell has been gracious enough to allow me to go ahead of him as have others on the Democratic side, and I want to thank them for that.

Mr. BARTON. Does the gentleman wish to make an opening statement?

Mr. WAXMAN. I do and I am going to have to go to the Government Reform Committee. I will come back here.

Mr. BARTON. The Gentleman is recognized for 3 minutes.

Mr. WAXMAN. On March 20, 2001, 2 years ago, we convened in this room to examine the California energy crisis. Curt Hebert, the President's first FERC chairman, told us that California merely suffered from a supply and demand imbalance and that environmental restrictions limited the full use of power resources in the region. Chairman Hebert offered us a solution. He said we should create financial incentives to ensure that the transmission system is upgraded and that we needed a regional transmission organization for the West. He told us that buyers and sellers of electricity needed non-discriminatory access to all transmission facilities in the West. And early last year, the current FERC chairman, Pat Wood, offered us a solution. He said we needed to encourage the construction of new infrastructure, assure non-discriminatory transmission access in the electric industry, and, yes, we needed regional transmission organizations. We know now this wasn't the problem.

California's markets didn't collapse because there weren't incentives for transmission lines or because FERC didn't have authority over public power and rural electric coops. Western families did not get price gouged because there wasn't a west-wide regional transmission organization. Instead the crisis was caused by market manipulation. Abuse after abuse has come to light in the electricity and natural gas industries. El Paso, Dynegy, AEP, Enron, CMS Energy and Williams have all been involved in scandals. Indeed, energy scandals have emerged from coast to coast.

But this committee won't address the true causes. Instead we are pursuing the same recommendations that Hebert made 2 years ago. It is as if we simply don't care what the facts are. In fact, if we stick to the current schedule, we won't even have a hearing on these abuses prior to marking up legislation. The chairman noted with pride we have 19 witnesses, a record number. That means we are churning through these hearings so quickly that we will go right to legislation without looking at why the industry collapsed, without trying to find out and delving into the fundamental problems of the industry. In fact, if we stick to the current schedule, we won't even have a hearing on these abuses prior to marking up the legislation.

If we are serious about having energy markets at work, we need to restore integrity to the oversight of this industry. That is not an

easy job. We need to dig in and hold hearings on market abuses and find out what the real solutions are, not simply recycle the ones that were proposed by people that never understood the problem in the first place and allowed what happened in California to go on and on and on. And I fear what they proposed for California will be delivered to the rest of the country as well—a dysfunctional market that hurts the consuming public. Thank you, Mr. Chairman.

Mr. BARTON. I thank the gentleman from California; and recognize the gentleman from Kentucky, Mr. Whitfield. Does he wish an opening statement?

Mr. WHITFIELD. Mr. Chairman, I am going to waive my opening statement.

Mr. BARTON. All right. The gentleman will have 3 additional minutes. Mr. Norwood, does he wish an opening statement?

Mr. NORWOOD. Mr. Chairman, I waive and request the additional 3 minutes.

Mr. BARTON. Okay. Mr. Shimkus?

Mr. SHIMKUS. I will also defer, Mr. Chairman.

Mr. BARTON. Okay. Mr. Buyer?

Mr. SHIMKUS. He said the same thing.

Mr. BARTON. He is going to defer? We need to hear that from him.

Mr. BUYER. I defer.

Mr. BARTON. He defers. Mr. Walden?

Mr. WALDEN. Mr. Chairman, since I deferred last time and stepped out of the room when I could ask questions and went to the bottom of the list and never did get to, I am going to take my 5 minutes this time.

Mr. BARTON. All right. Three minutes, you are going to take your 3 minutes.

Mr. WALDEN. I will talk fast. Thank you, Mr. Chairman, for holding this hearing. Let me start off by thanking you for including the bill I introduced last Congress to ban the practice of round tripping trades, the Truth in Electricity Trading Act. Yesterday I reintroduced this legislation for this Congress, and I am grateful the chairman not only included it in the House electricity offer to the Senate during last year's energy conference on H.R. 4, but I am grateful that you have included it in the draft proposal before us today. I think it is an issue that has to be addressed, it is an issue that contributed to the cost of power that was completely out of control in the western market last year, a year ago.

Although it won't be a topic for today's hearing, I very much want to thank you as well for including the hydro relicensing provisions in this draft bill that will add some balance to a process which has, quite frankly, become a malaise. So, again, I thank you for adding those provisions.

I also look forward to working with the chairman on renewable titles. The district I represent has benefited greatly from continued development of renewable energy sources like wind and geothermal, to mention just a couple. Sherman County in my district, for example, has been able to double its property tax base with the development of the Klondike Wind Project. The wheat farmers there now I think are making more on what they plant out there

with blades than what they plant with wheat. And the Oregon Institute of Technology, located in Klamath Falls, also in my district, continues to be a leader in the research and development of geothermal and renewable energy technologies.

I must raise some concerns, though, that I have about several provisions included in the electricity title of this draft. Mr. Chairman, I have shared a letter that Congressman Otter and I have cosigned with you and with Chairman Tauzin. My first concern pertains to the possibility that under this current draft the Bonneville Power Administration could be made FERC jurisdictional. Many of the non-FERC jurisdictional utilities in my district in Oregon, and the Northwest as a whole, feel that giving FERC jurisdiction over BPA would upset existing transmission rights and could possibly force BPA into a standard market design. My colleagues and I in the Northwest delegation have met with FERC Chairman Pat Wood on several occasions and raised our concerns about SMD and the ramifications its implementation would have on the Northwest. This concern originates from our understanding that SMD was based upon a traditional thermal system where hydropower is not an integral component of a region's load needs. As you know, Mr. Chairman, almost 60 percent of the Northwest power generation comes from the hydro-based sources compared to 6 percent nationwide.

Another concern that is causing heartbreak back home is language included in the draft proposal regarding the participation of BPA in an RTO. Bonneville understanding its role as the largest provider of transmission in the Northwest is actively engaged in regional discussions on the formation of an RTO. Those discussions are attempting to introduce a RTO proposal that meets the needs of many different stakeholders in the region and consider the hydro environment in the Northwest.

Mr. Chairman, in the absence of enough time, I am going to submit the rest of this for the record, but those are the two concerns I have with this bill that I hope we are able to continue to work to resolve.

[The prepared statement of Hon. Greg Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Thank you Mr. Chairman for holding this hearing today on the electricity, ethanol and renewable energy provisions included in your draft energy proposal.

Let me start off my remarks by thanking the chairman for including a bill I introduced last Congress to ban the practice of "Round-Trip" trades called "The Truth in Electricity Trading Act." Yesterday I reintroduced this legislation for the 108th Congress and I'm grateful that the chairman not only included it in the House electricity offer to the Senate during last year's energy conference on H.R. 4., but I'm grateful that he also included it in the draft proposal before us today.

Although it won't be a topic for today's hearing, I'm also very pleased that the Chairman included hydro relicensing provisions in his draft that will add some balance to a process, which has quite frankly, become a malaise. So, again, I thank the chairman for including these helpful provisions in his draft.

I also look forward to working with the Chairman on a renewables title. The district I represent has benefited from the continued development of renewable energy sources like Wind and Geothermal. Sherman County in my district, for instance, has been able to double its property tax base with the development of the Klondike (?) project, and the Oregon Institute of Technology, located in Klamath Falls and also in my district, continues to be a leader in the research and development of geothermal technologies.

As grateful as I am to the subcommittee and full committee chairmen for including these provisions in the draft proposal that is before us today, I must raise some concerns I have about several provisions included in the electricity title of this draft. My first concern pertains to the possibility that under this current draft the Bonneville Power Administration (BPA) could be made FERC jurisdictional. Many of the non-FERC jurisdictional utilities in my district, Oregon and the Northwest as a whole feel that giving FERC jurisdiction over BPA would upset existing transmission rights and could possibly force BPA into a Standard Market Design (SMD) situation. My colleagues and I in the Northwest delegation have met with FERC Chairman Pat Wood on several occasions and raised our concerns about SMD and the ramifications its implementation would have on the Northwest. This concern originates from our understanding that SMD was based upon a traditional thermal system where hydropower is not an integral component of a region's load needs. As you know, Mr. Chairman, almost 60% of the Northwest's power generation comes from hydro-based sources compared to 6% nationwide.

Another concern that is producing a lot of heartburn back home concerns the language included in the draft proposal regarding the participation of BPA in a Regional Transmission Organization (RTO). Bonneville, understanding its role as the largest provider of transmission in the Northwest, is actively engaged in regional discussions on the formation of a RTO. Those discussions are attempting to produce an RTO proposal that meets the needs of the many different stakeholders in the region and considers the unique hydro environment of the Northwest.

It is my understanding that the language included in Section 7022(d) would preclude the implementation of the results achieved in these negotiations. Moreover, the language brings into question whether or not it would "suspend" BPA's statutory authority concerning its current obligations and duties. There is some uncertainty as to whether this language could, for example, allow a RTO to override BPA's statutory obligations to recover endangered salmon under the Endangered Species Act or preclude BPA from making its annual Treasury payment to pay for the cost of the Federal Columbia River Power System. At this stage, my inclination is to ask that this language be removed from the bill, as there's too much uncertainty to what its implementation would mean for the Pacific Northwest, particularly in light of the rate increases the region has suffered through over the last two years.

With that said, Mr. Chairman, I want to work with your and the chairman of the full committee to see if we can hash out language which would achieve the goals your striving for in this legislation while considering the unique hydropower environment of the Northwest.

Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. BARTON. I thank the gentleman, and we appreciate his introduction yesterday of the bill that has many of the provisions or some of the provisions that are in our draft discussion bill. The Chair would recognize again the dean of the House and the ranking member of he full committee, Mr. Dingell, for a 5-minute opening statement.

Mr. DINGELL. Mr. Chairman, as always, you are very gracious, and I thank you for your courtesy this morning. Today, we resume this committee's research for consensus on the difficult issue of electricity legislation. Again, Mr. Chairman, you have done the committee and the members a service by putting forth a draft to focus the discussion, and I appreciate your willingness to solicit the views from a variety of witnesses. This will be very helpful.

Over the years, the search for the holy grail of an electricity bill has taken a number of forms. Initially, the goal was a Federal mandate to require the States to adopt retail competition. That did not pass. The focus then became a matter of clarifying the line between State and Federal jurisdiction. That did not pass. Then came the efforts to describe how the Commission should consider regional transmission organizations, or RTOs. That idea met the same fate. During the last Congress, members from both sides of the aisle widely decided that in the absence of consensus, including an electrical title would only jeopardize the rest of the bill. The

wisdom of that approach was again confirmed last year when electricity proved to be one of the most difficult issues in conference.

Nevertheless, we find ourselves on the brink of tackling the issue in a markup, perhaps as early as next week. The outlook for enacting sound electricity legislation is, I believe, dim, and the pressure to act quickly is almost certain to preclude thoughtful consideration of the issue. FERC has not yet released the results of the staff investigation it ordered 13 months ago into the manipulation of electricity and natural gas markets in California and other western States, which had a calamitous effect upon those States, the economy and upon the citizens thereof. I am hard pressed now to understand how the members can decide and why they would want to decide what to do without the benefit of this most basic information.

Turning to the particulars of the draft, Mr. Chairman, I remain skeptical of the wisdom of repealing significant consumer protections in current law. Last month, the Securities Exchange Commission, the SEC revoked Enron's exemption under the Public Utility Holding Company Act of 1935, PUHCA. Had the SEC attended to this matter earlier, Enron would not have been able to erect the complex OPEC corporate structure that it did to the detriment of shareholders and consumers alike. While there are arguments for modernizing PUHCA, I do not think that it is responsible for the Congress to repeal the act outright or to make changes in matters of the kind I have just discussed.

Similarly, I am baffled by proposals to repeal FERC's authority to oversee utility mergers. At last week's hearing, the DOE witness testified that the administration supports strengthening, not weakening, FERC's merger authority. Chairman Wood of FERC expressed reservations about repealing the Commission's merger authority. Chairman Massey flatly opposed the idea.

I have other doubts about the electricity draft. I am concerned that the provisions on incentive transmission rates could unjustifiably enrich industry at the expense of consumers. I am concerned that the siting provisions will strip States of their legitimate authority over siting transmission lines and transfer to them responsibilities for Federal land management that they cannot properly administer. I am concerned that market reform provisions, though a step in the right direction, barely scratch the surface of what is needed. If we are to treat electricity as commodity, we must ensure that we have a properly regulated market as we do for other commodities, many of which are less vital to consumers and to the state of our economy.

Mr. Chairman, it might be possible for us to agree on an electrical title that protects consumers and discourages market manipulation. I would certainly be happy to support such. I plan to introduce legislation which I sponsored in the last Congress along with Mr. Markey, Waxman and Boucher, that proposes a number of the reforms you might want to consider. If you, however, continue to press for a controversial electricity title, we may lose yet another opportunity to enact useful energy legislation that could benefit consumers. I hope that you will avoid this course and return to the bipartisan approach that characterized the energy bill in the committee report during the 107th Congress.

Finally, Mr. Chairman, as you know, any debate of the comprehensive national energy policy will have to include a discussion of ethanol and MTBE-related issues. Although the final set of panelists will address those issues, I commend to the majority working with us to select a balanced panel of witnesses on this important issue. We have no draft or outline of the majority's plans in this area. But before we act on this important and complex area, there should be sufficient opportunity for all interested parties to review language relating to these matters.

Mr. Chairman, I hope that you will make progress on this issue, but I hope also that you will urge members contemplating such a major amendment to make careful consideration of a draft which I hope you will make available to us as far in advance of the markup as possible. Thank you, Mr. Chairman.

Mr. BARTON. I thank the distinguished dean of the House for that opening statement. Mr. Issa defers. Mr. Burr?

Mr. BURR. Mr. Chairman, I would like to take my 3 minutes, not for the purposes of an opening statement, because I have had the opportunity over a number of years where we have discussed an energy plan and electricity. I think most people on this committee know where I stand. I want to take this opportunity, and I would ask my colleagues to pay special attention to a witness we have from North Carolina today. I think many times we judge people based upon the stock that they come from, and we certainly have an individual with us today that being the grandson of the great Sam Ervin comes from the stock that we would all like to associate with.

But the fact is that Commissioner Jimmy Ervin is a native of Morrington, North Carolina, and he has established his identity on his own. He is a graduate of Davidson College where he received an AB magna cum laude. In 1991, he was a graduate of law school from Harvard School of Law. After practicing—become practicing lawyer in North Carolina in 1981, Commissioner Ervin entered private practice in Morrington, his hometown. While in private practice from 1981 to 1999, Commissioner Ervin represented clients in a variety of areas. He left his practice of law to take an office as a member of the commission in North Carolina on July 2, 1999. His term ends in 2007.

My hope today, Mr. Chairman, is that we will have this legislation finished by then. There are days that I have questioned it, but I plead with my colleagues that the time for debate in this institution is over. Let us move a product, let us do it with the help and the aid and the support of people like Commissioner Ervin across the country, and let us not delay what we have already delayed for so long. I thank the Chair for his indulgence, I thank my colleagues, and I welcome the Honorable Jimmy Ervin.

Mr. BARTON. It is my hope that you and I, and all members of this subcommittee, will stand in the Rose Garden sometime this year behind the President as he signs the bill and gives each one of us a pen. We have Mr. Allen from Maine. Does he wish to make an opening statement?

Mr. ALLEN. I will defer, Mr. Chairman.

Mr. BARTON. He gets an additional 3 minutes in his questions. Mr. Hall of Texas, does he wish to make an opening statement?

Mr. HALL. Just a brief one, Mr. Chairman——

Mr. BARTON. The gentleman is recognized 3 minutes.

Mr. HALL. [continuing] to recognize two of our former colleagues, of course, Glenn English and with him, I think, is Mr. Wynn, who does most of the real work. Glenn just sits up at the table there.

And I wasn't going to ask about Sam Ervin, I was just going to presume that he was his son or his grandson and enjoy it. We have Henson Moore who was a great member here, and one that is of interest to me represents the American Chemistry Council, and that is very important to my State, your State and the State of Mississippi, because we have gone through a lot of legislation together.

I think it is great that you are having this meeting. We have an unusual group here to testify. By my reckoning, we are in about year 9 of work on electric restructuring in this committee, and, as you know, most of us know that those folks who are out here have been before us before and have testified before this committee. I suspect if we examine the record, we would find that many of you have shifted your position, some of you substantially. To me that characterizes the difficulty of this issue, and it is one of the main reasons it is so difficult to get the Congress to find common ground and send electricity to the President. But I am willing to continue to search for ways to amend current law to bring it more into conformance with the reality of the times today. Your testimony here will be very good. And as for the other two, I have Bill Douglass from the State of Texas that will be on the second panel, I think, who is a major leader in our area and a man that people listen to.

Mr. Chairman, you and those who have advised you have selected well. You have great witnesses here, and their testimony is going to be helpful, and I appreciate it. I yield back my time.

Mr. BARTON. We thank my good friend from Texas. Mr. Otter of Idaho? Defers. Seeing no other members present, the Chair will state that all members have unanimous consent to put their written statements in the record.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. VITO FOSSELLA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. Chairman, I am honored to be here as the Committee continues examining various provisions of your proposed energy legislation. As I mentioned at last week's hearing, few topics are as important as defining and passing into law a comprehensive national energy policy. Today's witnesses represent segments of the energy industry whose input is crucial to obtaining such a goal. Testimony from members of the electricity sector will provide valuable information on how to promote growth, while supplying consumers with reliable electricity from a market in which they can trust. Reliable energy is an issue of great importance for my constituents. I am pleased to have the North American Electric Reliability Council here to explain how provisions in this bill will affect New York City's strict reliability standards. I am also interested in hearing thoughts on FERC's proposed Standard Market Design.

Furthermore, today's hearing will address a topic on the top of everyone's mind: America's fuel supply. The Energy Information Administration's This Week in Petroleum states the U.S. average price for regular grade gas is over $1.70 per gallon, "only a tenth of a cent below the highest national . . . average price on record." The publication's future outlook isn't much better, predicting "strong gasoline demand ahead of the normal seasonal increase, extensive refinery maintenance, and still tight crude oil supply, may be pointing to added price pressure in the months ahead." In such an environment, changes to the national gas pool could cause even greater price hikes that unnecessarily squeeze the wallets of American citizens.

These pressing circumstances call on us to reduce our reliance on foreign oil while encouraging efficiency and alternate energy sources. Advancing such initiatives should be our highest priority, rather than discussing burdensome mandates Americans will be forced to pay for at the pump. Some of the panelists in front of us will discuss a proposed renewable fuels standard. I have many questions about the how this proposition will affect refiners and consumers in New York.

Once again, thank you for holding this hearing Mr. Chairman. I yield back the balance of my time.

PREPARED STATEMENT OF HON. MIKE ROGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for holding this important hearing as we begin to move forward on how best to provide for our nation's energy needs.

The goal of better, more efficient markets will not be achieved without substantial new investment in the transmission grid. Electricity providers in my home state of Michigan, working closely with the Michigan Public Service Commission and the Federal Energy Regulatory Commission (FERC), have led the way in seeking innovative solutions for attracting new investment in transmission facilities.

I want to particularly call the subcommittee's attention to the recent sale by DTE Energy of its transmission subsidiary, the International Transmission Company (ITC), to a group of investors led by the investment bank Kohlberg Kravis Roberts (KKR), for $610 million. This transaction, which will provide immediate benefits to electricity consumers in Michigan, is a model for how innovative regulatory initiatives can spur new investment in the transmission grid.

Wall Street's verdict on the ITC sale was immediate. On February 26, 2003, the day the transaction closed, Standard & Poor's assigned its A- rating to the senior secured bank loan of ITC that financed the transaction. Investors increasingly see that, given the proper regulatory structure, independent transmission companies are a profitable, stable investment option.

Chairman Wood and the other FERC commissioners are to be congratulated for putting in place the regulatory structure that made the ITC sale possible. I wholeheartedly support the provisions in the draft bill that encourage FERC policy in this area.

Mr. Chairman, thank you again for your continued leadership. I look forward to working with you as we proceed.

PREPARED STATEMENT OF HON. MIKE DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

I want to thank you Chairman Barton for convening this hearing today and I will keep my comments brief this morning.

As I've said before, I think it is vital that we move forward with this effort to write a bill establishing a comprehensive national energy policy. I also think that it is important that as a part of that effort, we do strive to include provisions dealing with electricity and those markets as they obviously play an integral role in our overall energy picture.

I realize there are those that suggest it is premature to address electricity while we are continuing the process of understanding all the factors that contributed to the crisis we saw in recent years in California and other western states and I respect that opinion. But at the same time, I think its important to note that there are many consumers throughout the nation that could benefit from our efforts on electricity, and to me it seems a little unfair to hold back the potential for progress because of the these ongoing investigations.

In fact, while I realize that California has filed and continues to pursue claims of market manipulation against a large number of companies, it is also true that not every company that was doing business in California is subject to these charges. There are companies that had long-term electricity contracts with California that, as I understand it, actually did save the state and its residents money. so I think its important that we not automatically lump all companies involved with California together as the causes for their crisis are considered.

Its also important to note that there are states and regions that are benefiting from a deregulated environment with regard to electricity. In my home state of Pennsylvania for instance, my constituents have seen substantial reductions in rates, increased competition, and more choices including green power. Based on my experience with Pennsylvania, I think that moving toward establishing RTO's and encouraging the FERC to work toward their ideas for implementing Standard Mar-

ket Design (SMD) has shown great promise and can benefit customers and consumers everywhere.

So I am generally encouraged by the direction we are taking with regard to electricity to date. At the same time, I do have some questions and concerns with the draft bill; for instance with the section regarding siting of transmission facilities. Some additional clarification or work also seems needed on the process DOE would use to designate 'congestion areas', in maintaining or increasing access to the grid for all types of generation, and to insure market transparency. I hope that we can address these and other areas of concern in a manner that achieves some true bipartisan and regional consensus.

Mr. Chairman, thank you for the time and I look forward to continuing to work with you and other members of the Subcommittee on these important issues.

Mr. BARTON. We will now begin to hear testimony from our first panel. Several of them have been introduce, but we will go down and introduce each one of them in their own right.

We are going to start with Mr. David K. Owens, who is the executive vice president, Edison Electric Institute. We will then hear from Mrs. Jan Schori, who is the general manager and CEO of the Sacramento Utility District who is testifying on behalf of the Large Public Power Council. She is from California. We have Mr. John Twitty, general manager of the City Utilities of Springfield, Missouri. He is testifying on behalf of the American Public Power Association, and he was introduced by our distinguished whip, Mr. Blunt. We have Mr. Glenn English, former distinguished member from Oklahoma, who is the CEO of the National Rural Electric Cooperative Association, and he has been before us numerous times, as Mr. Hall pointed out. We have Mr. Ron Walter, who is the executive vice president of Calpine Corporation. He is testifying on behalf of the Electric Power Supply Association, or EPSA. Mr. Walter is from San Jose, California. We have Mr. Henson Moore, who is the president and CEO of the American Forest and Paper Association. He is testifying on behalf of the Electricity Consumers Resource Council and the American Chemistry Council. As Mr. Hall pointed out, he is a former member from the great State of Louisiana. Last but not least, we have the Honorable Sam J. Ervin, the commissioner from the North Carolina Public Utility Commission, and he has been formally introduced by Mr. Burr of North Carolina.

Gentlemen and lady, welcome. Your testimony is in the record. We are going to ask that you summarize it in 5 or 6 minutes, and we are going to start with Mr. Owens. Welcome to the subcommittee.

STATEMENTS OF DAVID K. OWENS, EXECUTIVE VICE PRESIDENT, BUSINESS OPERATIONS GROUP, EDISON ELECTRIC INSTITUTE; JAN SCHORI, GENERAL MANAGER AND CEO, SACRAMENTO UTILITY DISTRICT, ON BEHALF OF LARGE PUBLIC POWER COUNCIL; JOHN TWITTY, GENERAL MANAGER, CITY UTILITIES OF SPRINGFIELD, MISSOURI, ON BEHALF OF AMERICAN PUBLIC POWER ASSOCIATION; GLENN ENGLISH, CEO, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION; RON WALTER, EXECUTIVE VICE PRESIDENT, CALPINE CORPORATION, ON BEHALF OF ELECTRIC POWER SUPPLY ASSOCIATION; W. HENSON MOORE, PRESIDENT AND CEO, AMERICAN FOREST & PAPER ASSOCIATION, ON BEHALF OF ELECTRICITY CONSUMERS RESOURCE COUNCIL AND AMERICAN CHEMISTRY COUNCIL; AND SAM J. ERVIN, COMMISSIONER, NORTH CAROLINA PUBLIC UTILITY COMMISSION

Mr. OWENS. Thank you, Mr. Chairman. Good morning, Mr. Chairman and members of the subcommittee. I am David K. Owens, executive vice president of the Edison Electric Institute. We certainly appreciate this opportunity to testify this morning.

As you know, the electricity industry is facing its worst financial challenge in decades. As we have been painfully reminded by recent events, electricity is not just another commodity, it is an essential service. We are committed to ensuring the integrity of electricity markets to consumers, investors and the public. As you consider an energy bill against this backdrop, EEI strongly believes that Congress should focus on those electricity issues that only Federal legislation can resolve. We believe electricity legislation should provide the right incentives to increase needed investment in our overall energy infrastructure. We believe it must set a clear policy direction for the future but at the same time be flexible enough to adjust to changes in our industry.

Let me comment on provisions of the Barton draft electricity title. My written testimony provides more detail about the issues that I will raise this morning. There were references about our transmission system, it certainly was not built with the idea of creating a robustly competitive wholesale market. Needed transmission investments are not being made today. There is a need in fact to enhance our transmission system in order to promote more competition. State transmission siting processes will probably prove adequate for most new transmission line construction, but regional electricity markets require a siting process that has the ability to consider regional and even national needs. We support the very limited FERC backstop siting authority authorized in the draft.

We also support the goal of the Barton draft to reduce delays in Federal permitting of transmission lines. We support the interstate compac provision in the draft, but we have some suggestions to improve the provisions for streamlining the Federal permitting process for siting new transmission lines. We also support the transmission pricing provisions to encourage FERC to promote capital investment in needed transmission infrastructure. FERC currently lacks jurisdiction over government-owned and cooperatively owned transmission, which constitute about 30 percent of the Nation's interstate transmission system. Now this swiss cheese regulation of

interstate transmission is ultimately unsustainable as the industry evolves. We believe the goal of protecting consumers requires putting all utilities participating in interstate wholesale electricity markets under FERC's full, just and reasonable requirements. At a minimum, EEI member companies strongly support inclusion of an effective FERC-lite provision, such as the one in the Barton draft, in any electricity bill.

We support eliminating any legal uncertainty about whether Federal utilities can participate in RTOs, although we are concerned the draft may not meet this important goal. We also support the reliability provisions with one minor modification addressing the governance of regional entities. We support the Barton draft PUHCA repeal provisions. PUHCA is a barrier to capital investment, the creation of independent regional transmission companies and the entry of additional players in electricity markets.

While we appreciate the draft's recognition that PURPA is not compatible with today's electricity markets, we believe that a compelling case exists for repealing PURPA prospectively on the date of enactment. We urge you to adopt this proposal as a PURPA provision. We support eliminating duplicative review of utility mergers and bringing the FERC regulatory process more in line with the process used for other industries.

EEI's member companies support a growing role for economically affordable, renewable energy resources and meeting our Nation's energy needs. Utilities are engaged in a wide array of renewable programs in the States. However, we believe that States and consumers should determine whether and what type of renewable resource makes sense. Now, because net metering is a retail electric service issue, we are pleased that the Barton draft does not preempt State net metering decisions or programs. We do have a number of suggestions on those provisions, however.

Finally, we wholeheartedly agree that the integrity of wholesale electric markets must be restored and maintained. Our biggest with the market integrity provisions in the Barton draft is they do not effectively apply to our participants in interstate wholesale electricity markets. California and other parties have submitted a massive filing to FERC, according to news stories, alleging that California's government-owned utilities engage in Enron-type manipulative strategies that hurt western consumers. All of these market participants, in my opinion, should be subject to FERC authority to make their case and to be judged just as EEI member companies are going to be judged.

Mr. Chairman and members of the subcommittee, we strongly support the movement toward electricity legislation. I would be happy to answer any questions. Thank you.

[The prepared statement of David K. Owens follows:]

PREPARED STATEMENT OF DAVID K. OWENS ON BEHALF OF THE EDISON ELECTRIC INSTITUTE

Mr. Chairman and Members of the Subcommittee: My name is David K. Owens, and I am Executive Vice President of the Edison Electric Institute (EEI). EEI is the association of U.S. shareholder-owned electric utilities and industry affiliates and associates worldwide. We are pleased to have the opportunity to testify today on the electricity title of the February 28, 2003, energy bill discussion draft circulated by Subcommittee Chairman Barton ("Barton draft").

I plan to discuss EEI's priorities in an electricity bill and comment on specific provisions in the Barton draft electricity title, but first I would like to provide a brief overview of the current financial crisis affecting our industry, which serves as a critical backdrop against which you are considering legislation.

FINANCIAL CHALLENGES FACING THE ELECTRICITY INDUSTRY

The electricity industry is facing its worst financial crisis in decades, as the aftermath of the Enron implosion, a boom and bust cycle in generation in some areas and the economic slowdown have combined to erode investor confidence. This has had a devastating impact on utilities' access to capital on reasonable terms. As the most capital-intensive industry in the country, the higher cost of capital makes it more difficult to finance infrastructure projects to maintain reliable electric service.

The shareholder-owned electric utility sector lost $78.3 billion in market capitalization between December 2000 and December 2002, a 23.9 percent drop over two years. The EEI Index, a measure of the overall stock performance of shareholder-owned electric utilities, was down by 14.7 percent in just 2002 alone. If the coverage is expanded to include merchant generators, the drop in market capitalization is even steeper.

Throughout 2002, credit rating changes in the utility sector were overwhelmingly negative, as downgrades outnumbered upgrades by a whopping 182 to 15, according to Standard & Poor's. This 12:1 ratio of downgrades-to-upgrades compares to a 3:1 ratio in 1999, 2000 and 2001. Currently, 18 percent of all utilities are non-investment grade; as recently as 2000, this percentage was only 5 percent.

In addition, it is estimated that the electricity industry must refinance $100 billion in short and long-term loans during 2003. Critical questions facing the industry are where and at what cost will the industry find this capital.

Utility stocks used to be the safe haven for "widows and orphans," who relied on steady utility dividends to help meet their income needs. Now, however, the capital markets view the electricity sector as high risk. Consolidation in the banking industry and federal barriers to investment in the electricity industry increase the difficulty of finding willing investors who are able to provide the needed capital infusions to the electricity industry.

The last year has also seen a "return to basics" movement in the industry. Utilities and their customers have been painfully reminded by the upheaval in electricity markets that electricity is not just another commodity, but is instead an essential service for all consumers. And, we have all recognized the importance of assuring the integrity of electricity markets to investors, customers and the public at large.

During the past several years, FERC has moved more aggressively to advance regulatory policies to promote more liquid and transparent wholesale electric markets. While there have been many criticisms of FERC's original standard market design (SMD) proposal, FERC appears to be responding by giving different regions greater flexibility to establish more liquid markets which best serve regional needs.

EEI supports those aspects of FERC's market design proposals that lead to liquid, transparent and fair regional markets, recognizing that FERC must work much more closely with the states to accommodate regional needs, state authority and other relevant concerns. We look forward to FERC addressing these issues in the "white paper" that FERC expects to release in April.

OVERVIEW OF ELECTRICITY LEGISLATION AND EEI'S PRIORITIES

According to the Department of Energy, competition in wholesale electricity markets reduces consumers' electricity bills by nearly $13 billion annually. While experience with retail competition clearly has been mixed, wholesale competition can benefit consumers. Congress should focus its legislative efforts on promoting the benefits of wholesale competition.

Congress can promote a more efficient competitive wholesale electricity market by addressing those electricity issues that only federal legislation can resolve in a way that provides the right incentives to increase capital investment in the nation's energy infrastructure and sets a clear direction for the future.

While Congress should establish the appropriate framework in which electricity competition can evolve, past experiences demonstrate that it should not try to legislate in response to the problem of the day. Electricity markets have evolved rapidly since Congress began debating electricity legislation in 1995 and the Federal Energy Regulatory Commission (FERC) approved open-access transmission rules in 1996. Our markets will continue to change dramatically in the foreseeable future. Any legislation that is passed must be flexible enough to adjust to the changes in business cycles, regulatory approaches and business activities that will inevitably occur.

However, many in our industry are concerned that federal electricity legislation could add to the industry's challenges in these financially turbulent times if legislation decreases regulatory flexibility or increases the uncertainty and costs of providing affordable electric service to our consumers. To put it in engineering terms, the margin for error in our industry is significantly reduced right now.

Improving the Transmission Infrastructure

Healthy competitive wholesale markets depend on robust transmission systems to move power to where it is needed. Unfortunately, transmission growth has not kept pace with electricity demand. Our current transmission infrastructure was never built for the purpose of moving large quantities of power across long distances. It is not a superhighway. It simply cannot perform this function in an efficient manner.

According to the North American Electric Reliability Council (NERC), the volume of actual transmission transactions has increased by 400 percent in the last four years. Increased congestion on transmission lines not only increases costs to consumers when not all transactions can be completed, but it also threatens the system's reliability.

At the same time that congestion is increasing, investments in transmission have actually been declining. Over the past 25 years, investments in transmission have fallen at a rate of $103 million per year compared to the investment needed just to maintain the current level of transmission adequacy. Difficulties in siting new transmission lines, on both private and public lands, and in raising capital are significant obstacles that have contributed to this decline in transmission investment.

In addition, most new transmission currently is being built to serve local load and to connect new generation to the grid, instead of the high-voltage wires needed to strengthen regional electricity markets. The relative annual growth rates in lower voltage lines and higher voltage lines have changed significantly since the early 1970s. In the early 1970s, the annual growth rate in lower voltage line-miles (69 kV and below) that support localized grid operations and interconnections was 1.9 percent, while the annual growth rate for high-voltage line-miles (115 kV and higher) was 3.2 percent. By the latter half of the 1990s, this relationship had reversed: the higher voltage line-miles were growing at only 0.3 percent, while lower voltage line-miles were growing at 3.5 percent.

We were very disappointed that the electricity title being negotiated as part of last year's energy bill appeared unlikely to include any provisions designed to improve our transmission infrastructure. Therefore, we are encouraged that the Barton draft electricity title includes a number of provisions to enhance transmission infrastructure. We strongly believe that these issues should be addressed in any final electricity title approved by Congress.

FERC Backstop Siting Authority—The Barton draft would grant FERC backstop transmission siting authority for only those transmission lines being proposed in DOE-designated "interstate congestion areas" if certain findings are made. These findings include that the proposed transmission line is consistent with the public interest and that a state lacks the authority to site the line or is unwilling to site the line within a certain time period.

We believe that state siting processes will continue to be adequate for the construction of most new transmission and that, with the conditions imposed in the bill, this new FERC backstop authority will be used only as a last resort in very limited instances. However, we believe that the authority could be critically important in those instances.

Wholesale electricity markets are becoming increasingly regional as power flows across multiple states and as multi-state RTOs gain operational control of utility transmission lines. Most state siting laws do not recognize the role new entities such as RTOs will play in transmission planning nor do they specifically allow for the consideration of regional, not just state, benefits of new transmission lines. If states consider only intrastate benefits and not regional benefits, they may have little choice under state law but to reject the proposed line, even if the benefits to the region are significant.

Regional electricity markets require a siting process that has the ability to consider regional and even national needs. FERC has jurisdiction over wholesale electricity markets, but it currently does not have the authority over transmission siting to help ensure that there is sufficient transmission capacity to support those markets. In comparison, FERC has the authority to site interstate natural gas pipelines. We believe the Commission should have at least limited backstop siting authority.

We are concerned about a limitation in FERC's eminent domain authority restricting use of transmission rights-of-way for parks or trails without consent of the property owner involved. Transmission rights-of-way are often likely candidates for mul-

tiple uses for trails, parks, bike paths and other recreational uses. Indeed, the Washington and Old Dominion bike trail in Northern Virginia runs partly along a transmission corridor. The additional recreational uses in a transmission right-of-way may well increase the public's acceptance of the right-of-way. As long as public recreational uses are merely incidental to transmission corridors, we see no reason why FERC's eminent domain authority should not apply to such incidental uses as well.

Federal Permitting of Transmission Lines—We appreciate the recognition embodied in the Barton draft that the length and complicated nature of the federal permitting process makes it difficult to address transmission infrastructure issues adequately and in a timely fashion. Indeed, we are finding that our member companies are going to extraordinary lengths to avoid siting on federal land if at all possible because of that process. This places a greater burden on private lands and, in some cases, state lands to meet the nation's needs for grid infrastructure enhancement. The byproduct is the potential for more conflict with private landowners and an underutilization of federal lands, even where those lands may be best suited to help fulfill the nation's infrastructure needs.

Rights of Way Across Federal Land: The Barton draft would allow states to assume permitting authority for rights-of-way across federal lands subject to Title 5 of the Federal Land Policy and Management Act (FLPMA) under certain conditions. It appears that the goal of this provision is to reduce delays in the federal permitting of transmission lines. We concur with the goal.

The provision, however, does not really address the core concerns of our member companies: that is, the fragmented federal permitting process for rights-of-way when multiple federal jurisdictions are involved, working under their own deadlines and without any coordination with the state process. It also does nothing to reduce or eliminate multiple and duplicative environmental reviews and the frequent refusal of federal agencies to engage until the state process is done.

We are concerned that, depending on how the language is construed, the provision could provide a powerful incentive for federal agencies to deny right-of-way applications and that it may not shorten the time or reduce the cost associated with getting a right-of-way special use authorizations. Irrespective of the potential benefit of this provision, we would encourage the Subcommittee to consider modifying and adding to this language.

Interstate Compacts: The Barton draft would authorize states to enter into interstate compacts to establish regional siting agencies. We support this provision. The western governors and other regions are working on the formation of multi-state entities to coordinate siting decisions on interstate transmission lines. Because of the differences between the states, these multi-state entities may only be able to serve an advisory function unless authority can be delegated through mechanisms such as interstate compacts.

Corridors Across Federal Lands: The Barton draft would require certain Secretaries and the Council on Environmental Quality (CEQ) to complete a study and report to Congress on transmission corridors. We strongly support the designation and development of corridors for transmission across federal lands under Section 503 of the Federal Land Policy and Management Act. To date, few of these corridors have been designated, despite substantial work by EEI member companies, the Bureau of Land Management, and the U.S. Forest Service to identify the potential for corridors.

A focused study could be helpful in encouraging the development of appropriate corridors, but we have significant concerns with how the provision is drafted. We also have a major concern that preparation of such a study and report to Congress could very well divert resources from the Administration's effort to move forward with corridor designations and thereby slow a process that has already been delayed by a decade.

Interagency Task Force and Memorandum of Understanding: The Barton draft would require the establishment of an interagency task force chaired by CEQ to develop a Memorandum of Understanding on federal coordination of transmission permitting.

We believe that the establishment of an interagency task force to develop such an MOU would be a positive step forward and would provide a modest benefit. We also believe it would be useful for Congress to be more specific and pro-active in addressing certain problems in the federal permitting process for transmission lines. These problems, while shared by other linear facilities, have a greater impact on transmission facilities because they have been traditionally certificated at the state level, hence there is no traditional lead federal agency. Each federal agency with potential jurisdiction over a project has its own set of rules, timelines for action, and processes for permitting. There are other concerns: (1) a tendency to require mul-

tiple and duplicative environmental reviews; (2) not only a failure to coordinate with any state process, but a refusal to become involved until the state process is completely finished; and (3) a lack of harmonized permit terms from one agency to the next, and an increasing tendency to shorten permit periods, making it difficult to build and maintain a reliable national grid infrastructure or to attract the necessary capital investment.

We encourage the Subcommittee to consider creating an opportunity for an applicant to have the Department of Energy serve as a lead agency for transmission and distribution facility permitting, including special use authorizations for rights-of-way. Furthermore, giving that lead agency clear responsibility to set deadlines, coordinate with states and tribes, and prepare a consolidated environmental record of review on which the other federal agencies must rely would significantly improve the federal permitting process for transmission without jeopardizing the ultimate authority of each federal agency to make their permit decision.

Transmission Pricing—The Barton draft would direct FERC to establish by rule incentive-based and performance-based rate treatments to promote capital investment in the transmission infrastructure. While FERC has existing authority to address transmission pricing issues, this has not been a high priority of the Commission's. In addition, while FERC's recent pricing initiatives include some positive incentives, they also demonstrate a clear bias toward utility divestiture of transmission assets, thereby penalizing vertically integrated utilities that are turning operational control, but not ownership, of their transmission lines over to regional transmission organizations (RTOs). Congressional encouragement to FERC on transmission pricing would be helpful.

Consistent Oversight of the Operation of the Transmission Grid

As we've already stated, transmission is the backbone that enables competitive wholesale electricity markets to work efficiently for the benefit of consumers. However, these benefits are threatened not only by insufficient investment in transmission infrastructure, but also by the lack of FERC jurisdiction over government-owned and cooperatively owned transmission facilities, which constitute almost 30 percent of the nation's interstate transmission system. In the Pacific Northwest, the federal Bonneville Power Administration (BPA) alone owns and controls nearly three-quarters of the region's high-voltage transmission capacity. The entire state of Nebraska and most of Tennessee are served by non-jurisdictional utilities, creating huge geographical gaps in FERC's authority.

According to a December 2002 GAO report, "Lessons Learned From Electricity Restructuring," because of this lack of jurisdiction

> FERC has not been able to prescribe the same standards of open access to the transmission system. This situation, by limiting the degree to which market participants can make electricity transactions across these jurisdictions, will limit the ability of restructuring efforts to achieve a truly national competitive electricity system and, ultimately will reduce the potential benefits expected from restructuring.

We believe that this bifurcated regulation of interstate transmission lines is ultimately unsustainable as the industry's structure continues to evolve. The nation's transmission grid is physically integrated. Electrons do not recognize boundaries between public and private transmission ownership.

In addition, the continued reliable operation of the grid is threatened by the lack of mandatory, enforceable reliability rules for all transmission system users.

FERC Open Access ("FERC Lite")—The Barton draft would grant FERC limited jurisdiction over the portion of the interstate transmission grid owned and operated by non-jurisdictional utilities, such as government-owned utilities and electric cooperatives. This authority would enable FERC to require those utilities to provide nondiscriminatory open access to their transmission facilities at rates comparable to those they charge themselves and on terms and conditions comparable to those shareholder-owned utilities are required to offer.

We believe sound public policy to protect consumers would mean putting all utilities participating in interstate wholesale electricity markets under FERC's full "just and reasonable" requirements. At a minimum, EEI's member companies strongly support inclusion of an effective "FERC lite" provision in any electricity bill.

The ability of government-owned utilities to finance transmission facilities with tax-free "private use" financing no longer provides a barrier or excuse for their failure to participate in RTOs or to offer open access upon terms comparable to that required by FERC. Last year the Treasury Department promulgated regulations that permit "private use"-financed transmission facilities to participate in FERC-approved RTOs. As a result, the provisions of proposed Section 211A(f) are no longer necessary.

Regional Transmission Organizations—We commend the Chairman for not including mandatory RTO participation provisions in this draft. EEI's member companies are moving aggressively to comply with FERC Order Number 2000 on RTOs.

The Barton draft also would authorize the federal electric utilities to participate in RTOs. We believe it is essential to eliminate any legal uncertainty about whether federal utilities can delegate authority over their transmission systems to a RTO. However, we are concerned that this provision, as drafted, may not meet this goal.

Reliability—Increasingly competitive wholesale electricity markets and traditional voluntary reliability standards are no longer compatible. We need a new reliability regime capable of developing mandatory reliability rules that are enforceable on all users of the transmission system. We support the reliability provisions in the Barton draft with one minor modification addressing the governance for regional entities with delegated enforcement authority.

Removing Federal Barriers to Wholesale Competition and Investment

Among the electricity issues that only Congress can address are repeal of the Public Utility Holding Company Act (PUHCA) and reform of the mandatory purchase obligation under the Public Utility Regulatory Policies Act (PURPA). The structure and regulation of electricity markets have changed dramatically since these federal statutes were enacted, and they are in desperate need of reform. PUHCA was enacted in 1935 during the New Deal; PURPA represents the only part of the Carter Administration's 1978 energy plan still in effect.

PUHCA Repeal—The Barton draft would repeal PUHCA twelve months after enactment, while giving FERC and state utility commissions broad access to books and records of a utility holding company and its subsidiaries. Such access, together with state and federal jurisdiction over utility activities, provides regulators the ability to protect utilities and their consumers from improper cross-subsidization, including the use of utility debt to finance non-utility activities.

We strongly support PUHCA repeal, which has been part of every major electricity bill and has long been recommended by the Securities and Exchange Commission and other federal agencies. PUHCA is a long-standing barrier to capital investment in the utility industry, the creation of independent regional transmission companies and the entry of additional players in wholesale and retail electricity markets.

PURPA Reform—We commend the Chairman for including provisions in the draft bill that recognize that PURPA is incompatible with competitive wholesale electricity markets. PURPA requires electric utilities to purchase power from certain legislatively-favored generators at government-determined prices.

These prices were supposed to ensure that consumers would pay no more for PURPA power than for other power. Unfortunately, due to a confluence of factors not foreseen by the authors of PURPA, FERC or state regulators, this has not been the result. Instead, long-term PURPA contracts generally have proven to be at rates far above competitive market prices of electricity.

Competition in electricity generation has been unleashed by the enactment of the Energy Policy Act of 1992 and the issuance of FERC open-access rules in 1996 (Orders No. 888 and 889). Consequently, electricity generators and wholesale customers have access to each other under the same terms and conditions applicable to the utility owning the transmission wires. QFs favored by PURPA have the right to request transmission service and to sell power to any wholesale customer, just like any other generator. They do not need the special privilege of being able to sell to a purchasing utility at the utility's "avoided cost" rate.

While we appreciate the draft's recognition that PURPA is not compatible with today's electricity markets, we believe that a compelling case exists for repealing PURPA prospectively upon the date of enactment, along the lines of legislation that has been authored by Representative Stearns. We urge your consideration of this legislation and inclusion of it into the electricity title as the PURPA provision.

Rather than repealing PURPA's power purchase mandate as of the date of enactment, the Barton draft would continue the power purchase mandate indefinitely, unless FERC makes a finding that one of three statutory tests is met. The first test is derived directly from FERC's proposed Standard Market Design (SMD) rulemaking. Memorializing in legislation the specific market attributes proposed by FERC in the SMD would codify a rigid view of what constitutes a workably competitive electricity market. FERC, itself, subsequently has indicated that there should be greater regional flexibility in structuring markets than this first test envisions and has already approved an RTO with a real-time but no day-ahead market.

Second, we agree that a utility participating in a FERC-approved RTO should not be subject to PURPA's power purchase mandate; however, it takes more than one utility to make an approved RTO. It is unfair to hold a utility responsible for the

decisions of others in its region over which it has no control. In addition, in Michigan and elsewhere in the country, utilities have divested their transmission. The new transmission owner may be participating in an approved RTO, but the utility remains subject to PURPA and can never meet this test. In these circumstances, the use of this test actually punishes utilities for doing something that FERC is encouraging as pro-competitive: the divestiture of transmission to an independent third party.

Third, we agree that if FERC finds that a utility operates in a competitive wholesale market, that utility should not be subject to PURPA's mandatory purchase obligation. However, there is nothing to constrain FERC's discretion with respect to making this finding, or even how quickly FERC must act. Without any standards, FERC can hold utilities "hostage" to PURPA for as long as it sees fit. Given the enormous costs in above-market power prices that PURPA has imposed, and continues to impose, on electricity consumers, there is no basis for this indefinite continuation of PURPA.

PURPA's requirement that utilities purchase power from certain, legislatively-favored generators at government-dictated prices has no place in the competitive wholesale electricity market this Subcommittee is seeking to foster. We urge its prospective repeal on the date of enactment.

FERC Merger Authority—Utility mergers are among the most heavily scrutinized of any industry, even though all of the monopoly functions of a utility obviously remain thoroughly regulated after a merger.

A wide range of government regulators, including the Department of Justice (DOJ) or the Federal Trade Commission (FTC), FERC, and, in most cases, the interested state utility commissions must examine proposed utility mergers. In addition, the Nuclear Regulatory Commission must review mergers involving nuclear plants. State attorneys general and consumer advocates also often participate in utility merger proceedings at the state and federal levels. During their merger analysis, the FTC and DOJ determine whether the merger will adversely affect competition. In addition, state commissions examine the impact of the proposed merger on utility rates. FERC duplicates these reviews.

In addition, the DOJ and FTC merger review processes are streamlined and have deadlines the agencies must meet. While we acknowledge that FERC has made progress in improving its merger review process, other changes are needed, so that utility mergers do not drag on for years. The redundant, duplicative review of utility mergers should be eliminated to bring it into line with the merger review process applied to most other industries.

Promoting Renewable Energy Resources

EEI's member companies support a growing role for economically affordable renewable energy resources in meeting our energy needs. We support extending and expanding the Section 45 production tax credit, as well as increased funding for renewable energy research and development. However, because of the significant regional differences in availability, amount and types of renewable energy resources, we believe it is important for the states to determine whether requiring a certain percentage of electricity to be generated from renewable energy resources makes sense for their consumers.

States already are encouraging the development of renewable energy resources through a variety of programs that best fit their own circumstances. More than 90 utilities in 30 states have implemented or announced green pricing programs to support investment in renewable energy technologies. Forty-three states support programs that offer incentives, grants, loans or rebates to consumers using renewable energy resources.

And, 13 states have adopted renewable portfolio standards. Electric suppliers in nine states with competitive retail markets are offering green power products to consumers.

Net Metering—Because net metering is a retail electric service issue, we are pleased that the net metering program in the Barton draft is a PURPA Section 111(d) requirement that the states consider such a program, instead of a mandate that would preempt state decisions or existing programs.

We do have a number of concerns with the provision. The net metering provisions that would prohibit any standby, capacity or interconnection charge create an uneconomic subsidy when such charges are economically justified. In addition, the provisions that would measure net metering "in accordance with normal metering practices" are confusing because net metering is not the norm at this time. The better approach is to require simultaneous metering of energy sold to and sold by an on-site generating facility.

In addition, the Barton proposal goes beyond encouraging renewable energy resources when it endorses net metering for combined heat and power facilities up to 500 kilowatts in size at commercial facilities. As we have learned from PURPA, cogeneration in and of itself does not always mean a facility that is more energy efficient or desirable.

Maintaining Market Integrity

The integrity of wholesale electric markets must be restored and maintained. The public, our investors and our customers must have confidence in our markets. That is why EEI supports FERC's efforts to foster transparent, liquid regional wholesale electric markets. We believe such markets will provide the basis for price transparency and an effective platform for market monitoring and oversight.

Given current market concerns, the Barton draft's market transparency provision would make sure that FERC develops appropriate price and market information. Round trip trading, which we agree is improper, would be prohibited by the draft.

Our biggest concern with both the market transparency and round-trip trading provisions is that these provisions do not extend to all participants in interstate wholesale electricity markets. The current language, referring to "any person, including any entity described in Section 201(f)," inadvertently excludes various non-jurisdictional electricity sellers in interstate commerce that do not qualify as "persons" under the FPA. This problem can be fixed by extending FERC authority to "any person and (emphasis added) any entity described in Section 201(f)" of the Federal Power Act.

An even bigger problem occurs in the Barton draft provision amending FERC's remedial authority under Section 206 of the Federal Power Act, because the provision extending FERC's remedial authority to government-owned utilities and electric cooperatives has so many qualifications as to be virtually ineffective. The provision applies only to a "spot market sale of electric energy" that is for 24 hours or less, but not to longer term sales or to transactions involving transmission, congestion or related services.

It also excludes all transactions by non-jurisdictional entities that sell less that 4 million MWh of electricity per year. We urge that the qualifications in these provisions be removed so that FERC has remedial jurisdictional over all interstate wholesale electric transactions.

No market participant in interstate wholesale electric markets should be immune from FERC's investigative and remedial authority. Recent news accounts make it clear that alleged improper activities in electricity markets are not limited to jurisdictional utilities. The state of California and other parties last week submitted a massive filing to FERC that, according to news stories, alleges that California municipal utilities engaged in a number of Enron-type manipulative market strategies. These alleged market schemes include municipal utilities engaging in "Ricochet" trades, involving selling power out of state and then back into the state to avoid price caps, and "Death Star," in which companies created false congestion on the transmission system and then were paid a premium to remedy the problem. We note that the alleged "Death Star" activities were facilitated because the California Independent System Operator does not operationally control government-owned utilities' transmission systems.

We firmly believe that all participants in competitive interstate wholesale markets, including government-owned utilities, should be subject to the same rules and requirements and to FERC's full rate refund authority. As California's electricity crisis painfully demonstrated, retail consumers of shareholder-owned utilities desperately need the consumer protections offered by FERC's "just and reasonable" rate standard and refund authority applied to all electricity suppliers.

CONCLUSION

As we have stated, only Congress can address a number of critically important electricity issues. We hope our comments on the Barton draft are useful to you and the other Subcommittee Members as you prepare to mark up a comprehensive energy bill. We look forward to working with you to produce the first comprehensive energy bill since the passage of the Energy Policy Act of 1992.

Mr. BARTON. Thank you, Mr. Owens. We would now like to hear from Ms. Jan Schori.

STATEMENT OF JAN SCHORI

Ms. SCHORI. Thank you, Mr. Chairman, good morning. And good morning to the members of the committee. My name is Jan Schori,

I am the general manager of the Sacramento Municipal Utility District in California, and today I am testifying on behalf of the Large Public Power Council, which, as the committee knows, is an association of the 24 largest public power systems in the United States. We collectively serve over 22 million customers, we own about 33,000 miles of transmission lines and have control over about 61,000 megawatts of generation. We are located in virtually all States and territories and all regions of the country.

I am going to defer to John Twitty, who is testifying on behalf of APPA, for broader comments on the overall energy title on behalf of Public Power. I wanted to make very brief comments on two key sections of interest to the LPPC members in the draft electricity title: The expansion of FERC jurisdiction contemplated by the FERC-lite provision, as well as the uniform refund authority provision.

First, on FERC-lite, I want to emphasize that the LPPC members have always supported and continue to support open access transmission. We have support Order 888 and the comparability standard as it was defined in 888; meaning, that we support—that we will make service available to others comparable to what we are providing to ourselves and our own customers. However, with respect to the language that is now in the draft that the committee is considering, we would like the opportunity to work with the committee to amend the language to assure that we will be able to continue to meet our obligation to serve our customers and meet all of our load obligations. We oppose full FERC jurisdiction. There have been certain FERC decisions as well as court decisions which potentially broadened the original understanding that was reached in the language of FERC-lite and which potentially changed the intent of the compromise that was reached. So we look forward to working with the committee to amend that language to restore the original agreement and intent.

Second, on uniform refund authority, the LPPC members have only just received a copy of the draft. We have not yet had an opportunity to meet and discuss and take a formal position on behalf of the LPPC. However, I will note that we appreciate that the language has been significantly narrowed. It is now addressing spot market sales only, and it also is making clear that sales will be permissible if they are undertaken under the market rules that are in effect at the time that sale is made. And those are significant improvements over the original language.

That concludes my comments for this morning. I will be happy to answer any questions.

[The prepared statement of Jan Schori follows:]

PREPARED STATEMENT OF JAN SCHORI ON BEHALF OF THE LARGE PUBLIC POWER COUNCIL

My name is Jan Schori and I am the General Manager of Sacramento Municipal Power District, located in Sacramento, California. I am testifying today on behalf of the Large Public Power Council (LPPC), an association of 24 of the largest public power systems in the United States. LPPC members directly or indirectly provide reliable, affordably priced electricity to almost 22 million customers. Our members own almost 33,000 miles of transmission and control over 61,500 MW of generation. LPPC members are located in states and territories representing every region of the country, including several states represented by members of this Subcommittee—such as Georgia, Florida, Texas, California, New York, and Arizona.

LPPC has testified before the Subcommittee on numerous occasions throughout the consideration of energy policy and electric restructuring. Over the years, we have worked with members of the Subcommittee and full Committee and their staff in a cooperative fashion. We appreciate the opportunity to continue our involvement. We also appreciate the continued support of the Chairman on private use. In addition, on behalf of our members from the Tennessee Valley, I want to thank the Chairman and the Subcommittee for your years of support for the consensus process in that region—support we sincerely hope will continue to be demonstrated by the inclusion of a TVA title in this bill when introduced. Finally, thank you for this opportunity to express the views of LPPC on your draft energy legislation. I will not be commenting on all provisions of interest or concern to LPPC members today but will, instead, focus on several issues of primary concern to our members—FERC transmission jurisdiction, service obligation, and "Uniform Refund Authority." I commend to you as well the list of specific concerns that another witness on this panel, John Twitty, outlines in his testimony.

PUBLIC POWER IS UNIQUE

Public power systems are owned by the communities we serve, not by investors. We are not-for-profit entities, which makes us different. Public power systems have been a part of the nation's electric system since the late 1800s, with many created as a part of the city government. Many LPPC member systems continue to provide numerous services to their communities in addition to electricity, such as flood control and natural gas, water and wastewater services.

Electricity is a vital component of our lives now and, as has been recently demonstrated in my home state of California, a cornerstone of the economy. There are dire consequences if electricity is not reliable and affordable.

As the electric supply of the country has been "deregulated," many providers of electricity have sold off their generation or transmission assets or have severed their direct relationship with electric customers. But public power systems still have an obligation to serve the customers for which the systems are built. This service obligation is generally imposed by state law or local ordinance, sometimes by the statute creating the public entity. As a result, all available resources go first to serving those customers. Power is sold and surplus transmission made available only if it is surplus to those needs.

Our rates reflect the fact that we are not-for-profit entities. Our rates include only the costs of producing and delivering power to our customers and, in some cases, payments to our governing boards or municipal entities as a component of the local budget. Since public power systems are locally controlled, decisions about policies such as rates are made by people who are in touch with local concerns. The city council sets policies for many LPPC members, while other public power systems have a separately elected or appointed utility board that governs their policies. Local control helps ensure that we respond to community needs. In addition, since public power systems are community based, our revenues stay close to home. This helps keep the local economy strong.

THE NEED FOR MARKET REFORMS

As the Chairman noted last week, this Subcommittee has held over 30 hearings in the last five years on the issues of energy policy and electric restructuring. LPPC has been involved in many of these efforts.

This Subcommittee has undertaken tremendous efforts to become well educated on the electricity industry and market. However, this industry has undergone tremendous change and no substantive hearings have been held by the Subcommittee or full Committee since December 2001. Once robust investor-owned utilities are now in serious financial shape with 180 rating downgrades in the past year. Some significant players in the market have filed for bankruptcy. There is an unstable market for all participants and for consumers. The capitol market for utility infrastructure has basically collapsed. Many LPPC members and our customers have serious concerns about legislating major changes to electric power markets at this time, concerns which are shared by our cities and states. Any legislative action must be cautious and carefully considered.

Standard & Poor's recently issued a credit analysis report on the public power sector that noted that the credit rating stability of public power "is a testament to the sector's ability to withstand periodic shocks as well as respond to new challenges." More than 80% of the public power sector has an "A" rating or better at this time and public power systems are functioning well in competitive wholesale markets. A strength of public power systems is our focus on providing the lowest-cost power to our customers.

EXPANSION OF FERC JURISDICTION

Our issue of primary concern today before this Subcommittee, one that affects our willingness to continue to support legislative action and our ability to exhibit the strength and resilience market watchers see in our sector, is the issue of expanded FERC jurisdiction. LPPC and its member companies support open access transmission. In 1999, LPPC worked with the Chairman of this Subcommittee to guarantee open access transmission service by non-jurisdictional entities. Public power agreed that limited FERC jurisdiction could be extended to public power systems and cooperatives in order to ensure that open access transmission service would be provided to all market participants. That is the provision that is known as "FERC-lite." LPPC continues to support this limited expansion of FERC transmission jurisdiction—for the purpose of open access transmission. A recent Supreme Court Decision and the subsequent issuance of FERC's proposed Standard Market Design rule have raised concerns that the current language of the FERC-lite provision could be read to allow expansion beyond its original intent, possibly to impose full FERC jurisdiction over public power systems and cooperatives.

LPPC looks forward to working with the Subcommittee to craft language that would preserve the original intent of FERC-lite and respect the compromise that was made three years ago. The modification we seek to "FERC-lite" would make it clear that FERC may require public power, coops, TVA and PMAs to provide open access transmission services—that is, service to others that is comparable to the service they provide themselves. This is completely consistent with FERC's reciprocity requirements.

FERC itself is not seeking to expand its jurisdiction over public power systems. FERC Chairman Pat Wood has not asked Congress to expand federal authority over public power systems, preferring a "voluntary approach to entice such utilities into the marketplace." The Administration and Commission have generally supported the concept of open access transmission but have not sought additional jurisdiction over the transmission assets of public power. We hope that the Chairman and this Subcommittee recognize this issue and correctly return FERC-lite to a limited extension of FERC jurisdiction to ensure open access to the transmission system.

I know that LPPC is not alone in raising the issue of service obligation. We hope that you will address this issue because, for us, it is about protection our customers.

On the issue of "Uniform Refund Authority," LPPC is reviewing your new draft. LPPC has no official position on the language but we appreciate the fact that you have narrowed the focus to the spot market and limited the grant of authority to violations of market rules in place at the time of the sale in question. Before legislating further, it would be my advice that Congress should take a hard look at how FERC is exercising its current refund authority prior to granting additional authority.

Mr. BARTON. We thank you, and it is always good to end on a positive note, so we appreciate that. Now I would like to hear from Mr. Twitty. You are recognized for 5 minutes.

STATEMENT OF JOHN TWITTY

Mr. TWITTY. Thank you very much, sir. Good morning, Mr. Chairman.

Mr. BARTON. Microphone on. You actually have to push a button there. Glenn English is a high tech guy, he can help you with that.

Mr. ENGLISH. I was fumbling.

Mr. BARTON. Yes.

Mr. TWITTY. He was most helpful, and we appreciate that. Thank you, Mr. Chairman, members of the committee. Let me thank Congressman Blunt even though he is not here for that nice introduction earlier. I am here today on behalf of City Utilities of Springfield, Missouri and the American Public Power Association to talk about issues facing the electric industry and your energy bill discussion draft. I have submitted a comprehensive written statement for the hearing record and would like to summarize that for you this morning.

APPA appreciates and supports the chairman's effort to enact comprehensive energy legislation. We support a number of the key provisions in the draft, including clean coal technology, energy efficiency improvements, Price-Anderson reauthorization, hydro licensing reform, the natural gas pipeline in Alaska and low-income energy assistance. At the same time, we have some serious concerns regarding the electric restructuring provisions in Title VII. Much of our industry is still reeling from the effects of the western crisis 2 years ago, and much of what went wrong is still the subject of ongoing investigation and analysis by Federal and State agencies, including the FERC. We believe it makes sense for Congress to have the final results of those investigations before proceeding with any additional electric restructuring. It may also help to achieve some consensus among Members of Congress, regulators and stakeholders on how to proceed since, as you know and has been mentioned several times, consensus has thus far proven elusive.

In addition, Congress would have an opportunity to see how the FERC may further refine or alter their plan for a standard market design and have an opportunity to address that issue sometime in the future. Finally, in his recent testimony, the FERC chairman asked for only two new authorities: authority to require market information or market transparency and an increase in civil and criminal penalties for violations of the Federal Power Act and the Natural Gas Act.

Mr. Chairman, our economy has had about all the experimentation with electric restructuring it can stand right now. However, if the committee and Congress are determined to legislate in this area, we cannot support most of Title VII as currently drafted. We do support the electric reliability provisions but believe this to be more a matter of infrastructure security than industry restructuring. We also support reauthorization of the Renewable Energy Production Incentive Program, which is addressed in Title VII but prefer the version introduced this session as H.R. 671 by Representatives Bono, Markey, Blunt and others.

While my crystal ball is no clearer than any of yours regarding the results of the ongoing investigations and what they might reveal, it seems to me that some elements of Title VII are not helpful and other elements that could be helpful have been omitted. For example, repeal of both the Public Utility Holding Company Act and FERC's merger authority leaves consumers vulnerable and invites market manipulation. PUHCA repeal will not spur increased investments in new facilities, it simply spurs investments in acquisitions of existing facilities by existing companies.

Moreover, a recent report by APPA shows how partial repeal of PUHCA in the Energy Policy Act of 1992 has led, in part, to a number of failed diversifications that have harmed consumers, electricity markets and investors. We believe that PUHCA, while not aggressively enforced by the SEC, still provides some level of consumer protection through passive features, such as the contiguous integration requirement. Imagine how many utilities Enron could have acquired and the impact on consumers and investors if not for that requirement. Thus, if PUHCA is to be repealed, it should be replaced with other consumer protections, such as strengthening FERC's merger review authority.

In addition, Title VII leaves out important elements, such as direction to FERC on use and revocation of market-based rates and language to ensure that load serving entities, such as City Utilities, can continue to use its own transmission lines or firm contractual rights to meet its legally required service obligation. With its directed rulemaking for incentive transmission rates, lack of adequate safeguards against market manipulation and loss of Federal oversight on utility mergers and acquisitions, we are concerned that Title VII, as drafted, has the potential to raise the cost of providing electricity in public power communities like Springfield. While not all utilities are enjoying the same positive outlook, public power systems are financially stable, able to raise capital and have received very favorable ratings from Wall Street. Obviously, we would not like to see changes in Federal law that could dim that outlook.

There are issues that need to be addressed, though not necessarily through legislation. One of these is the increasing congestion on the transmission system. Clearly, new lines are needed, but as the chairman has acknowledged in the draft's bill, it is the difficulty in siting new lines that is the problem. Furthermore, FERC already has the authority it needs to address these issues. The bottom line, we believe, is that there is no need for incentive rates to attract capital. This congested situation is forcing some of us to pursue local generation that is not necessarily the most efficient for our region. City Utilities, for example, has experienced cuts in firm transmission rights on lines that we own, even on off-peak days and times. This has caused us to seek approvals to construct a new 275 megawatt coal fired plant inside our service territory in order to assure that we can meet our obligations to serve customers without relying on the external transmission system. Without those constraints, others in our areas could have participated and benefited from this new plant, but we are the folks who must provide services behind the switch on the wall and must do whatever is necessary to maintain service. That means we need physical resources and a physical path or the lights go out.

Mr. Chairman, APPA and I stand ready to work with you on comprehensive energy legislation, and I thank you for the opportunity this morning.

[The prepared statement of John Twitty follows:]

PREPARED STATEMENT OF JOHN TWITTY, GENERAL MANAGER, CITY UTILITIES, SPRINGFIELD, MISSOURI, ON BEHALF OF THE AMERICAN PUBLIC POWER ASSOCIATION

Thank you Chairman Barton, Ranking Member Boucher, and Members of the Subcommittee for this opportunity to testify. I am pleased to appear today on behalf of the American Public Power Association (APPA) to discuss Chairman Barton's draft energy bill.

My name is John Twitty, and I am the General Manager of City Utilities of Springfield, Missouri, a municipal electric, gas, water and transit utility established in 1945, and serving approximately 100,000 customers. I am also a member of APPA's Board of Directors and Executive Committee. APPA represents the interests of more than 2,000 publicly owned electric utility systems across the country serving approximately 40 million customers. APPA member utilities include state public power agencies and municipal electric utilities that provide electricity and other services to some of the nation's largest cities. However, the vast majority of these publicly owned electric utilities serve small and medium-sized communities in 49 states, all but Hawaii. In fact, 75 percent of our members are located in cities with populations of 10,000 people or less.

The first and only purpose of public power systems is to provide reliable, efficient service to their customers at the lowest possible cost. Like hospitals, public schools, police and fire departments, and publicly owned water and waste water utilities, public power systems are locally created governmental institutions that address a basic community need: they operate on a not-for-profit basis to reliably provide an essential public service at a reasonable price. Publicly owned utilities also have a legal obligation to serve the electricity needs of their customers and they have maintained that obligation, even in states that have introduced retail competition. Furthermore, because they are governed democratically through their state and local government structures, public power systems operate in the sunshine, subject to open meeting laws, public record laws and conflict of interest rules. Most, especially the smaller systems, are governed by an elected city council, while an elected or appointed board independently governs others. Democratically governed, not-for-profit, obligated to serve all customers—understanding the underlying structure and mission of public power is essential in promoting policies that will maintain industry diversity and protect all consumers' interests.

NON-ELECTRICITY PROVISIONS

Although the majority of my testimony will focus on the electricity provisions in Title VII of the draft bill, I will briefly highlight several other areas of importance to APPA. As has been the case since President Bush introduced his national energy policy plan in 2001, APPA believes that there are a number of areas where the Administration and Congress should act to maintain or enhance the viability of traditional fuels used to generate electricity, promote the commercialization of new, alternative sources of electricity, increase energy conservation, provide adequate energy assistance to low-income households, and maintain infrastructure security. APPA supports the following provisions in the bill that will achieve these goals:

- **Title I—Energy Conservation.** This title authorizes greater funding for energy efficiency and conservation efforts and implements specific conservation measures at federal facilities. Specifically, APPA supports Title I, Subtitle B, Section 1021 to increase the authorization for the Low Income Home Energy Assistance Program (LIHEAP) and weatherization assistance. Current weather and economic conditions underscore the need for an increase in this federal program that helps thousands of families pay their home energy costs.
- **Title IV, Subtitle A—Price Anderson Act Reauthorization.** This provision would reauthorize the Price-Anderson Act, a law that indemnifies Department of Energy (DOE) contractors and Nuclear Regulatory Commission (NRC) licensees for damages resulting from nuclear incidents.
- **Title VII, Subtitle C—Reliability.** This subtitle would ensure the reliability of the interstate transmission grid by creating a national industry self-regulating organization to develop and enforce mandatory reliability standards, subject to FERC oversight. We agree with the testimony submitted by the North American Electric Reliability Council (NERC) that this section is acceptable with one change—ensuring that stakeholders govern the regional entities designated by the electric reliability organization to promulgate reliability standards (please see NERC's testimony for the legislative language necessary to effect this change). Although this provision is included in the electricity title, we believe that electric reliability represents a fundamental part of our nation's infrastructure security, and should be considered separately from electricity restructuring provisions.
- **Title VIII—Coal.** This title would authorize funding and specify criteria for the development of a program at the Department of Energy to deploy clean coal technologies. APPA supports clean coal technology research and development, as well as incentives when linked to a tradable tax credit available for public power and rural electric cooperatives.
- **Title II, Subtitle A—Alaska Natural Gas Pipeline.** This title would facilitate the construction of a natural gas pipeline from Alaska to the lower 48 states. APPA members in June 2001 approved a resolution urging the federal government to support construction of the Alaska Natural Gas Pipeline, particularly with the assurance of open access. Increasing supplies of natural gas should help to mitigate price spikes like those we are presently seeing in the market.
- **Title V, Subtitle A—Vehicles and Fuels, Energy Policy Act Amendments.** This subtitle provides fleet owners—including electric utilities—and others with additional flexibility and opportunity to meet alternative fuel vehicle goals established in the Energy Policy Act of 1992. We would also encourage the Subcommittee to add provisions to this title allowing for the banking or trading of

biodiesel credits, as well as ensuring that credit is given for hybrid or neighborhood electric vehicles under EPAct.

- **Title III—Hydroelectric Relicensing.** This title will improve the Federal Energy Regulatory Commission hydroelectric licensing and relicensing processes. APPA supports the language in the bill that will allow current licensees, for the first time, to offer alternative conditions to those mandated by the federal resource agencies under Sections 18 and 4E of the Federal Power Act as long as those alternatives accomplish the same level of environmental protection.
- **Title VII, Subtitle F, Section 7072—Renewable Energy Production Incentive.** This section would reauthorize and reform the Renewable Energy Production Incentive (REPI) program at the Department of Energy. We look forward to working with the Subcommittee to make changes to the language in Section 7072 to conform to the stand-alone REPI reauthorization and reform bill, H.R. 671, recently introduced by Representatives Bono (R-CA), Markey (D-MA), Blunt (R-MO) and others. REPI was established by the Energy Policy Act of 1992, and authorizes DOE to make direct payments to publicly- and cooperatively-owned electric utilities for electricity generated from solar, wind, landfill-gas, and certain geothermal and biomass projects. Since 1995, REPI has funded more than 36 renewable energy projects in 17 states. REPI's authorization is set to expire in September of this year.

  City Utilities plans in the near future to install a wind turbine and solar array as demonstration projects for renewable energy production. Future plans for acquiring or installing additional renewable capacity will in large part be dependent on the continued availability of REPI funds to help offset the additional cost to our customers. As the only incentive available to locally-owned, not-for-profit utilities to make new investments in renewable energy projects, REPI delivers important and significant air quality benefits to the communities served by project owners and operators. The REPI program merits extension, requires reform, and deserves congressional attention.

EVALUATING LESSONS LEARNED FROM DEREGULATION IN THE WEST BEFORE MOVING FORWARD WITH LEGISLATION

"The [electricity] markets are not developing for many complex technical and financial reasons. Yet although Enron demonstrated the potential for abuse of energy deregulation, the issue is not so much fear of crooks as respect for the complexity of restructuring properly—if the objective is even possible with a commodity like electricity."

From article appearing in the February 19, 2003, Roanoke Times and World News, referencing a report by the State Corporation Commission of Virginia.

At its most recent policy meeting in February, APPA members voted to urge that Congress review the results of various ongoing investigations into consumer abuses and market manipulation in western electricity markets and then develop consensus for further action based on those results before imposing any new requirements on electric industry participants, or experimenting with further industry restructuring. Although market abuses in the West continue to be uncovered, these recent events have not been fully aired by Congress, nor will the provisions in the draft bill ensure that market manipulation will be curtailed. As recently as February 25, 2003, the U.S. Attorney's office in San Francisco subpoenaed the California Independent System Operator to obtain documents and recordings between grid operators and the agency's trading floor from May 1, 2000, and July 31, 2001. This action suggests that federal prosecutors are broadening their investigation of market manipulation.

We recognize that restructuring legislation as proposed by Chairman Barton and others has been debated, revised and—once—voted on in subcommittee over the past several years. However, significant deregulation activities at the Federal Energy Regulatory Commission (FERC) and at the state level have progressed during this same time-frame. Revelations in recent months have made it more clear that the results of these deregulation efforts have been disastrous in the West and questionable elsewhere. Rather than proceed with legislation modeled on the failed Enron vision of the electricity industry, we believe that Congress should take a fresh look at the electricity industry and examine the characteristics that are fundamentally different from those of other industries. These characteristics include, among others, the fact that electricity is a real-time product produced and consumed simultaneously, cannot be stored, is a necessity of modern life, and has no reasonable substitute. Delivery of electricity requires hard-wire connections, making this function a natural monopoly that must be regulated in some manner. Further, it is a complex network industry and all parts—generation, transmission and distribution—must work together. This situation necessitates planning to ensure optimum

use of individual facilities and the network, as well as concomitant infrastructure investments. All of these unique characteristics make it very difficult to displace regulation with a purely competitive market in the electricity industry.

Despite promises that the deregulation of both wholesale and retail markets would be beneficial to consumers by reducing electricity prices, the western experiment caused power costs to skyrocket and had a detrimental impact on consumers and investors. APPA believes that the proposals in Title VII would do little if anything to reduce and stabilize electricity costs throughout the industry because they fail to ensure competitive wholesale markets—and the lower costs, improved service and innovation which should be the ultimate goals of federal policy. By imposing unnecessary jurisdictional and regulatory burdens on public power systems and at the same time neglecting to mitigate wholesale market manipulation, the legislation has a significant potential to raise costs for many electric consumers, including those served by public power systems. Given this outcome, we urge the Subcommittee to reevaluate the merits of moving forward with legislation until there is a greater understanding of what can be done by FERC under existing law to ensure effective competition, including how FERC may proceed on proposals to institute a standard market design. Only then it will become more clear whether or not Congress should continue along the same restructuring path, find new ways to restructure, or impose a different regulatory structure.

CREATING EFFECTIVE WHOLESALE MARKETS SHOULD BE THE GOAL OF FEDERAL POLICY

APPA continues to evaluate the information we receive from ongoing investigations into the western electricity crisis as well as the results of retail competition in states that have deregulated. We still do not have all of the information we need to determine the remedies that will be the most effective. Given what we do know, however, we believe that, at a minimum, the following issues still need to be addressed before competitive electricity markets will become viable: ensuring sufficient transmission infrastructure; restoring financial viability to the industry; mitigating market power abuse; ensuring FERC maintains its ability to review mergers; safeguarding the ability to meet service obligations; and creating effective wholesale markets. APPA does not believe that the draft legislation adequately addresses these issues.

I. Transmission Infrastructure

Competition will not work, much less benefit consumers, without a solid and well-developed transmission infrastructure. In many places, our nation's transmission infrastructure is clearly inadequate to support competitive markets. The grid has been neglected by many utilities because a weak transmission system protects their local generation investments. Transmission congestion is increasing, and with congestion, opportunities to manipulate markets and exercise market power grow exponentially.

Accelerating development of the transmission infrastructure required to support competitive markets seems to be the most intractable of all of the obstacles to achieving competitive markets. The problem is not that capital is unavailable because returns on investment are inadequate. To the contrary, Wall Street values the virtually guaranteed regulated return produced by these natural monopoly facilities. Rather, even where the transmission owner is ready, willing and able to expand the system, it is very difficult to site new facilities.

APPA appreciates that the draft bill has acknowledged this problem in Section 7012 by giving the federal government limited authority to ensure the siting of interstate transmission lines. We also appreciate the emphasis in Section 6231 on the development of new transmission technologies by directing the Secretary of Energy to create a program to promote the improved reliability and efficiency of electrical transmission systems.

It has previously been suggested in statements by members of this Subcommittee and in testimony by other stakeholders that because public power systems come under limited direct FERC jurisdiction, we are in some way hindering the creation of a "seamless" transmission system. Some argue that without more FERC jurisdiction, there will continue to be large gaps in the system, thereby hindering the flow of electricity. These supporters of increased FERC jurisdiction over public power systems argue further that if public power were subject to increased FERC jurisdiction, the interstate transmission grid would suddenly function like the interstate highway system.

First, the comparison between the interstate highway system and the interstate transmission grid is tenuous at best. The only similarity between the interstate highway system and the transmission grid is that both were originally created for non-commercial uses—the highway system for national security and the transmission system for reliability. Second, the interstate highway system was planned

and built by the federal government, and the use of eminent domain authority was employed where necessary. Contrastingly, the electric transmission grid was created on an ad hoc basis to facilitate reliability, and the use of eminent domain had to be approved by state siting authorities. Therefore, seams issues and other hindrances to creating a competitive wholesale market will exist regardless of regulatory jurisdiction.

APPA members own only approximately 8% of the nation's bulk transmission lines. Bringing those lines under increased FERC jurisdiction will not solve the major problems of siting and technology development and will not result in a more robust competitive wholesale market. Furthermore, Sections 211 and 212 of the Federal Power Act allow entities seeking access to transmission lines owned by public power systems to petition the FERC if access is denied based on undue discrimination. Nevertheless, APPA agreed several years ago to the language known as FERC-lite which gives FERC an additional tool to ensure that public power systems provide comparable treatment to other entities that wish to access our transmission lines. However, the language in Section 7021 of the bill needs to be updated in order to clearly limit FERC-lite to review and approval of transmission service tariffs.

II. Financial Stability in the Industry

The electric utility industry has experienced a tremendous upheaval in the last two years. The stock of many merchant generators and power marketers has plummeted and the credit ratings of a substantial number of traditional vertically integrated investor-owned utilities have suffered significant downgrades.

Unlike regulators, the markets have not been slow to punish corporate malfeasance. Enron is in bankruptcy-court proceedings and the stock price of Dynegy, another large trader, which in May 2001 had stocks being traded at a high of $57, now has stocks being traded at approximately $2. Other energy trading companies, such as the Williams Companies and El Paso Corporation, have also suffered dramatic decreases in the value of their stock. Even Duke Energy, consistently rated among the top investor-owned utilities, had its credit rating reduced and its rating outlook revised to negative. The weakened financial condition of energy companies clearly hurts both investors, who have lost billions of dollars, and consumers, who will pay higher rates as the result of utility companies' lower credit ratings and higher costs of debt.

At the same time, public power systems for the most part have remained financially stable, and the outlook from Wall Street for public power is positive in 2003. Last year, 182 private energy companies received credit downgrades according to Standard & Poor's, and only 15 have been upgraded. Contrastingly, of the 197 consumer-owned utilities (including rural electric cooperatives) rated by Standard and Poor's, 12 received upgrades and 14 received downgrades with the remainder undergoing no change in their credit ratings. APPA is concerned that further legislation to restructure the industry, including repeal of the Public Utility Holding Company Act (PUHCA) and loss of local control, will have consequences that could damage public power's stable and positive financial outlook.

While APPA members in most parts of the country are weathering the storm of financial uncertainty, their lack of confidence in being able to obtain reasonably priced wholesale power in recent years, coupled with the lack of confidence in being able to obtain firm, reasonably-priced transmission service (without significant risk of curtailments or hefty congestion charges), has led some to build their own localized generation. Indeed, my utility is currently in the process of securing approval to construct a 275 MW coal-fired unit within our service territory. While borne of necessity, this trend is not optimum in terms of APPA's members being able to leverage the economies of scale that drive costs down in a functionally competitive wholesale market. Unless confidence in the market is restored through the mitigation of market manipulation, however, this trend will continue.

III. Mitigating Market Power Abuse

Unless behavior is carefully constrained (or better yet, as has been recommended by the Federal Trade Commission in a number of FERC filings, structural safeguards are put in place), the market can easily be manipulated by those who exert market power. Determining who has market power is difficult since there are many sub-markets within the electric wholesale power market with both geographic and time constraints that do not exist in most other markets.

Although Section 7082 of the proposed bill prohibits round-trip trades of electric power, legislation should not try to identify each and every way market participants can manipulate the market, and attempt to separately legislate against it. Rather, Congress should give FERC broad authority to identify the type of practices that are prohibited (in general terms, just as the antitrust laws define in general terms

what is prohibited), and impose a duty on FERC to take all steps necessary to ensure that wholesale markets are vigorously competitive and free from manipulation, the exercise of market power, and other wholesale market abuses. A clear directive in this area is important in light of the abuses that have occurred in the western electricity market, the gas industry and elsewhere. Otherwise, as experience has shown, consumers will suffer significant harm.

IV. Maintain and Strengthen FERC's Merger Review Authority

With the collapse of the merchant sector of our industry, consolidation is likely to occur at an increasing pace, with the ability to undermine the competitive forces Congress and FERC are seeking to foster (and increasingly depending upon to produce just and reasonable rates for consumers). FERC review of mergers is an essential tool for ensuring that markets are workably competitive and is particularly important at this time of transition for the electric utility industry. APPA has consistently urged adoption of a higher standard that would condition merger approval on an affirmative finding that the proposed merger will promote the public interest, as opposed to the current standard that only requires the merger to be consistent with the public interest.

In addition, FERC's merger authority needs to be clarified and expanded to cover mergers of utility holding companies as well as the disposition of generation assets by jurisdictional utilities and "convergence" mergers of electric and gas utilities.

FERC lacks the clear authority to review the former. While APPA believes FERC has the authority and responsibility to review the latter, it has declined to do so.

The draft bill not only fails to improve upon FERC's ability to review mergers, it eliminates their authority altogether. Deletion of FERC's merger review authority is neither supported by FERC itself nor by the Department of Energy. Section 7101 of the proposed legislation would repeal Section 203 of the Federal Power Act to eliminate FERC's authority to review, approve and condition utility mergers and asset disposition. Inclusion of this provision makes it more likely that large generation companies will increase in size and in their ability to exercise market power.

V. Safeguarding Ability to Meet Service Obligations

In the transition to competitive wholesale markets, it is essential that the ability of all utilities to meet their "obligation to serve" wholesale and retail customers under federal, state and local laws and contracts not be impaired. Congress should include a provision that requires FERC, in whatever market structure it adopts, to preserve such utilities' existing transmission rights—whether they arise from transmission ownership, service agreements under FERC's Open Access Transmission Tariffs, or other firm transmission contracts. Including such a provision would enable these utilities to continue to meet their obligations to serve with existing resources at reasonable cost and without any degradation of reliability. This protection must encompass both transmission-owning utilities and those that depend on transmission facilities owned by others to meet their service obligations, and must include municipal joint action agencies and generation and transmission cooperatives that serve member distribution systems at wholesale, as well as utilities that directly serve retail customers. The language should also require FERC to exercise its jurisdiction to facilitate the planning and expansion of transmission to meet the reasonable needs of load-serving entities to serve current and future loads.

VI. Creating Effective Wholesale Markets

Before wholesale electricity markets can work effectively, the proper market structure, market rules, market monitors and market data must be in place. Also, as mentioned above, market power must be identified and mitigated. APPA believes that these issues can be addressed through the following:

Specifying criteria for market-based rate approval and revocation. APPA believes market based rates for jurisdictional utilities should only be approved on a finding that the applicant will not possess market power and that effective and sustainable competition will exist in that market. The analysis must include an examination not only of the resources available to individual applicants and whether such assets could be used to set the market-clearing price, but also of the effect of transmission constraints and how those assets fit into the broader market structure. Location-specific constraints must be taken into account, as should requirements for grid reliability. Further, and frequently ignored in traditional market analysis, is the time-sensitive nature of electricity.

Enhancing FERC's merger review authority. As opposed to repealing that authority, FERC's merger review process should be revised as discussed above. Further, FERC should be able to preserve the integrity of the market through preliminary relief in order to prevent irreparable harm pending issuance of a final order.

FERC on November 20, 2002, approved the merger of Ameren Corp. and Central Illinois Light Company. As part of FERC's merger conditions, Ameren agreed to several transmission system upgrades which will increase the import and export capability of Ameren's service area, and serve to mitigate market concentration concerns. Therefore, if FERC's merger review authority were to be repealed, as envisioned in the draft legislation, the benefits of the transmission upgrades incorporated in the conditions for approval of this merger would never be achieved.

Market transparency. Market transparency is an essential requirement for fully competitive markets. Today, many electricity markets are opaque, and disparities in market knowledge vary widely from one stakeholder to another. APPA believes that legislation should ensure transparent information on market transactions and should grant clear authority to the Energy Information Administration (EIA) and the FERC to collect and publish appropriate data while protecting proprietary information. Transparency of market information is a fundamental prerequisite of competitive markets and necessary to protect consumers. We believe the directed rulemaking in Section 7081 of the draft bill is a step forward toward assuring market transparency, but that the language needs to clarify to FERC that close calls should be resolved in favor of transparency, not secrecy.

IF ELECTRICITY LEGISLATION MOVES FORWARD, THE FOLLOWING PROVISIONS SHOULD BE REVISED

Eventually, the structural issues listed above must be addressed before wholesale markets can become truly competitive. Other issues may also be uncovered when we more fully understand the causes and effects of the western electricity crisis. In the interim, FERC—particularly under the auspices of its new Office of Market Oversight and Investigations—has tools at its disposal that it can use to influence the behavior of market participants to mitigate market power and restore consumer and investor confidence. APPA does not agree with all of FERC's actions—in particular, we believe that FERC should slow down and more fully acknowledge regional differences in implementing its standard market design rulemaking. However, we are confident that FERC will continue to utilize the tools at its disposal to "calm the waters" in the energy markets until we are more informed about how to proceed.

Nevertheless, if the Subcommittee insists on pursuing the draft electricity legislation, the provisions delineated below should be revised. The legislation should also include provisions addressing market transparency, criteria for the approval and revocation of market-based rate authority, and enhanced FERC merger review authority as outlined above.

Section 7011—Transmission Infrastructure Improvement Rulemaking. This section would require FERC to adopt "incentive transmission pricing" rules and would unnecessarily codify the "participant funding" model for pricing transmission expansion. FERC already has authority under existing law to create incentives for transmission improvements and to impose "participant funding" where appropriate. Therefore, reiterating in legislation this ability is unnecessary and would in fact create a preference for participant funding. Furthermore, "participant funding" is an untested concept and, in most parts of the country, is likely to delay and limit transmission construction at a time when congestion and curtailments are increasing, to the detriment of consumers. Competitive markets will fail without construction of substantial new transmission in many areas.

Transmission pricing is a complex subject currently being debated by FERC. FERC has ample authority under the Federal Power Act to experiment with incentive pricing alternatives and modify pricing models over time as experience is gained. For example, the Commission on January 15, 2003, issued a proposed policy on incentive transmission rates and already has approved incentive rates based on the facts in individual proceedings. Congress should allow the Commission to continue to assess the facts on a case-by-case basis and not codify an untested funding mechanism that could be detrimental in many regions of the country.

Section 7021—Open Access Transmission By Certain Utilities. Known as "FERC-lite," this provision would require public power systems and rural electric cooperatives that own transmission to provide non-discriminatory access to other entities. Open, non-discriminatory access to the interstate transmission system has been a longstanding principle of public power. Although APPA can continue to support the FERC-lite concept, the language in this section must be revised to clarify that FERC-lite is limited to the review and approval of transmission service tariffs for consistency with the comparability standard.

Section 7022—Regional Transmission Organizations. This language would force federal transmission-owning entities to forego their existing statutory authorities and obligations if they contractually enter into an RTO, in the event that the existing authority and obligations conflict with the contract. The scope of the language moves well beyond the ability of an RTO to oversee and operate the federally-owned portions of the transmission system.

Section 7043—Repeal of the Public Utility Holding Company Act (PUHCA) of 1935. Rather than enhancing competitive wholesale markets, the repeal of PUHCA would increase the uncertainty and instability in the wholesale electricity market. As mentioned above, utilities and utility holding companies have placed operating utilities in jeopardy by engaging in unregulated activities and using profits from operating utilities to prop up those activities. As delineated in the attached analysis compiled by APPA staff entitled "The Public Utility Holding Company Act: Its Protections Are Needed Today More Than Ever," these activities were permitted by partial repeal of PUHCA in the 1992 Energy Policy Act. The 1992 Act exempted developers of independent power generation facilities, called Exempt Wholesale Generators, whether they were owned by operating utilities, utility holding companies, or parties not involved in the electric utility business. This exemption resulted in a substantial number of electric utilities and utility holding companies taking advantage of the new freedom from Securities and Exchange Commission scrutiny to create unregulated power production subsidiaries—the very subsidiaries placing many operating utilities in jeopardy today.

PUHCA was originally enacted in 1935 to protect investors and consumers by establishing effective regulation over multi-state utility holding companies. Exemptions to many of the Act's provisions were provided to utility holding companies that operated substantially in one state, as state regulators were presumed to have adequate authority and access to the necessary information to effectively oversee these companies. In the Act, Congress identified several classes of problems it sought to remedy, including: lack of investor information; incorrect valuation of assets and earnings; improper pricing of inter-affiliate transactions; no relationship between a company's expansion and operational efficiencies; and subsidiaries and affiliates in different states, making effective regulation difficult. Not coincidentally, this same list of problems characterizes the current energy industry.

Sections 7044 and 7045—Federal and State Access to Books and Records. A *Wall Street Journal* article from December 26, 2002, stated that "As [energy] deregulation swept the nation in the late 1990s, state legislatures often clipped the wings of regulatory commissions to save money and give emerging markets more breathing room . . . With little or no authority to review the books and records of the unregulated businesses, they now only see part of the picture." Although a step in the right direction, the provisions included in the draft to give FERC and the states greater access to books and records for the limited purpose of reviewing electric utility rates are not adequate to protect customers and investors. While such expanded authority is appropriate, it is by no means an adequate substitute for the protections afforded by PUHCA. Before PUHCA is repealed, there must be strong market power protections in place, regulatory gaps must be filled, and opportunities must be provided to ensure that transactions across the entire utility holding company and all of its subsidiaries can be carefully examined.

Section 7081—Market Transparency Rules. Although a step in the right direction toward assuring market transparency, the language in this section needs to clarify to FERC that close calls should be resolved in favor of transparency, not secrecy.

Section 7082—Prohibition on Round Trip Trading. This provision is too narrow in its scope to effectively mitigate market manipulation. Rather than try to identify each and every way bad actors can manipulate the market, the language should give FERC broad authority to identify the type of practices that are prohibited (in general terms, just as the antitrust laws define in general terms what is prohibited). FERC should also be given the authority to punish manipulative behavior through fines and by withdrawing authority to sell power at market based rates.

Section 7092—Jurisdiction over Interstate Sales. This provision would unnecessarily extend FERC jurisdiction over public power systems by imposing FERC's refund authority over the spot market sales made by public power systems. This language is an encroachment on local authority that is neither prudent nor warranted. Public power systems have been regulated differently under federal law for more than 66 years. This is neither an accident nor an oversight, but rather good public policy that recognizes the differences between not-for-profit public power systems operating in the public interest and regulated at the local level, and multi-state, investor-owned private utilities. Public power systems do not represent a significant presence as sellers in the wholesale markets, and public power systems are,

and will continue to be, net purchasers of electricity. The limited volume of surplus energy from public power systems precludes their ability to set a market-clearing price—public power systems are price takers, not price makers.

There is no policy justification for reversing decades of effective, local authority. Uniform refund authority would negate any notion of the FERC-lite agreement, and makes jurisdiction over public power systems FERC-heavy, including the ability to set wholesale rates after the fact. This is, in fact, a back door to extensive new FERC regulation over public power.

Section 7101—Repeal of Certain Provisions of Federal Power Act Regarding Disposition of Property, Consolidation and Purchase of Securities. This provision would repeal Section 203 of the Federal Power Act, eliminating the ability for FERC to review mergers. APPA opposes this provision, as discussed extensively above.

In conclusion, APPA encourages the Subcommittee to move forward with energy policy legislation as envisioned in the draft bill with the important distinction that the electricity restructuring provisions should be deleted and addressed at a time when we more fully understand the appropriate remedies to prevent a repeat of the western electricity crisis. Thank you again for this opportunity to testify.

Mr. BARTON. Thank you, sir. We now welcome, Mr. English, who is representing the National Rural Electric Coop Association.

STATEMENT OF GLENN ENGLISH

Mr. ENGLISH. Thank you very much, Mr. Chairman; I appreciate that. I am Glenn English, the chief executive officer of the National Rural Electric Cooperative Association. I am representing nearly 1,000 electric cooperatives in 47 States that is owned and, I am proud to say, regulated by some 35 million consumers. And I am pleased to be here.

I, first of all, Mr. Chairman, want to apologize to Sergio Leoni and Clint Eastwood, because I think the description of this legislation can be the good, the bad and the ugly. First of all, I would like to focus on the good. The reliability provisions in this legislation we feel are good, the enhanced penalties we feel are good, the market transparency efforts we feel are steps in the right direction, the voluntary RTO provisions are good, and we agree that moving and dealing with the siting provisions is a step in the right direction.

Now I would like to focus a little bit, Mr. Chairman, on what we find to be bad. The repeal of PUHCA removes any kind of consumer protections whatsoever. We would like to see PUHCA updated and modernized. And, failing that, we would like to see a replacement of consumer protection legislation if PUHCA in fact is going to be repealed. There is nothing in this legislation that does that.

The so-called FERC-lite provisions that are contained within the legislation while they might have been workable under Rule 888 by FERC, when we look at the standard market design proposal by FERC, it simply does not work. Also, we have already had many public statements by the chairman of FERC stating that he finds it unnecessary to even have provisions of the FERC-lite nature contained in any legislation. I can understand and appreciate why many would like to see Rural Electric Cooperative, even though we are the smallest of the entire electric utility industry and a lot of very small electric cooperatives, included in the provisions of regulations. That means FERC has to divert its resources from those who have proven to have committed egregious mistakes—those who have mismanaged, those who have abused the system—and re-

quire those resources to be focused on dealing with those who have not been shown to have been guilty of any problems.

We also have great difficulty with the repeal of the merger review. That, to us, is an anti-competitive provision, one that attempts to provide the opportunity for those with the deepest pockets to be in a position to squeeze out those who may be interested in competing within this marketplace. And I would also say that we have great difficulty with the provisions dealing with the PMAs. These PMAs have contractual obligations that this legislation would void or at least provide the opportunity to void, and we think that is wrong.

But there is the ugly, and it is the ugly that we really find to be not only anti-consumer, but we also find it to be anti-competitive. When you look at the situation with regard to incentive rights, the Federal Energy Regulatory Commission today has the ability to use incentive rates, and they apply it on a case-by-case basis. The only reason we can see for this provision being included in the legislation is to require FERC to go beyond what they have found to be a just and reasonable application of incentives. It also seems to push FERC in the direction of using incentive rates only when in fact a task force comprised of all industry representatives, as well as those from the financial markets that provided a study of the Transmission Task Force to the Secretary of Energy, pointed out this is only one of several options. For instance, reducing risk is another way of dealing with problems that increased investment in the transmission system.

And also we are puzzled by the fact that this legislation does not require that any of these additional funds that might come about as a result of incentive rates be used to build transmission. It can be used for virtually anything. But participant funding, another feature within this legislation, another one that can only be categorized as ugly is another one that we find troubling. Certainly, the Federal Energy Regulatory Commission today has the ability to be able to make judgments and decisions on a case-by-case basis on the case of just and reasonable as to what the compensation should be. But this particular feature, while it has been hailed as bringing about equity between regions, actually it is anti-competitive within the regions. It discourages the building of transmission within the regions, makes it more difficult for competition to take place within a region, and certainly we think that it would discourage improved transmissions within regions of the country. And we don't really think that is the aim of the authors.

Mr. Chairman, what we would suggest is that for many of these provisions, those that fit into the category of being bad and ugly, that we should simply take a time out, see what FERC does through the standard market designs, give them the opportunity to apply the lessons of California and Enron, to give us an opportunity to get it right. But certainly trying to pass legislation to codify into law based on regulations that have not even been finalized yet we think would be a very serious mistake. Thank you very much, Mr. Chairman, for giving us this opportunity to testify.

[The prepared statement of Glenn English follows:]

PREPARED STATEMENT OF GLENN ENGLISH, CHIEF EXECUTIVE OFFICER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

INTRODUCTION

Chairman Barton and Members of the Subcommittee, I appreciate this opportunity to continue our dialogue on the restructuring of the electric utility industry. For the record, I am Glenn English, CEO of the National Rural Electric Cooperative Association, the Washington-based association of the nation's nearly 1,000 consumer-owned, not for profit electric cooperatives.

These cooperatives are locally governed by boards elected by their consumer owners, are based in the communities they serve and provide electric service in 47 states. The more than 35 million consumers served by these community-based systems continue to have a strong interest in the Committee's activities with regard to restructuring of the industry.

Electric cooperatives comprise a unique component of the industry. Consumer-owned, consumer-directed electric cooperatives provide their member-consumers the opportunity to exercise control over their own energy destiny. As the electric utility industry restructures, the electric cooperative will be an increasingly important option for consumers seeking to protect themselves from the uncertainties and risks of the market. I would like to thank you, Mr. Chairman, and Members of the Committee for your receptiveness to the concerns and viewpoints of electric cooperatives.

TIME OUT ON ELECTRICITY

Congress should take a time-out on electricity. It should take time to review the failed deregulation schemes of recent years before it acts. It should avoid undermining the Federal Energy Regulatory Commission's (FERC) ability to respond flexibly to changing conditions in the electric utility industry. And, it should avoid bogging down energy legislation with a controversial electricity title.

The electricity industry is in a state of turmoil and rapid change. In some parts of the country, the competitive wholesale power marketplace is rapidly developing. In other regions, wholesale competition is developing at a more deliberate pace. Retail competition continues forward in a few states, has stalled in many, and is in full retreat in some others. Wall Street, FERC, and the industry are all still trying to determine what lessons we should take from the disaster in California's market, Enron's bankruptcy, and the rapid decline of many power marketers, independent power producers, and investor-owned utilities. Investors, the Commission, and the industry are still working to piece together the causes of this turmoil.

Now is not the time for Congress to act. If Congress moves now, and enacts electricity legislation before the causes of the turmoil have been thoroughly analyzed, Congress risks codifying the very problems that it seeks to solve and possibly breaking those aspects of the industry that are actually working.

By acting now, Congress would also risk denying FERC the resources and flexibility it needs during this time of change. It will take all the resources and flexibility available at the FERC to protect consumers from market failures and abuses during the transition to competitive markets and to ensure that consumers benefit from the new market structures that ultimately develop.

Congress must not enact any law at this critical time that would undermine FERC's ability to respond to changing circumstances. While the Commission has the flexibility today to respond quickly to evolving conditions and the expertise to anticipate the consequences of its actions, the same cannot be said of any rigid congressional mandate. Given the rapid pace of change and the existence of enormous regional differences in power markets, a policy that might make sense today in one part of the country may not make sense tomorrow or in another part of the country. Congress must not, therefore, force FERC to adopt rules that the Commission could conclude today, or in the future, are unnecessary, unjust, or unreasonable given the developing state of the market in any part of the country.

Congress should also recognize that electricity legislation is controversial. Congress should focus instead on issues—such as LIHEAP reauthorization, Price-Anderson Act reauthorization, and support for clean-coal technologies—that are vital for the nation's long-term energy security. It would be better to call a time-out on electricity and to concentrate on the country's real energy needs.

THE FEBRUARY 28 DRAFT ELECTRICITY TITLE

As noted above, NRECA believes Congress should take a time-out on electricity. For many reasons, now is not the time for Congress to address the electricity industry. To the extent Congress does act, however, it should be certain that it does not

restrict FERC's existing ability to respond flexibly to changes in the industry, regional differences in electricity markets, and the needs of consumers.

NRECA is disturbed, therefore, that the February 28 draft includes provisions that will distract FERC from its core mission by expanding its jurisdiction over consumer-owned utilities even though FERC Chairman Wood has himself said that such additional jurisdiction is unnecessary.

NRECA also opposes provisions in the February 28 draft that permit the Secretary of Energy to undermine the critical role of the Power Marketing Administrations and TVA in serving the energy, flood control, irrigation, and other needs of rural America; require FERC to adopt incentive transmission rates that could increase the cost of electricity to consumers without improving service; codify an inflexible approach to funding needed new transmission infrastructure that discourages critical investment and reinforce existing market power; deprive FERC of its existing authority to ensure utility mergers are in the public interest; and repeal PUHCA without adopting effective market power protections in its place. These provisions threaten to increase instability on both Wall Street and Main Street, undermining important consumer protections, developing wholesale markets and investor confidence.

On the other hand, NRECA is pleased that the February 28 draft is narrower in many ways than was H.R. 3406. For example, NRECA was pleased to see that the February 28 draft lacked any proscriptive language with respect to Regional Transmission Organizations. FERC needs to retain the flexibility it has today to define the kinds of transmission institutions that can best serve consumers in light of evolving market conditions and regional differences.

Similarly, NRECA was pleased to see that the net metering requirements in H.R. 3406 have been moved to title I of PURPA. Cooperatives do not object to considering the role that net metering, advanced metering, and real-time pricing can play on their systems. Some cooperatives have already adopted these concepts where and to the extent it serves the best interests of their consumers. Others are in the process of doing so. Nevertheless, were the language in §§7061 and 7071 made mandatory, those provisions would impose a significant burden on many electric cooperatives and their consumers: shifting costs from some classes of consumers to others and inappropriately subsidizing consumers with their own generation.

NRECA supports elements of the February 28 draft that would tend to increase stability for consumers and investors in the electric utility industry. Electric reliability provisions, enhanced civil penalties and an adjustment of the refund effective date for violations of the Federal Power Act, prohibitions on wash trades, and new limited federal siting authority could all enhance the FERC's ability to protect consumers without limiting its existing authority or flexibility.

SPECIFIC PROVISIONS OF THE FEBRUARY 28 DRAFT

Section 7011 Incentive Rates

For several reasons, NRECA opposes § 7011 of the February 28 draft, which requires FERC to adopt a transmission pricing policy that includes incentive rates. First, this provision is unnecessary. FERC has already begun work on a new transmission pricing policy that includes incentives, including higher rates of return for new transmission construction, participation in an RTO, and transfer of transmission facilities to an independent transmission company that is participating in an RTO. Congress does not have to force FERC to do something it is already doing.

Second, NRECA believes it is wrong for Congress in this bill to restrict FERC's discretion to adopt those approaches that it believes will best encourage the construction of needed transmission facilities and otherwise serve the public interest. As discussed above, with the market in the beginning of an evolutionary process, a good approach to transmission pricing today in one part of the country may not be a good approach tomorrow or in a different region. FERC already has authority today to adopt a transmission policy with incentives—and is doing so. It also has the authority to rescind or alter that policy if, at a later date, it considers incentives to be unnecessary or contrary to the public interest. The draft bill would deprive the FERC of that critical authority. FERC would have to include incentives in its transmission pricing policy no matter how unnecessary, unjust, or unreasonable, it later considers them to be.

Finally, NRECA believes that arbitrary increases in rates of return are already an unnecessary and unwise approach to encouraging investment in needed transmission facilities. As explained by the Department of Energy's National Transmission Grid Study, "authorizing higher rates of return is not the only approach to stimulating needed investments in transmission facilities over the long term. Reducing regulatory uncertainty should also be a focus of efforts to stimulate needed in-

vestments" (NTGS at 31) As the NTGS notes, the rate of return required by investors varies with the level of risk. The lower the risk, the lower the return required to attract capital.

Similarly, the Department of Energy's Energy Advisory Board looked at how best to encourage the construction of needed new infrastructure, given that "there is a clear reluctance from the financial community to finance transmission projects." (Report at 22.) The Board determined that "[i]nvestment in the grid will only occur when regulatory policy provides (a) reasonably certain cost recovery, (b) regulatory certainty, in terms of who can operate the system and under what rules and (c) provides a return that makes investment in transmission a reasonable option, considering other available investment options." (*Id*).

That conclusion is significant. As NRECA has been saying for several years, FERC can best encourage the construction of new transmission facilities by providing investors with certainty that they will recover their costs. While the rate of return may be important, the level of return required to attract capital investment is a product of the level of risk faced by investors: the lower the regulatory risk, the lower the rate of return required to attract investment.

NRECA believes it is far better to increase regulatory certainty than to simply throw more money at the transmission shortage. By increasing regulatory certainty, Congress and the Administration can attract greater investment in transmission infrastructure without raising rates of return. That approach keeps costs down for consumers and strengthens electric markets by permitting more generation from across a region to compete economically. Higher rates of return should be a last resort, not a first resort.

The competing approach, granting transmission owners higher "incentive rates" would raise costs for consumers and narrow electric markets by building toll gates between generators and consumers. Interestingly, recent Moody's reports indicate that the regulated (*i.e.*, transmission) component of the industry may now provide a more attractive investment vehicle than the unregulated (*i.e.*, generation and trading) component of the industry. Similarly, Fitch recently rated the newly formed American Transmission Company's senior unsecured debt "A" because:

> Cash flow is expected to be stable and healthy. ATC is a monopoly provider whose transmission franchise is supported by state regulation and [FERC] approved tariff. Its costs are recovered through an annual revenue requirement allocated as fixed demand charges to regional electric utilities using the transmission network.[1]

In other words, ATC has an excellent debt rating (and associated low cost of capital) because it faces low risk.

Section 7011 Participant Funding

For similar reasons, NRECA also opposes § 7011's requirement that FERC permit RTO's to require that all "new transmission facilities that increase the transfer capability of the transmission system" to be participant funded.

First, FERC is already considering adopting participant funding for certain transmission facilities as part of its standard market design (SMD) rulemaking. Congress need not order FERC to do something it already intends to do.

Second, as I have already stated several times, NRECA believes it is wrong for Congress in this bill to restrict FERC's discretion to adopt those approaches that it believes will best encourage the construction of needed transmission facilities and otherwise serve the public interest. The draft bill would deprive the FERC of that critical authority. FERC would have to permit participant funding even if it later considers participant funding to be unnecessary, unjust, or unreasonable.

Third, NRECA believes that the broad participant funding mandate in the bill will discourage the construction of much needed transmission facilities, raise costs to consumers, and entrench existing market power.

NRECA does not oppose participant funding in all circumstances. Like many others, NRECA supports participant funding for those transmission facilities that would not be required but for the interconnection of new generating facilities that plan to export power outside of the region where they are sited. That approach protects native load consumers in one region from paying for transmission facilities that provide them no benefit. If the new transmission facilities benefit a generator, or consumers in another region, the generator or the consumers in the other region should pay the costs of the transmission facilities.

On the other hand, NRECA believes that the cost of any new transmission facilities required in a region to serve consumers in that region reliably or economically

---

[1] Yahoo! Finance Press Release, "Fitch Rates American Transmission Company LLC 'A/F-1,'" March 16, 2002.

should be rolled into the cost of transmission in that region. NRECA and many others, including the Louisiana Public Service Commission, believe that this is the equitable approach. If consumers in a region benefit from a particular transmission upgrade, those consumers should all pay the cost of the facilities.

NRECA also believes that this is the best approach to encourage investment in needed transmission facilities. Rolling the costs of new transmission facilities determined by a regional plan to provide benefits to consumers in the region into the regional revenue requirement gives investors precisely the assurance they need that they will recover the costs of their investment as well as a reasonable rate of return. Participant funding, on the other hand, makes cost recovery extremely uncertain. Under a participant funding approach, investors receive no direct income from the use of their facilities. Instead, they receive "congestion revenue rights," or CRRs. CRRs, however, only entitle their holders to revenue in the event of congestion, which may be substantially reduced or even eliminated due to the construction of the expansion. An allocation of CRRs alone thus discourages investment in new facilities, or at the least creates a perverse incentive to undersize upgrades to maintain congestion on the system, since that is the only way they get paid.

Section 7012 Limited Federal Siting Authority

NRECA understands that limited federal siting authority may be necessary to permit the construction of some regional transmission facilities and upgrades that are critical to the continued reliable and economic service of consumers. Nevertheless, NRECA believes the rights of permitting, siting and eminent domain authority come with the responsibility for serving the public interest. That means that any provision providing for federal permitting, siting, or grant of eminent domain must meet the following criteria:

- Federal permitting, siting, and eminent domain must be used solely to create an interstate high voltage transmission grid that will help utility systems meet their obligations to the states and their consumers;
- The facility for which federal permitting, siting, or eminent domain authority is sought must have been specifically reviewed and determined by an RTO-led or other appropriate multi-state regional planning process to be necessary for the reliable and/or economic operation of the regional transmission grid, and thus provide benefits to the consumers within the region; and
- Federal permitting, siting, or eminent domain must be used only as a backstop to state permitting, siting, or eminent domain authorities.

Section 7012 of the February 28 draft is a good start in that direction. The limited federal authority it provides is restricted to interstate transmission and may only be used as a backstop where state authority fails.

The section's requirement, however, that facilities receiving federal siting and eminent domain authority be within federally determined interstate congestion areas is both too broad and too narrow. On one hand, not all transmission upgrades within a congested area may be properly located or designed to address the congestion. Thus, some facilities built within "interstate congestion areas" might receive federal siting authority under the February 28 draft without providing significant benefit to the consumers within a region. On the other hand, the process for designating interstate congestion areas appears ill suited to identifying the most serious problems in regional transmission grids. Conducted in Washington, D.C. only once every three years, the process seems rather too distant both physically and temporally from the problems to be addressed.

NRECA believes it would be more effective to trust the regional planning processes conducted by FERC-approved Regional Transmission Organizations or other multi-state entities to make good, timely, decisions about the transmission requirements of their regions.

Section 7021 "FERC-lite"

NRECA opposes any expansion of FERC jurisdiction over cooperatives. Such expansion is unnecessary as cooperatives have not denied third parties access to their transmission systems. Provisions subjecting cooperatives with RUS financing to additional FERC jurisdiction are simply a solution in search of a problem.

Even had cooperatives not provided open access to their systems, FERC already has adequate authority to protect other market participants. Under Sections 211 and 212 of the Federal Power Act, as amended and expanded by the Energy Policy Act of 1992, FERC has the direct and explicit authority to require transmission-owning cooperatives to provide transmission service to third parties at just and reasonable rates. Under the principle of reciprocity, FERC has also required cooperatives to provide transmission service to public utilities pursuant to terms and conditions comparable to those FERC imposes on those public utilities.

Even the Chairman of the FERC has stated that the Commission does not require any additional jurisdiction over cooperatives. Speaking to reporters in January, Chairman Wood stated that "FERC would not seek congressional authority over municipals and co-ops, preferring voluntary approach to entice such utilities into the marketplace." "Wood Says He Wants Munis, Co-ops To Want To Be Part Of SMD, But Won't Force Them," Platts, Electric Power Daily, Thursday, January 30, 2003.

NRECA recognizes that it supported the movement of H.R. 2944 from this subcommittee to the full Commerce Committee in the 106th Congress, even though H.R. 2944 included a "FERC-lite" provision similar to the one in § 7021 of the February 28 draft. That was because when the idea of "FERC-lite" first appeared, the "Commission rules" referenced and applied to cooperatives by the provision were Order 888 and its progeny. Since Order 888's reciprocity provisions already required to some degree that cooperatives provide service comparable to that imposed on public utilities by Order 888, "FERC-lite" did little more than codify an existing regulation with which cooperatives were already complying.

Today, however, the "Commission rules" that would be incorporated into the statute are in FERC's standard market design. Thus, even cooperatives with outstanding RUS financing could have to:

- Transfer to an Independent Transmission Provider (ITP) operational control over the transmission facilities that they built to serve their own member owners.
- Incur the substantial transaction costs required to establish an ITP that operates their transmission facilities, a day-ahead energy market, a real-time energy market, and any other mandates that are part of a final SMD rule.
- Incur costs required to schedule service for member-owners in the SMD markets.
- Pay congestion charges for use of their own facilities, built to serve their own member-owners.
- Participate in auctions to obtain congestion revenue rights for use of the transmission facilities that they built to serve their own member owners.
- Permit third parties to take transmission service out of, or across their transmission facilities without making any contribution to the fixed costs of the system.
- Be subjected to market monitoring and mitigation procedures and the associated costs.

These obligations go far beyond the requirements to which cooperatives are currently subject, and far beyond what could possibly be necessary to ensure third parties fair open access to the limited transmission facilities owned by rural electric cooperatives with RUS financing. These obligations could deny cooperatives control over and reasonable access to the very facilities that their members own, paid for, and built to serve their own needs. Such a broad expansion of FERC authority over these facilities threatens cooperatives' ability to meet their core purpose: to bring reliable, affordable electric service to their member-owners.

NRECA is also concerned that "FERC-lite" could now have an even more dramatic impact on small distribution cooperatives than it would have in prior years. First, FERC decided for the first time in its SMD NOPR to take jurisdiction over and regulate bundled retail transmission. That means that "FERC-lite" would now apply not only to those cooperatives providing wholesale transmission service, and to those very few cooperatives providing unbundled retail transmission, but also potentially to hundreds of distribution cooperatives that use a small amount of radial, high voltage transmission line to serve bundled retail consumers. These distribution only entities whose facilities could not possibly have any use to the competitive wholesale market could be subjected by "FERC-lite" to all of the expensive and complicated burdens imposed by SMD.

Second, in several cases FERC has asserted that any facility that carries a wholesale electron is transmission subject to its jurisdiction, even if the facility would otherwise be considered a local distribution line. That means that any distribution-only cooperative that serves only bundled retail consumers could also be subjected by "FERC-lite" to all of the expensive and complicated burdens imposed by SMD if a single retail consumer installs their own generator—no matter how small, no matter how little role the generator could play in the wholesale market.

For these reasons, it is more important than ever that, if Congress enacts some version of "FERC-lite," it include an explicit, bright-line test that exempts all small electric cooperatives from the obligations of "FERC-lite." It is not adequate to exempt those cooperatives that own no "transmission facilities that are necessary for operating an interconnected transmission system." The Commission's definition of transmission is growing so quickly, soon no distribution cooperative would qualify for an exemption no matter how little transmission the cooperative might have or how burdensome it would be for the cooperative to comply. Just the cost of proving

that it qualifies for an exemption could impose undue economic burdens on some small distribution cooperatives, some of which have only a few thousand meters.

Given the tendency of regulators to expand their roles over time, it is also critical that if Congress does enact some form of "FERC-lite" that Congress also state clearly that it does not intend the Commission's authority over cooperatives with RUS financing to ever expand beyond the limits enunciated in the "FERC-lite" provision. Future Commissions should not be permitted to consider the "FERC-lite" provision to be an invitation for further expansion of their jurisdiction over rural electric cooperatives. "FERC-lite" cannot be just the camel's nose under the tent.

Section 7022 Regional Transmission Organizations

NRECA opposes the subsection of § 7022 of the February 28 draft that gives the Secretary of Energy the authority to require the Power Marketing Administrations and TVA to join an RTO and overrides all of the PMAs' and TVA's existing legal authorities, duties, and obligations, to the extent they conflict with the requirements of the RTO. This language goes far beyond what would be necessary to authorize the PMAs and TVA to join RTOs. The language in this section raises serious issues about the federal government's mission to market and reliably deliver hydroelectric power to public bodies and electric cooperatives. Millions of consumers depend on power generated from multi-purpose federal projects. The federal power program is affected by numerous statutes that relate to the preference in the sale of electricity. NRECA believes the consequences of suspending the federal power program's myriad of statutory obligations requires additional examination before it is implemented.

Section 7031 Reliability

NRECA supports the North American Electric Reliability Council's legislative proposal to create the North American Electric Reliability Organization as a single national self-regulating reliability organization with the authority to set mandatory reliability standards applicable to all users of the bulk transmission system. That proposal is critical to the continued reliability of the interstate transmission grid in a competitive environment. For that reason, NRECA supports Section 7031 of the bill with a few minor amendments to which the broad-based coalition in favor of the NERC legislation has recently agreed.

Sections 7041, 7081, 7082, 7084, 7091, 7101 PUHCA, FERC Merger Review, and Market Abuse

NRECA opposes the repeal of PUHCA in § 7041 of the bill. Now is the wrong time to repeal PUHCA. While it has not been adequately enforced, PUHCA is more critical today than ever to protect consumers from abuses in the utility industry. It was PUHCA that prevented Enron from owning, and abusing, more than one electric utility. It was PUHCA that should have prevented Enron and many other companies in the industry from shifting the risks of their unregulated and off-shore activities to retail consumers in the United States.

If repealed, NRECA believes it should be replaced with modern legislation that takes a practical approach to controlling market power, focusing on the substance of consumer protection and market power abuses, as well as the acquisition of undue market power through ownership and affiliation. Such legislation should give federal regulators an array of tools that they can use to protect consumers and enhance competition in electric markets. If circumstances require it, regulators should have the authority to impose structural solutions that will prevent investor-owned utilities from accumulating undue market power, or remedy already existing market power that threatens competitive markets.

For these reasons, NRECA also opposes § 7101 of the February 28 draft, which repeals FERC's authority to review dispositions of jurisdictional property, including utility mergers. Section 7101 moves far in the wrong direction. Without PUHCA it is more important than ever that FERC not only exercise its existing authority to review utility mergers but also new authority. As the Senate version of H.R. 4 provided in the 107th Congress, FERC needs new authority to review transfers of generating facilities and clearer authority to review mergers between electric utility holding companies. The standard of review for large utility mergers should also be strengthened to ensure that such mergers enhance competition. At a time when competition is just beginning to develop in the nascent wholesale electric market, Congress and FERC should not allow it to be choked through the rapid consolidation of generation assets in the hands of a few large companies.

NRECA also believes that Congress should encourage FERC to reconsider the standards FERC uses to grant utilities and others the right to sell power at market-based rates. As FERC has conceded, inadequately competitive wholesale markets have often led to exorbitant rates for consumers. Thin markets, inadequate trans-

mission, market power and market manipulation have singly or together caused rates to rise far above just and reasonable levels. Under such conditions, only traditional rate regulation can ensure that rates are consistent with the law and that consumers are protected from abuse.

For the same reasons, NRECA supports the goal of § 7081 of the February 28 draft, which authorizes FERC to collect data from sellers of electric energy about the availability and market price of wholesale electric energy. To prevent manipulation of market prices, market price information must be transparent to buyers and sellers. NRECA believes, however, that this section should include language that ensures that data collection is implemented in a manner that minimizes the cost and burden to those that must provide the information and requires all relevant agencies to coordinate with one another to prevent duplicative requirements.

NRECA also supports § 7082 of the February 28 draft prohibiting round trip trading; § 7084 of the February 28 draft enhancing criminal and civil penalties for violations of FERC rules; and, § 7091 of the February 28 draft, moving up the refund effective date to the day that a complaint is filed with FERC. Each of these provisions enhances FERC's existing ability to protect consumers without limiting its discretion and flexibility or distracting it from its core mission of ensuring just and reasonable rates, terms, and conditions for interstate transmission and wholesale electric sales.

Section 7092 FERC Refund Authority

NRECA opposes § 7092 of the February 28 draft. That provision would, for the first time, subject RUS borrowers' wholesale rates to FERC review and regulation. At a time when Congress and FERC are seeking to move towards a competitive wholesale market for electric energy, § 7092 would move in the opposite direction, increasing the regulatory burden on electric cooperatives that seek to sell power in the wholesale market. Yet, *electric cooperatives have not been part of the problem*. Not-for-profit electric cooperatives have not gamed markets, they have not abused consumers, and they have not exercised market power. It would be impossible for them to have done so. Cooperatives do not own enough generation and are not large enough players in electric markets to exercise market power. All together, electric cooperatives generate only about 5% of the electric power in the country, which is less than half of the power they need to serve their own consumers. All combined, electric cooperatives' sales to public utilities represent less than 1% of all sales in the wholesale market.

Instead of solving a problem, § 7092 would distract FERC from its core responsibilities and increase uncertainty for electric cooperatives, their member-owners, and their creditors. To date, cooperatives have been one of the most financially stable sectors of the electric utility industry. While other sectors have seen their credit ratings decline precipitously, cooperatives have experienced more credit upgrades than downgrades. Because cooperatives stuck to their knitting and did not engage in speculative generation construction or speculative trading, they have continued to have access to the credit they need to serve their consumers' electricity needs at a reasonable rate. Section 7092 threatens that stability.

Mr. BARTON. We thank you, Mr. English. I do wish that myself and all the bills that I introduce could be beautiful like all the beautiful people that you associate with.

Unfortunately, for me, I am not a beautiful person, and sometimes I have to do ugly things, but that is what makes the world go around.

Mr. ENGLISH. We think you have the potential to be beautiful, Mr. Chairman, and we would like to help you get there.

I would be delighted to provide you with the provisions that make this a beautiful bill.

Mr. BARTON. We are going to give you a chance to——

Mr. ENGLISH. Thank you very much, Mr. Chairman.

Mr. BARTON. [continuing] make me beautiful. It is probably impossible, but hope springs eternal. We would now like to hear from Mr. Walter, and your testimony is in the record, and you are recognized for 5 minutes.

STATEMENT OF RON WALTER

Mr. WALTER. Good morning. My name is Ron Walter. I am executive vice president of Calpine Corporation and one its founders. Thank you for the opportunity to testify today before this subcommittee on behalf of the Electric Power Supply Association, or EPSA. Calpine is a leading independent power producer in this country. With the completion of several power plant projects that are now under construction, by the end of this year we will be the seventh largest generator of electricity in the country. We are proud to have power plants that are either in operation or under construction in 13 of the States represented here on this subcommittee.

EPSA is the national trade association representing competitive power suppliers and have about one-third of the installed generation here in the United States. Our Nation tends to take for granted that an adequate, affordable and reliable supply of electricity will always be available. Electricity is the most fundamental commodity which powers our personal and commercial lives. All too often the country does not pay sufficient attention to electricity until a crisis occurs. We must attend to these issues before a new crisis happens, and we appreciate this committee's efforts to do so.

From an historical perspective, the Energy Policy Act of 1992 was successful in that it fostered a growing private sector investment in modern, efficient and environmentally beneficial gas-fired power plants. Since 1992, Calpine has invested over $15 billion to build new power plants—our money. We have 20,000 megawatts in operation and 10,000 megawatts of construction—enough for 30 million households here. Unfortunately, the installation of new generation alone doesn't complete the vision of reaping the benefits of a fully competitive market. Until fair and open access to transmission is available, until fair access to power procurement is available to consumers, we will not see the positive impact of more affordable costs and greater reliability that should accrue to the consumers. EPSA and Calpine urge Congress to take a fresh perspective on what legislation might best address the needs of consumers.

The key issues today, and it was referred to earlier, revolve around the availability of capital and the evolution of open and fair competition to deliver affordable power. With open competition, regulatory certainty, the sanctity of power contracts and fair long-term procurement practices, capital will once again flow to this industry. A second key issue is the ability for the most efficient power plants to operate regardless of who owns them. This is not happening today in far too many markets. As a result, consumers are paying a higher price where markets are restricted.

I would like to make a few remarks on standard market design and FERC's proposal. We need FERC to act in a timely manner to implement the key proposals of SMD and RTOs, which include an independent transmission grid operations, a single transmission tariff, a long-term bilateral contract market and a transparent short-term market. These actions will open markets up, create regulatory certainty and benefit consumers and producers. Legislation that would put SMD or RTOs in limbo would increase uncertainty, would be costly to consumers and, we believe, to the environment.

EPSA and Calpine commend Chairman Barton for introducing his draft legislation. We generally support its provisions. Specifically, all transmission providers should operate under the same set of rules, so we support the FERC-lite section applying to municipal and cooperative entities, and the authorization for Federal utilities like BPA and TVA to enter into RTOs. We support the draft's efforts to increase the investments in transmission systems. EPSA supports the repeal of PUHCA to facilitate further investment in this electric industry. We also support your compromise position on transmission siting.

Our one serious concern with the draft is in respect to PURPA. PURPA plants, including both cogeneration facilities and renewables, provide a valuable resource to industrial customers as well as consumers, in general. PURPA should not be repealed except and until a truly competitive market is sustained with free access to multiple buyers and seller of electricity, and that is certainly not the case today.

In conclusion, Calpine and EPSA believe that the Congress wisely introduced competition to the electric sector in 1992. If we now complete the steps necessary for a fully competitive wholesale market, consumers will benefit from more reliable, more affordable and more environmentally beneficial power plants. Thank you, and I will take questions, of course, as they come.

[The prepared statement of Ron Walter follows:]

PREPARED STATEMENT OF RON WALTER, EXECUTIVE VICE PRESIDENT, CALPINE CORPORATION

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to testify today. I am Ron Walter, Executive Vice President of Calpine Corporation. I am pleased to be here representing both Calpine and the Electric Power Supply Association (EPSA).

Based in San Jose, CA, Calpine is a leading independent power company that is dedicated to providing wholesale and industrial customers with clean, efficient power generation. Calpine has nearly 20,000 megawatts of operating assets in 23 states and nearly 10,000 megawatts under construction in 11 states. By the end of 2003, Calpine will be the nation's seventh largest power generator. We have energy centers in most of the states represented on the Subcommittee, including California (where we built the first new power plant in almost a decade and continue to be the principal source of new in-state generation), Texas (where we will be 10 percent of the generation in ERCOT), as well as Illinois, Louisiana, Maine, Massachusetts, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania and Virginia.

EPSA is the national trade association representing competitive power suppliers, including independent power producers, merchant generators and power marketers. These suppliers, which account for more than a third of the nation's installed generating capacity, provide reliable and competitively priced electricity from environmentally responsible facilities. EPSA seeks to bring the benefits of competition to all power customers.

On behalf of the competitive power industry, I appreciate this opportunity to comment on electricity policy as Congress resumes work on omnibus energy legislation.

At the risk of stating the obvious, the nation tends to take for granted that an adequate, affordable and reliable supply of electric power will be available to provide for our physical and economic well-being. All too often, though, the country does not pay sufficient attention to policy and market issues that impact the price and supply of electricity until a crisis occurs. From Calpine's perspective, we must attend to these issues and continue to build on our track record of using the latest technologies to create a truly modern U.S. electric power industry.

While competitive suppliers have succeeded in bringing new generation on-line, we want to work with you to extend what Congress under this Committee's leadership advanced with enactment of the Energy Policy Act of 1992. That statute ushered in a new approach in which the costs of building power generation no longer fell on ratepayers—a broken system in which the incentives were to put more and

more money into a regulated rate base with a generous, guaranteed rate of return. In 1992, Congress introduced competition from generators like Calpine and other EPSA members. The Act has succeeded in that Calpine alone has installed 20,000 megawatts of new generating capacity using modern, efficient and environmentally responsible natural gas-fired technology. Since 1999, almost 80 percent (or 92,000 MW) of new U.S. power supplies came from the competitive power sector. While much has been accomplished since the 1992 law was enacted, more remains to be done.

While the 1992 law promoted competition in the generation of power, the benefits of that competitive generation will not be fully realized until competitive power suppliers have non-discriminatory access to a more seamless transmission system and achieve greater participation in fair and open mechanisms for the procurement of power. Unfortunately, many regions of the country do not yet have fully competitive conditions with respect to transmission and power procurement.

Against this backdrop, EPSA urges you and your colleagues to look with a fresh perspective on what type of legislation best meets the needs of electricity consumers. EPSA believes that many of the issues raised in the past are less relevant today, while new issues have emerged that we respectfully suggest should command the attention of Congress.

We ask you to always keep in mind three basic principles:

- First, any structural or procedural change brought about by legislation must be aimed at providing consumers with the lowest-cost reliable power available;
- Second, maximum consumer benefits will flow from competition built around seamless regional markets in which power is generated at the least expensive and most efficient facilities regardless of who owns them; and
- Third, the basic concept of "first do no harm" should apply—the collateral effects from incomplete or poorly thought out policy changes could have a negative impact on all electricity users.

THE LANDSCAPE HAS CHANGED

Much has transpired in the years since the House Commerce Committee began consideration of comprehensive electricity restructuring legislation several years ago. While some issues have increased in relevance, like the need to remove barriers to new capital investment, others no longer require legislative attention.

The landscape has changed in significant respects: for example, the statutory authority of the Federal Energy Regulatory Commission (FERC) to police wholesale power markets and respond to issues of market power abuse has been upheld; steady progress has been made towards independent regional transmission organizations (RTOs); and Public Utility Regulatory Policies Act (PURPA) facilities are recognized as integral sources of cost-effective power with proven efficiency and environmental benefits.

Today, the issues confronting the power sector revolve around the availability of adequate capital to build needed generation and transmission and the continuing evolution of open and fair competition in a manner that will lead to the delivery of the most affordable power to consumers. The two are inextricably linked. Industry participants, investors and lenders need regulatory certainty regarding power markets and assurance that contracts that were signed in good faith will not be overturned. This, in turn, should improve access to capital.

While a few power markets presently have excess capacity, none are over-supplied from a long-term perspective. We know all too well from recent history that even a relatively small shortage of power can result in significant price volatility. Furthermore, when the economy picks up and as various regions of the country continue to grow, there will be an inevitable need for construction of additional, clean generating capacity. However, in today's market these new plants are more likely to be financed when competitive generators can enter into long-term power purchase agreements. Above all else, national and state electricity policies should send positive signals to the investment community about competitive wholesale markets and focus on policies that contribute to achieving that goal, including a regulatory environment conducive to long-term power contracts.

THE GOAL SHOULD BE TO BENEFIT CONSUMERS

The introduction of wholesale competition has been good for consumers. With wholesale and some retail competition, inflation-adjusted electricity prices decreased from 1985 to 2001 on average by 31 percent for residential customers and by 35 per-

cent for industrial/commercial customers.[1] The Department of Energy has estimated that, even in today's partially competitive market, wholesale competition reduces consumers' bills by $13 billion annually and that the savings from increased competition would exceed $20 billion annually.[2] Moreover, studies have shown that fully establishing RTOs could save consumers as much as $60 billion by 2021.[3]

Congress can foster these additional savings by encouraging the purchase of the most economically efficient generation and opening up access to the transmission system on a non-discriminatory basis. Consumers in areas of the country that do not have robust wholesale markets, are not reaping the full benefits of competition—if markets were established in which the least expensive and most efficient generation was deployed first, all electricity customers would save and the competitiveness of energy-dependent industries in these regions would be improved.

THE FRAMEWORK FOR ELECTRICITY POLICY

Any electricity legislation should build on the successes of competitive generation and wholesale markets that have already been achieved. Legislative and regulatory policies should recognize the opportunities that a competitive and dynamic industry can pursue on behalf of consumers of all kinds. Policymakers should complete the job of establishing competitive markets with tangible economic and environmental benefits that began with the Public Utility Regulatory Policies Act in 1978 and was accelerated with passage of the Energy Policy Act in 1992.

Timely action by FERC to consider, improve and bring to a final resolution the many issues addressed by the Standard Market Design (SMD) proposal and other initiatives is an important way to help develop the power resources the nation needs in the most cost efficient and environmentally sound manner possible. Congressional intervention to halt or delay the SMD process has the potential to increase market uncertainty and thus harm consumers. EPSA respectfully suggests that, while vigorous congressional oversight is useful, statutory intervention to block SMD would not be prudent. Doing so would unduly tie the hands of regulators charged with implementing the Federal Power Act, leaving pressing electricity regulatory issues unresolved. The alternative of detailed congressional legislation runs the risk of not being able to anticipate future market conditions and is inherently too inflexible to deal properly with a business as dynamic as power generation, transmission and procurement.

EPSA believes that there are several "myths" about SMD and wholesale competition that should be dispelled. For example, far from raising power prices, SMD will more likely have a downward impact on overall prices by recognizing the practical reality of regional power markets and by removing artificial barriers in order to make them function more efficiently. When robust regional markets are in operation, we know from real world experience that excess power in a given location flows to where it is needed, rather than remaining stranded. Both the customers where the excess power exists and those where it is needed benefit; those selling power generate revenues to help keep their overall prices lower, while those purchasing power avoid the higher prices that even a modest shortfall can produce.

While EPSA members, including Calpine, filed comments on how to improve SMD, it is important to point out that its fundamental principles are based on what has already worked to benefit consumers in major power markets. The tens of millions of "native load" customers in areas that already have vibrant regional markets have been helped, not harmed. Furthermore, making the maximum efficient use of generating assets reduces some of the need for transmission lines and power generation projects.

Far from SMD creating a California-like crisis in other states, as some suggest, just the opposite is true. By encouraging new investment and efficient use of existing resources, SMD and other policies that promote competition will prevent what we in California painfully experienced a few years ago, the costly effects of which continue to be felt. The bottom line is that a state or a regional power market with access to ample power supplies from multiple sources will not experience shortages, which will deter those who might otherwise try to take advantage of tight supply and demand conditions.

Perhaps the perpetuation of these and other SMD "myths" is explained by the Schwab Capital Markets Washington Research Group report which stated that "The only losers under SMD are vertically-integrated utilities that have been using grid

[1] The "2003 Data Update: Assessing the "Good Old Days' of Cost-Plus Regulation" prepared for EPSA by the Boston Pacific Company.

[2] U.S. Department of Energy National Transmission Grid Study, May 2002.

[3] E.g., the "Economic Assessment of RTO Policy" prepared for FERC by ICF Consulting, Feb. 26, 2002.

congestion and manipulating grid access to keep their owned, but less competitive generation assets on line.''

COMMENTS ON DRAFT ELECTRICITY LEGISLATION

EPSA supports the passage of a comprehensive energy bill, including electricity provisions that are carefully crafted and relevant to today's market realities. Mr. Chairman, we commend you for tackling a difficult subject in a generally balanced and judicious manner in your draft legislation.

Many of the draft's electricity provisions are important to EPSA members. For example, the draft extends limited FERC jurisdiction to the transmission systems of large municipal utilities and electric cooperatives. The competitive wholesale market Congress envisioned with passage of the Energy Policy Act of 1992 will not come about and cannot function properly unless all market participants in a clearly interstate transmission system operate under the same set of basic rules. Also in the category of removing barriers, EPSA believes that PUHCA repeal is one of the steps that Congress could take to help encourage additional investment in the industry by removing artificial limits to a range of potential transactions.

The draft legislation explicitly authorizes federal utilities such as TVA and BPA to participate in RTOs; this will facilitate the flow of electricity and allow customers in affected regions to reap the benefits of wholesale competition. A picture is always worth at least a thousand words; one look at the U.S. transmission map demonstrates that a national or even regional transmission system will not exist in major parts of the country if TVA and BPA are excluded. Furthermore, it is incongruous for one federal agency, FERC, to require or encourage non-federal entities to join a transmission regime that does not apply to federally-run transmission systems.

The draft legislation addresses transmission siting, a thorny issue that will not be solved merely by avoiding the complexities of this subject. The Department of Energy's ''National Transmission Grid Study'' documented the importance of correcting the under-investment in transmission assets that has occurred in recent decades. The draft suggests a compromise by establishing a federal back-stop for ''interstate congestion areas'' after states have failed to act; authorizing interstate transmission compacts; and permitting states to step in when there are undue delays with federal rights-of-way.

The one serious concern suppliers of power from cogeneration and renewable sources have about the draft legislation—and it is a major one—is with the provisions to amend the Public Utility Regulatory Policies Act of 1978 (PURPA). Calpine has nearly 9,000 megawatts of cogeneration and geothermal power in operation or under construction in 13 states, including California, Texas, Illinois, Louisiana, Maine, New Jersey, New York and Virginia, from facilities that qualify under PURPA. In considering PURPA issues, it should be noted that the president's National Energy Policy calls for doubling the use of combined heat and power (or cogeneration) by 2010 and encouraging the growth in renewable sources of power, concluding that they will increase reliability and improve the environment. A comprehensive energy bill should encourage, not discourage, the deployment of these technologies.

While we recognize that, unlike some proposals from years past, the draft's intent is to remove PURPA's purchase and sale obligations only where there are alternative purchasers and suppliers, the specific conditions set out in the draft legislative language are insufficient to ensure that PURPA facilities will be able to continue selling their efficient, environmentally friendly power on a predictable and sustainable basis where there remains only one potential buyer of PURPA power and seller of back-up power.

It was one thing to reconsider PURPA as part of broader legislation that would have mandated across-the-board wholesale and retail competition, which would have created multiple buyers of PURPA power and sellers of back-up power across the country. Given that such is no longer the case, it is inappropriate to repeal PURPA's long-standing mechanisms that bring beneficial sources of power to market. EPSA and Calpine are members of a broad-based coalition on the PURPA issue. Our view is that if current law is to be amended, the competitive conditions under which PURPA would no longer apply should be carefully defined, relevant to the operational and financial needs of PURPA facilities (including recognition of their capacity value as well as electric energy), and periodically reviewed if competitive conditions change.

Finally, several issues to be taken up in other bills are worth mentioning for the record. For example, EPSA supports the netting provisions of the bankruptcy legis-

lation and the allowance of accelerated depreciation for new power plants because they could be helpful to the energy industry and other sectors of the economy.

Mr. Chairman, we appreciate your knowledge of and dedication to competitive electricity markets, and look forward to continuing to work with you and your colleagues as you consider these policy issues. Thank you, again, for the opportunity to testify.

Mr. BARTON. Thank you, Mr. Walter. We now want to hear from Mr. Henson Moore. Your testimony is in the record, and you are recognized for 5 or 6 minutes.

STATEMENT OF W. HENSON MOORE

Mr. MOORE. Thank you, Mr. Chairman. I am here today representing major industrial consumers of energy. Our industries are all in the business of making products that require energy for production; in some cases, substantial amounts of energy. An abundant and affordable supply of energy is absolutely critical to our ability to stay in business, to be able to make paper, chemicals, steel, plastics and other goods that are the mainstays of our economy.

I want to compliment you on the efforts to increase the supply of affordable energy in your bill. We never met a form of energy we don't like. The international competitiveness of our products are being severely tested by recent energy shortages and increases in prices. In our case, in the forest products industry, energy is our third highest cost—or the third largest cost in our production. And so we basically support what you are doing to increase the amount of energy that we will have available to us.

In the interest of time, though, I would like to focus my remarks on the electricity title of the bill and specifically how it impacts combined heat and power of cogeneration facilities. Many of your large industrial consumers of energy also produce energy—the chemical industry, the refining industry and the forest products industry in particular. Currently, combined heat and power, or CHP, accounts for 9 percent of the electricity generation in this country. The President's national energy plan calls for a doubling of that by the year 2010. It won't happen unless we have access to the grid and a guarantee of backup and standby power.

CHP plays a dual role in helping expand the supply of affordable electricity, but it does so in an environmentally friendly way. Cogeneration facilities can be more than twice as efficient as a traditional power plant in generating electricity with efficiencies up to 80 percent where the average in the industry of generation of power is somewhere around 35 to 40. In the forest products industry, in addition, almost 60 percent of the energy we cogenerate comes from biomass fuels, which is recognized as climate friendly.

To maintain and expand CHP, we have got to have the market to sell the power we cannot use in our normal operations. Many States continue to have monopoly electric utilities that own both the generation and transmission systems. In States where monopolies still control the market, CHP cannot get meaningful access to the grid or backup or standby power at nondiscriminatory rates without the Federal requirements under PURPA. Even with PURPA in those kinds of States, our paper mills often find it difficult and expensive to satisfy all the local utilities' demands for entering into a contract under PURPA. While some regions of the

country have moved to a more competitive environment, many have not. And even in those where they have, a few large players can dominate that market which really doesn't make it competitive.

Mr. Chairman, I want to compliment you for recognizing your draft bill that the purchase and sale requirements of PURPA should not be immediately repealed, there ought to be a truly competitive market in place before that happens. We think you have the concept right, but we are concerned about some of the provisions and how they actually read. Specifically, under Section 7062 of your bill, there are three things that can trigger the elimination of the current PURPA obligations: A FERC finding of competition according to a statutory definition, a utility joining an RTO or by FERC otherwise finding competition.

I recognize that legislating the definition of competitive market is difficult, but there has got to be more there to be able to point out that competitive markets have got to include willing buyers and sellers, that QFs can reasonably expect to have a market for their power and be able to get backup and standby power when they need it. Such markets must offer a wide range of products, and the transmission of electricity must be completely separated from generation. We strongly support the formulation of independent RTOs, but there is no guarantee you are really going to have a competitive market for QFs to both buy and sell power just because an RTO exists. You could have only two companies in it, and those two companies not be interested in real competition.

We also recommend that your legislation includes some legislation that is not in it now, something we call a look-back provision. You have got to recognize that while you may have market conditions today, those conditions may change. You may have a competitive market today and an uncompetitive one in the future. The legislation ought to include a provision authorizing FERC to reinstate the purchase and sale obligations if it finds at any time that conditions of a fully functioning market no longer exist.

There are many other issues worthy of comment in this legislation relating to transmission, as others have testified to, and market power issues. I have included those in my written remarks. But let me say publicly that we agree fully that transmission capacity is needed in some areas of the country and believe it should not be held up local obstructionism. Your language on transmission siting can make a real difference in that regard. Thank you.

[The prepared statement of W. Henson Moore follows:]

PREPARED STATEMENT OF W. HENSON MOORE, PRESIDENT & CEO, AMERICAN FOREST & PAPER ASSOCIATION, ALSO ON BEHALF OF THE AMERICAN CHEMISTRY COUNCIL AND ELECTRICITY CONSUMERS RESOURCE COUNCIL

My name is Henson Moore. I am President and CEO of the American Forest & Paper Association. AF&PA represents more than 240 member companies and related associations that engage in or represent the manufacturers of pulp, paper, paperboard and wood products. America's forest and paper industry ranges from state-of-the-art paper mills to small, family-owned sawmills and some 9 million individual woodlot owners.

I am here today also representing the Electricity Consumers Resource Council ("ELCON"), and the American Chemistry Council ("ACC.") ELCON is the national association of large industrial users of electricity. Its membership includes companies from nearly every manufacturing industry. ACC is the national association of companies engaged in the business of chemistry.

As the former Deputy Secretary of Energy involved in developing the last National Energy Strategy in 1991 and the Energy Policy Act of 1992, and as a former member of this subcommittee, I know the severe challenges that confront you. I appreciate the opportunity to share my views, as well as the concerns of industrial energy users and producers, as they relate to decisions you will have to make.

Mr. Chairman and Members of the Committee, our respective industries are all in the business of making products that require energy for production. An abundant and affordable supply of energy is critical to our ability to make paper, chemicals, steel, plastics and other goods that are mainstays of the U.S. economy. We haven't seen a form of energy we didn't like yet—I compliment you on efforts to increase the supply of affordable energy. Our businesses and the international competitiveness of our products are being severely tested by recent energy shortages and rising prices.

The U.S. forest products industry is vital to the nation's economy. We employ 1.5 million people and rank among the top ten manufacturing employers in 42 states with an estimated payroll of $50 billion. We are the world's largest producer of forest products. Sales of the paper and forest products industry top $230 billion annually in the U.S. and export markets.

Energy is the third largest cost for the forest products industry, making up more than 8 percent of total operating costs. Paper mills, for example, run their paper machines using electricity largely supplied by mill-operated, on-site cogeneration or Combined Heat and Power (CHP) facilities. Although the industry is nearly 60 percent self-sufficient (using biomass), we also use natural gas, coal, fuel oil and purchased electricity to meet the balance of our energy needs. Forest products companies spent over $2.1 billion on purchased electricity in 2000. Importantly, the industry also sells more than 12 million megawatt-hours annually of electricity to the transmission grid—the equivalent of a mid-sized utility.

Since 1997, employment at U.S. paper and paperboard mills has gone from 222,400 to 178,000—a decrease of almost 20 percent. While these losses have been caused by a variety of factors, the additional pressure of the current energy crisis could result in further mill closures and job losses. This situation would be far worse, had it not been for the forest product industry's commitment to fuel efficiency and independence over the past three decades. Since 1972, this industry has reduced its average total energy usage by 17 percent, reduced its fossil fuel and purchased energy consumption by 38 percent, and increased its energy self-sufficiency by 46 percent.

The chemical industry is also a major consumer of virtually all types of energy—fuel, power, steam and feedstocks (raw materials) for its processes. The $460 billion business of chemistry is a key element of the nation's economy. It is the country's largest exporter, accounting for ten cents out of every dollar in U.S. exports. The industry is also one of the largest and most efficient users of energy in the U.S. economy with energy efficiency improvements of more than 44 percent over the past 30 years. Like the paper industry, the business of chemistry has utilized CHP technologies to become more energy efficient and to significantly reduce emissions.

ENERGY POLICY LEGISLATION AND COMBINED HEAT AND POWER

Any change in energy policy clearly must take into account the needs of consumers and producers. It also needs to address the needs of those who have already taken positive steps to make energy consumption more efficient. The President's National Energy Plan calls for a doubling of energy output from CHP units by 2010. CHP is the cornerstone of the Administration's plan to improve energy efficiency and expand sources of electricity generation in an environmentally-friendly way. This goal of expanded CHP power, increased efficiency and environmentally-friendly power will not be met without the assured access to the grid that is afforded by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The primary function of a CHP unit is to support manufacturing operations that require both electric power and steam or other useful thermal energy. Nonetheless, this electricity represents a critical component of the nation's electricity supply portfolio. Currently, CHP represents 9 percent of total electricity generated nationwide. Forest products, chemicals and oil refining represent 90 percent of the total CHP generation in the manufacturing sector. Almost 60 percent of CHP generation in the forest products industry is from biomass and, thus, is climate friendly. CHP power is also highly efficient power, reaching efficiency levels of 80 percent, which is at least twice as efficient as conventional power generation. This high level of efficiency occurs because our manufacturing processes use both the heat and the steam, while traditional generation units vent steam into the atmosphere. These efficiencies have also led to significant reductions in air emissions.

Successful development and full implementation of black liquor and biomass gasification programs would make the forest products industry a net exporter of renewable electricity—removing some 18 million tons of carbon emissions from the air and generating nearly 30 gigawatts of CHP-based electricity. Mr. Chairman, this represents enough energy to power two-thirds of California's summertime peak. These initiatives entail substantial risk for an already capital-intensive industry. Much R&D remains to be done to prove the technologies can work without adversely impacting mill operations. Continued cooperation with the federal government is crucial to reducing risk to a level that will allow significant industry participation.

Similar initiatives are underway in the area of coal gasification. These technology development programs are essential to creating new and diverse sources of clean energy. Importantly, without guaranteed access to the grid, these new power sources will not be developed and implemented.

WHY PURPA IS IMPORTANT

PURPA was enacted to help reduce U.S. dependence on foreign oil and encourage fuel diversity. It is one of the most successful federal policies in promoting energy efficient generation and renewable energy. CHP technologies make use of diverse fuel resources, including renewables, thus lessening the nation's dependence on foreign oil. Additionally, CHP units typically are diverse in size and geographically dispersed. Their dispersal throughout the grid means greater efficiency through reduced line losses, and improved system reliability through less dependence upon central generation units. Their smaller size also allows for continual adaptation to, and adoption of, improving technologies. For these reasons, CHP has been a successful addition to the nation's power supply portfolio.

In order to maintain existing CHP, and expand it in the future, facilities must have a market to sell the power they cannot use in their operations. Since many states continue to have monopoly electric utilities that own and control both the transmission and generation of electricity, CHP power would not get meaningful access to the grid without the federal requirement under PURPA. In addition, CHP units must be able to purchase back-up power at non-discriminatory rates. Many industries, such as those I am representing today, responded to PURPA by investing billions of dollars in new on-site CHP generation to provide electricity primarily for their manufacturing processes and, occasionally, to the electrical grid.

Under PURPA, electric utilities are required to interconnect and purchase power from "Qualifying Facilities," or QFs, and they are obligated to sell standby, back-up and maintenance power to such facilities on a non-discriminatory basis. This dual guarantee of a place to sell excess power and to purchase backup power has made it possible for more industries to install the necessary equipment and develop the ability to generate electricity for their own needs, in spite of monopoly utility markets.

The power production facilities of a manufacturing operation are generally sized to meet the optimal demand. When the facility experiences a technical problem it must either divert the excess energy to the grid or shut down the power plant. When the manufacturing production process requires more energy than can be produced on site, then electricity is purchased from the local utility. The seamless integration of these QFs benefits not only the manufacturer, but also the local utility by giving them access to additional power to meet unusually high demand for power. If Congress restricts the current access to the grid that PURPA provides, many of these facilities will be economically harmed.

PURPA'S ROLE IN A TRANSITIONING MARKET

While some regions of the country have moved to a more competitive environment, many have not. Even in those regions where competition has been introduced, it is often limited to a few players that dominate the market, thus depriving small generators of meaningful access to willing buyers and sellers. In the face of monopoly and transitioning markets, there must be an assurance of access to the grid. Without such a requirement, utilities could simply refuse to provide access or make the cost of access either so expensive or so difficult that connection to the grid would be impossible. Thus, the opportunity to fully utilize CHP assets would disappear, and the monopoly utility will dominate the market.

Even with PURPA in place, many QFs, including CHP plants, are still having problems selling power into the electric grid. For example, in the Northwest and California, utilities have put up roadblocks to power being sold to the grid or to transmit power to third parties. In the Southeast, where monopolies control vast transmission and distribution systems stretching over several states, utilities regularly exercise their market power through unreasonable surcharges, interconnection

standards and fees, and "shell game" pricing for backup power sales. QFs frequently face obstacles, such as overly burdensome requirements for interconnection studies and long delays, resulting in projects being cancelled or abandoned because the cost of access is too high.

OBLIGATION FOR PURCHASE AND SALE OF QF POWER

FERC has correctly recognized that even in a state that is scheduled to be open to retail competition, there is no guarantee that a fully functioning competitive market for QFs to sell power into will develop. Congressional energy policy legislation should approach PURPA from a similar perspective. Care must be taken to ensure that CHP power is not blocked from the grid as an unintended consequence of reforms to PURPA. The PURPA obligation to purchase is the critical factor that allows manufacturers to contribute to a more diverse energy supply for this nation. If the purchase requirement is eliminated in advance of a truly competitive market place, then many existing CHP assets will become uneconomic, and future CHP development will stall because financing for CHP units is highly dependent on access to the grid.

Similarly, the importance of a federal guarantee for back-up power at just and reasonable rates cannot be over-emphasized in states that remain dominated by monopoly utilities. Without it, QFs would be captive to unregulated monopolies that could charge what they wish. Even in states that have implemented some form of electric restructuring, tariffs and regulations often continue to favor incumbent utilities, and viable options for back-up power often are not offered by competitive suppliers. The QF must be assured of receiving back-up power on a non-discriminatory basis and at just and reasonable rates, especially if the utility is the "provider of last resort" serving retail load. To the extent that utilities have an obligation to serve retail loads, they also should continue to have the obligation to provide back-up power to QFs on a non-discriminatory basis. Once there is a truly competitive retail market, and QFs can buy back-up power in the open market, then, and only then, will the back-up power guarantee no longer be essential to existing and future CHP power generators.

ASSESSMENT OF CHAIRMAN BARTON'S DRAFT PURPA PROVISIONS

Mr. Chairman, I want to compliment you for recognizing in your draft bill that the purchase and sale requirements of PURPA should not be repealed without regard to the conditions in the market where the QF is located. This is a major change from your bill in the last Congress. It appears to be intended to ensure that competitive markets must exist before the purchase and sale requirements of PURPA are repealed. This is a goal we support. We are concerned, however, that the language of this new draft does not adequately guarantee that CHP plants will have meaningful and continuing access to willing buyers and sellers of power before current PURPA provisions are eliminated.

I recognize that legislating the definition of a competitive market is extremely difficult; however, it is essential if CHP power is to survive in this country, and it is essential for meeting this Administration's objectives on CHP and new power plant construction. Specifically what do we mean by a "fully functioning competitive market?" We mean markets that are comprised of enough willing buyers and sellers that QFs can reasonably expect to have a market for their power and be able to get backup and standby power when they need it. Such markets would include both spot and bilateral transactions offering a wide range of products, not only in terms of duration (short-term, mid-term and long-term,) but also types of power (capacity and energy; peaking, intermediate and baseload) and allow development of other products and services. Title VII, Subtitle E, Section 7062 of the draft bill encompasses some, but not all of these criteria for FERC to use in determining whether the market is truly competitive.

While paragraph (a)(1)(A) sets out indicia of competition upon which FERC can make a finding, paragraph (a)(1)(B) does not. We strongly support the formation of large, independently managed Regional Transmission Organizations (RTOs) that require separate independent ownership of transmission and generation assets. We believe this is the linchpin of a competitive market for electricity. Those with financial interests in both transmission and generation will always have an economic incentive to favor their own generation over other generators. However, there is no assurance that this will be the outcome of the RTO debate. Legislating in advance of the determination of these rules leaves open the very real possibility that the intent behind your provision (the assurance of competitive markets for QFs to sell and buy power) will not be accomplished. Formation of an RTO in name only could satisfy paragraph (a)(1)(B). Similarly, paragraph (a)(1)(c) provides FERC with unfet-

tered authority to determine a competitive market exists and thus end the purchase and sale obligations. While we may not be concerned about the use of this provision under the philosophy of the current FERC, there is no guarantee that future Commissions will be as committed to bringing about competition in electricity as this one. Therefore, it would be helpful to give FERC guidance as to the criteria they may use in determining a competitive market.

As currently written, a FERC finding that competition exists in a market will end the utility's obligation to purchase from—and sell power to—a QF. The legislation must also recognize that market conditions can change over time, and that a competitive market today may become uncompetitive in the future. For example, a key player may go out of business, or acquire sufficient market share to dominate, or they may control key inputs to the production of electric generation such as natural gas. In these circumstances, FERC should have the authority to reinstate the utility's obligation to purchase and sale requirements of PURPA. We recommend that this legislation include a provision authorizing FERC to reinstate the purchase and sale obligation if it finds that the conditions of a fully functioning competitive market no longer exist.

Finally, with respect to back-up and standby power, the draft language should be clarified to ensure that if the local utility is required by State law to be the provider of last resort, or still has an obligation to serve any and all customers, that obligation should not be affected by a FERC finding that triggers elimination of a requirement to provide back-up and standby power.

OTHER ISSUES

There are many other issues worthy of comment in this legislation such as those dealing with the transmission grid, transmission siting, participant funding and market power issues including the repeal of the Public Utilities Holding Company Act (PUHCA).

A transmission grid operated in a fair and non-discriminatory manner is essential to industrial consumers whether they produce their own power, or whether they are simply a purchaser of electricity. Our goal is a transmission system that allows buyers of electricity as much access to sellers of electricity as possible. Industrial customers recognize that until we achieve the open transmission system, the utilities who own monopoly transmission and distribution facilities will still possess and exercise market power. These utilities have often used their government-granted monopoly power to the detriment of industrial users by favoring their own power generation over other—often lower priced power—produced by others.

We agree with your assessment that new transmission capacity is needed in some areas of the country. Mr. Chairman, I want to commend you for including the language on transmission siting. We support the language you offer and, in fact, we would support stronger language. New transmission, where needed, will produce benefits to many consumers, and it should not be held up by local obstructionism. This is a serious, problem and you have proposed a fair way to deal with the problem.

Your draft also includes a directive for FERC to implement and utilize incentive rates for the construction of new transmission. While your goal is a noble one—to bring more investment to transmission—this directive is unnecessary. FERC currently has the authority to order incentive rates on a case-by-case basis under present law. There are many areas where new transmission is not needed. Incentive rates would be pointless in these areas and would, in fact, do little more than increase costs to consumers. Thus, we believe this provision in the draft has the potential to increase costs to consumers in certain areas without really encouraging additional transmission to be built. If incentive rates were effective, FERC would order those more frequently to help relieve the congestion where it exists on the grid. In my view resolution of the endless delays in transmission siting will do a lot more to bring needed investment than will this provision.

Another transmission issue that we believe is best left to a FERC rulemaking is the issue of participant funding. FERC has—and frequently uses—the authority to order such funding on a case-by-case basis. While the draft bill's language on participant funding is an improvement over versions that were considered in the Senate last year, we continue to believe this issue is best settled in a regulatory arena, perhaps on a case-by-case basis, rather than legislative arena where it is difficult to craft a one-size-fits-all-rule when each region has a different fact pattern. I would also note that all consumer groups and all non-utility generators believe that mandatory participant funding will hinder, rather than help, the construction of new transmission capacity.

Finally, while my instincts tell me that PUHCA is an outdated and ineffective statute that is no longer useful, energy managers in the forest products industry and elsewhere in the manufacturing community tell me otherwise. There are almost daily stories in the press about utilities allegedly manipulating energy markets. There have been countless instances where utilities have shifted debt from unregulated affiliates to those affiliates subject to state regulations, thus forcing costs to be borne by consumers. While, I support removing those restrictions in PUHCA that limit needed investment by American companies, I believe that reporting and other requirements in PUHCA that protect consumers and investors should remain in place to prevent market abuse and manipulation. Rules are needed to address the operational unbundling of generation, transmission, system control, marketing, and local distribution functions. The need for federal authority to address market power and anti-competitive activities is as essential today for avoiding such abuses as it was 70 years ago.

CONCLUSION

Industrial users and congenerators recognize and fully support the need for more electricity generation and transmission. PURPA has been—and will continue to—be an essential law. It encourages the adoption of new technologies. It has produced a broader, more efficient, more environmentally favorable base of electricity generation. Due to PURPA, electricity capacity was added in smaller increments, thus not burdening users with paying for generation that proved to be much larger than necessary. And the cost of building that generation was funded by private capital. The National Energy Plan, including the goal of doubling CHP units by 2010, will be seriously undermined by efforts to repeal PURPA where open markets are not in force and no independent party determines access to the grid.

Any changes to PURPA must be made with a full recognition of their potential impact on existing CHP assets as well as plans for future expansion of CHP. The access to the grid afforded by PURPA and the rights for back-up and standby power, are essential in markets and regions of the country where competitive markets are not yet functioning effectively. In the spirit of moving toward more competitive markets in the future, the Congress should, at a minimum, ensure that this power generation is not disadvantaged by monopolistic markets by making the changes we have suggested.

Mr. BARTON. Thank you, Mr. Moore. We now want to hear from the Honorable Ervin, and I have been asked by Mr. Burr's staff to suck up to you a little bit.

He is thinking about running for a Senate seat that your grandfather held down in North Carolina for so many years, and his staff just wants me to let you know that he is honored that you are here and he thinks you are a great American, and he wants to follow in the footsteps of your grandfather. And any advice you have on how to help him to do that or any people you know that could help him to do that, he would be more than willing to listen to.

Mr. ERVIN. Mr. Chairman, I have been over introduced sufficiently today already, so I——

Mr. BARTON. You are recognized for at least 5 minutes. In all seriousness, we are very pleased to have you here.

STATEMENT OF SAM J. ERVIN

Mr. ERVIN. My grandfather used to advise anybody that spoke in public not to trespass on eternity. You have got a clock up here which I appreciate, and I am well known for my verbosity and I will try not to violate my grandfather's admonition.

I do appreciate the opportunity to come before you this morning. I am here representing the other six members of the North Carolina Utilities Commission, although most of what I am going to say is generally consistent with the views that are shared by most of the other State regulators in the southeast. Like Mr. Walter, I am going to generally speak about the FERC's standard market design

initiative, although not surprisingly, I suspect that what I am going to say is going to be about 180 degrees different than what he said.

Like the others who had spoken this morning, I do very much appreciate the opportunity to address the issues that are the subject of today's hearing. As the other speakers have indicated, the subjects that you are addressing this morning are among the most important issues that this Congress will confront. As you consider them, I urge you in the strongest possible terms to keep in mind that electric service is not provided in a uniform manner across the United States and that any electricity-related legislation that you ultimately choose to enact should take these regional differences into account.

Electric service in the Southeast continues to be provided in large part by vertically integrated utilities. With the exception of Virginia, no southeastern State has embraced retail competition at the present time. In addition, none of these States are likely to abandon the existing industry structure in the near future. As a general proposition, southeastern regulators tend to believe that rates in our region are favorable, that our service is reliable and that our infrastructure is in reasonably good condition. For that reason, there appears to be little demand for abrupt change in southeastern electric markets.

This general level of satisfaction with the industry structure does not, however, mean that the North Carolina Utilities Commission is indifferent to the benefits of a properly functioning wholesale market. On the contrary, we recognize that such a wholesale market can benefit the retail customers of our vertically integrate utilities, and I talk about some of the ways that that can occur in my written statement.

Despite this fact, the benefits of wholesale market improvements are not unlimited given our current industry structure. For that reason, any attempt to reform the wholesale market should be based upon a careful analysis of the impact of any proposed wholesale market changes upon the retail market and a recognition that the purpose of the wholesale market is to support the retail market rather than the other way around.

As you know, the FERC standard market design proposal has produced considerable controversy in many parts of the country, particularly including the Southeast. Although FERC claims that standard market design is intended to rectify a perceived residual discrimination in wholesale markets, much of what FERC views as undue discrimination is something that we at the North Carolina Utility Commission see as conduct inherent in the operation of a vertically integrated utility of the type that is contemplated by North Carolina law. It causes us to wonder whether something that for 75 years has been supported by our statutes has suddenly somehow become illegal.

The other justifications that have been offered in support of standard market design by FERC don't look to us to have much validity when applied to a fully regulated market like that which exists in North Carolina. At least as far as North Carolina is concerned, standard market design, seems to be, as one of my colleagues is fond of saying, a solution in search of a problem. The

specific components of standard market design don't appear to us to fit our existing industry structure very well for reasons that I have detailed in my written testimony. They seem to us to be much better suited to the restructured markets that appear in other parts of the country.

At bottom, we are just simply concerned that the changes in the existing industry structure that have been proposed in the standard market design Notice of Proposed Rulemaking, as applied to the Southeast, will increase our customers' rates while reducing their quality of service. The standard market design Notice of Proposed Rulemaking proposes nothing less than a fundamental sweeping nationwide restructuring of the way that both wholesale and retail service is provided in the United States, including significant Federal intrusions into areas once thought to be exclusive State domains. As a matter of basic constitutional theory, it seems to us that such fundamental changes are matters for elected rather than appointed officials. As a result, any energy legislation that you all choose to adopt should address, at least from our point of view, or preferably stop or curtail standard market design.

[The prepared statement of Sam J. Ervin follows:]

PREPARED STATEMENT OF HON. SAM J. ERVIN, IV, COMMISSIONER, NORTH CAROLINA UTILITIES COMMISSION

My name is Sam J. Ervin, IV. I am a member of the North Carolina Utilities Commission, having served on that body for approximately three and a half years. I very much appreciate the opportunity to appear before the subcommittee this morning to discuss the current status of the electricity sector and the role of Congress in addressing the issues faced by that sector. The subjects you have asked me to address—the development of well-functioning competitive wholesale electricity markets, Federal statutory and regulatory barriers to wholesale competition, the adequacy of the capacity and operation of the interstate transmission grid, the climate for investment in critical infrastructure, electric reliability, and identifying any statutory or regulatory changes that need to be made concerning these issues—are among the most important domestic questions that this Congress will be called upon to consider. As you consider the appropriate way address these matters, I encourage you to carefully consider the impact of any legislation that you choose to enact on each region of the country, including the Southeast, because of the significantly different manner in which electric power is delivered to retail customers in each part of the country.

The North Carolina Utilities Commission, like other similar bodies across the country, is an agency of state government responsible for regulating the rates charged and terms and conditions of service provided by the entities defined by our General Assembly as "public utilities." Under North Carolina law, our electric jurisdiction extends to "persons" owning and operating equipment and facilities for the production, generation, transmission, distribution, and furnishing of electricity. Our statutory authority does not, however, extend to rural electric cooperatives and municipal distribution systems, subject to certain limited exceptions. Put in simple English, our electric jurisdiction is focused on the activities of the investor-owned utilities providing retail service in North Carolina.

As many of you are aware, electric service in the Southeast continues to be provided, in large part, by vertically-integrated utilities. These utilities generate much of the power that they sell to their retail customers in facilities that they own and operate, transmit that power over lines that they own to their own distribution facilities, and then deliver that power to individual factories, stores, churches, and homes using those same utility-owned .distribution facilities. Although I have not made a careful study of the statutes enacted in other Southeastern states, North Carolina law clearly contemplates the continued existence of such vertical integration. The only common exception to this model in most of the Southeast exists when retail service is provided by a rural cooperative or municipal distribution system. Although the situation varies from state to state within the region, some of the rural cooperatives and municipal systems in the region own their own transmission and generation assets. Others, particularly in North Carolina, are completely trans-

mission dependent. With the exception of Virginia, retail competition is not authorized anywhere in the Southeast at the present time. Arkansas has recently repealed the retail competition statute that it enacted a number of years ago. Although I do not claim to be omniscient, it is my impression from talking with colleagues throughout the region that none of the other Southeastern states are likely to move to retail competition in the near future. As a result, I believe that the existing industry structure is likely to remain in place for the foreseeable future.

At this point, the general perception among Southeastern regulators is that the regional system for providing electric service is, on balance, working reasonably well. Our rates are among the lowest in the country. We have not experienced any significant reliability problems in recent years. Our reserve margins are generally adequate. A study of the regional transmission infrastructure performed by the staffs of the Southeastern state commissions found no material transmission bottlenecks. At bottom, while our electric system is not perfect, the available evidence has not led our state legislatures to support radical reform of the type adopted in certain other parts of the country. Unquestionably, the decision of whether, when, or how to restructure retail markets is a decision for each state to make instead of a matter to be decided at the federal level.

The persistence of the traditional industry structure throughout most of the Southeast does not, however, mean that we are indifferent to the potential benefits of a properly-functioning wholesale market. On the contrary, the North Carolina Utilities Commission recognizes that a properly-functioning wholesale market can benefit the retail customers of our vertically-integrated utilities in a number of ways. First, the wholesale market can provide enhanced opportunities for our utilities to procure competitive generation from independent power producers as an alternative to utility-built options. Secondly, the wholesale market can provide opportunities for additional short-term economy purchases, allowing our utilities to reduce their costs by purchasing power instead of operating more expensive units on their own systems. Finally, the wholesale market can allow vertically-integrated utilities to share reserves, effectively reducing the costs of maintaining system reliability. As a result, I do not believe that any of my colleagues disputes the benefits of a properly-functioning wholesale market to the operation of a retail market despite the continued presence of traditional, vertically-integrated utilities.

North Carolina pays more than mere lip service to the development of a properly functioning wholesale market. Instead, the North Carolina Utilities Commission and the utilities we regulate have taken steps to facilitate appropriate reliance on the wholesale market in recent years. Our jurisdictional utilities have engaged in joint planning efforts and reserve sharing through the Southeastern Electric Reliability Council. All three of our major electric utilities provide retail electric service in more than one State, so they are accustomed to performing multi-jurisdictional planning. At the time that our utilities procure additional capacity to meet anticipated future load, they typically issue a request for proposals for the purpose of soliciting wholesale offers that are compared with the cost of self-build options prior to making a final resource procurement decision. The North Carolina Utilities Commission will entertain a complaint from a competitor that feels that its proposal was not fairly considered during the evaluation process. As a result of such an RFP, Duke entered into a purchased power contract with a Dynegy subsidiary several years ago. An examination of the records in our fuel adjustment cases since 1996 indicates that our jurisdictional utilities have purchased power from marketers and brokers in lieu of generating power in their own facilities. The North Carolina Utilities Commission has adopted procedures to facilitate the recovery of the costs associated with such purchases in order to avoid deterring our utilities from purchasing such less expensive power. A number of years ago, at the request of our General Assembly, the North Carolina Utilities Commission revised our generating plant certification rules to make it easier to site and construct merchant generating facilities. To date, we have not rejected any application for the issuance of a merchant plant certificate. As a result, it would be completely inaccurate to say that the North Carolina Utilities Commission has refused to embrace the opportunities for cost savings and reliability improvements available on the wholesale market.

Acknowledging that a properly-functioning, wholesale power market can be beneficial to North Carolina electric customers does not, however, end the inquiry. The potential benefits of wholesale market improvements in a retail market such as that found in North Carolina and most other Southeastern states are not unlimited. The ultimate purpose of the wholesale electric market is the same as most wholesale markets—supporting the retail market. The large majority of the power sold at retail by North Carolina's investor-owned utilities is generated in utility-owned facilities. The same is generally true of the other vertically integrated utilities that provide service throughout the Southeast. Although the municipal distribution and

rural cooperatives appear to place greater reliance on the wholesale market than is the case with Southeastern investor-owned utilities, the simple fact of the matter is that, for the foreseeable future, the impact of wholesale market improvements in the Southeast is likely to be relatively limited. While the importance of the wholesale market in the Southeast may increase over time, the potential benefits of an improved regional wholesale market in the near term should not be oversold. As a result, any attempt to reform the wholesale electric market should include a careful analysis of the impact of the proposed reform on the retail market and should avoid subordinating the retail market to the wholesale market.

At this point, the legal structure governing the operation of the wholesale market is generally set out in FERC Order 888, which provides for open access transmission service at the wholesale level and for unbundled retail transmission, and by Order 2000, which provides for the voluntary formation of regional transmission organizations. As you aware from your hearings last week and from your work on energy legislation in the last Congress, a recent FERC proposal intended to implement a standard market design has produced considerable controversy in many parts of the country. Along with many of our colleagues throughout the country, the members of the North Carolina Utilities Commission have vigorously protested the FERC's proposed SMD as contrary to existing law and as potentially harmful to the interests of the retail ratepayers of the vertically-integrated utilities that provide service in our jurisdictions. Our objections to the proposed SMD are fundamental, and are shared in whole or in part by many people besides Southeastern state regulators.

According to the FERC, the principal purpose of SMD is to remedy what it perceives to be remaining undue discrimination in wholesale electric markets. An analysis of the relevant portion of the SMD Notice of Proposed Rulemaking indicates that much of the basis for the FERC's claim of undue discrimination rests upon conduct that we believe to be inherent in the operation of a vertically-integrated utility. When one examines the language of the undue discrimination section of the SMD NOPR in conjunction with the FERC's pending proposal in the standards of conduct NOPR to prohibit individuals performing the generation function in a vertically-integrated utility from communicating with the individuals performing the transmission function in the same vertically-integrated company except through the OASIS system, one cannot help but conclude that the FERC is fundamentally hostile to vertical integration of the type required by the law of North Carolina and most other Southeastern states. Putting it bluntly, the FERC's legal analysis appears to assume that the industry structure contemplated by North Carolina law and common throughout the United States ever since the enactment of the Federal Power Act has somehow become illegal. That proposition strikes me and my colleagues as exceedingly dubious.

A number of other justifications for SMD have been advanced at various times during the debate over the merits of this proposal. For example, Chairman Wood stated in his testimony before you last week that SMD would "provide certainty to all market participants, encourage new infrastructure investment, promote fair competition and prevent a repeat of the mistakes made previously in California." In our view, none of these additional justifications has any merit as applied to North Carolina and the Southeast. For the reasons that I will discuss in a few minutes, we are not convinced that SMD will lead to fair competition and are concerned that it will actually harm our citizens if implemented as currently proposed. Instead of providing certainty for market participants, SMD is an open invitation to years of additional litigation over the validity of the FERC's attempt to control matters traditionally handled at the state level, such as its assertion of jurisdiction over bundled retail transmission, generation issues, and resource adequacy matters. If the FERC proceeds with SMD in its current form, such litigation is virtually inevitable. In my opinion, the resulting uncertainty will deter, rather than encourage additional infrastructure investment. I might add, parenthetically, that North Carolina law gives the North Carolina Utilities Commission the power to compel the construction of needed generation, transmission, and distribution facilities, so that SMD will do little to assure adequate infrastructure in our State. Finally, North Carolina and the other states that have retained the traditional industry model are not at risk of a California-type debacle because our rates remain regulated and are not significantly exposed to wholesale price volatility. As a result, none of the remaining justifications for SMD offered by Chairman Wood in his testimony before you last week have any real application to North Carolina and the Southeast.

As I indicated a moment ago, a number of the components of the FERC's SMD proposal are potentially harmful when considered in the context of the facts on the ground in the Southeast. Although I won't subject you to a detailed analysis of the entire SMD proposal, please keep in mind that the "best practices" on which SMD is based were primarily developed in markets that developed voluntary from tight

power pools in the Northeast over a period of many years. We are not at all sure that experiences there are directly and immediately transferable to the situation in the Southeast. At any absolute minimum, the transferability of that experience is not intuitably obvious, at least to those of us with experience in the current Southeastern markets.

First and foremost among our concerns with SMD is the FERC's attempt to assert jurisdiction over the transmission component of bundled retail service and its related decision to abolish the existing native load priority. I recognize that there is an inevitable tendency to think that arguments among state and federal regulators about jurisdiction are mere turf protection battles. In some instances, that may be exactly what they are. In this instance, however, I do not believe that to be the case. After all, jurisdiction is a means to an end. At bottom, the issue of jurisdiction is the issue of who decides. In this area, that issue is of ultimate importance, as can be seen from the question of the treatment of the native load priority. Under existing FERC precedent and under North Carolina law, our vertically-integrated utilities are required to give priority service to the native load customers who have paid for the construction and operation of the existing transmission systems in their retail rates. As we use the term, the retail customers of the municipal distribution systems and rural cooperatives as well as the retail customers of the vertically-integrated utilities are entitled to be treated as "native load." FERC proposes to eliminate the existing native load priority in the interests of facilitating the development of more competitive wholesale markets. We believe that that implementation of this proposal will result in a diminished quality of service for North Carolina electric consumers. In the event that FERC is unable to assert jurisdiction over bundled retail transmission, this inequity will not occur. In the event that FERC is able to assert jurisdiction over bundled retail transmission, native load customers will be deprived of their right of priority access to the transmission system. As a result, resolution of this jurisdictional issue is more than deciding who wins a turf battle between two sets of bureaucrats; it is, at least in this instance, a choice between competing visions of the manner in which electric service should be provided in each region of the country.

As a corollary to the abolition of the native load priority, the FERC proposes in the SMD NOPR that all transmission service, including that included in bundled retail service, be provided under the same open access tariff. Although FERC clearly states that this means that all transmission service should be provided in accordance with the same terms and conditions, it is not clear whether this will ultimately result in FERC determination of the cost of all transmission service nationwide. Although this proposal may seem, at first blush, eminently equitable, it suffers from the same defect as the proposed abolition of the native load priority. Contrary to the FERC's assumption, all transmission load is not created equal. The effect of the FERC's proposal would be to subject the bundled retail load of a vertically-integrated utility to an increased risk of curtailment or bearing new congestion costs as a result of additional uses of the transmission system made by new market participants. Although we certainly favor the most efficient use of the transmission system reasonably possible, we believe, at bottom, that the native load customers of the transmission owning utility have paid for the existing transmission system and ought to retain their existing priority right to the use of that system. The FERC's proposal would eliminate that existing right without any offsetting benefit.

An integral part of FERC's SMD proposal is its requirement that each transmission-owning public utility surrender control of its transmission assets to an independent transmission provider or ITP. An ITP can be anything from an RTO of the type with which we are all familiar to a single-utility transmission provider. Although each of us understands the arguments in favor of independent operation of the transmission system and understands their potential merit, we also understand that those benefits come at a cost. The simple fact of the matter is that setting up and operating an ITP is not an inexpensive proposition. The problem with the mandatory independent operation provisions of the SMD NOPR is that the FERC's proposal totally overlooks the possibility that, in at least some circumstances, a particular ITP proposal may not be cost-effective. As a result, the mandatory independent operation provisions of the SMD NOPR, unlike the voluntary RTO provisions of Order 2000 construed in conjunction with Order 888, creates a real risk that the costs associated with an inefficient ITP will be imposed on native load customers.

The SMD NOPR proposes to manage congestion through the use of locational marginal pricing, or LMP. Under FERC's proposal, LMP would replace the existing system of physical transmission rights. Transmission customers entitled to firm service under the existing system have both price and deliverability certainty. The implementation of LMP requires the ITP to operate certain bid-based markets

through which load serving entities may procure power, must resolve congestion problems, and are required to procure certain ancillary services. Although I have many concerns about those portions of the SMD NOPR that require the use of LMP and define the operation of these bid based markets, let me focus on just two of them. First, the principal method available to load serving entities for protecting themselves from additional costs associated with this new congestion management system is the procurement of financial instruments known as congestion revenue rights. The FERC indicates a preference for auctioning congestion revenue rights to the highest bidder, with the revenues going to the load serving entities responsible for paying the fixed costs of the system. The problem with this approach is, of course, that there is no assurance that these load serving entities will be able to win the auction or that the auction revenues will match actual congestion costs, thus exposing the load serving entity to the payment of congestion costs which that entity does not currently have to pay. As an alternative, the FERC proposes an allocation formula that deprives the load serving entity (and its customers) of existing capacity for growth and existing capacity that fails to pass a simultaneous feasibility test. For all of these reasons, the FERC's proposal risks depriving bundled retail customers of currently-available price and deliverability certainty. Secondly, the ITP-operated markets are bid-based, which means that the prices charged for power purchased from these markets, will be based on bids submitted by participating generators. Given that the bulk of the generation in North Carolina is owned by the vertically-integrated utilities subject to our regulatory jurisdiction, it seems to me that there is a risk of market power in these bid-based markets solely because of the design of the markets mandated by the SMD NOPR. As a result, the SMD NOPR creates a congestion management system and various bid-based markets that could raise costs for Southeastern electric customers. This is a prime example of the way in which the new market structure envisioned by the FERC conflicts with the regulated retail structure that persists in the Southeast.

A final matter of great concern to many in the Southeast is the issue of cost-causer or participant funding. The concept of cost-causer funding arises from the notion that transmission expansion projects should be financed by those who benefit from such projects. Although virtually everyone agrees that the cost of transmission enhancements that serve regional reliability purposes should be borne by all customers taking service from the system, there is considerable concern that those same ratepayers will be forced to bear the costs of other transmission improvements that provide them with little or no benefit. Although the SMD NOPR provides rhetorical support for participant funding, there is considerable concern among Southeastern state commissions that the preconditions for implementing this change in the FERC's existing transmission pricing policy as stated in the NOPR will not occur until significant additional costs have been imposed upon naive load customers. As a result, many Southeastern regulators remain concerned about the treatment of participant funding in the SMD NOPR.

The concerns felt by Southeastern regulators about the policies espoused in the FERC's SMD NOPR and related pronouncements were so significant that the Southeastern Association of Regulatory Utility Commissioners commissioned a study of the potential impact of those policies on our region. I served on the steering committee responsible for overseeing the performance of this cost-benefit study along with a number of my colleagues from other SEARUC states. After reviewing several outstanding proposals and interviewing a group of well-qualified consulting firms, we ultimately retained Charles River Associates to perform the study, which was intended to examine the impact of RTO formation and the implementation of SMD on the Southeast. I am satisfied from my own work on the steering committee and my conversations with others familiar with CRA's credentials that there is no consulting firm in the United States with greater integrity or more impressive qualifications. After performing an enormous amount of work in an attempt to fully understand Southeastern electric markets and modeling a number of different scenarios, CRA released the results of its work last fall. The principal conclusion of the SEARUC study was that "[t]here is considerable uncertainty as to whether RTOs and SMD would provide greater benefits to the southeast than the implementation costs." As a result, the general thrust of the concerns that I have expressed in my testimony have support in the SEARUC cost study, which is available for review on the SEARUC website.

I understand that the Chairman Wood attempted to utilize this study to claim that SMD would result in net benefits for the Southeast during his testimony last week. Despite my great personal respect for Chairman Wood, I disagree with his description of the results of the SEARUC study. I did not hear Chairman Wood testify, and am not for that reason able to comment directly on what he said. In looking at the most optimistic scenario shown in the study, CRA found the existence

of approximately $1.3 million in total regional benefits out of total regional production costs of approximately $114 billion. In other words, the total benefits were approximately one percent of total production costs, which strikes me as a relatively small number. As if that were not enough, a significant portion of this benefit stems from the study's assumption that a certain level of merchant generation will come into operation and that participant funding will come be implemented by 2004; these assumptions are almost certainly optimistic at this point. Furthermore, the SEARUC study makes the further optimistic assumption that Southeastern load serving entities will be perfectly hedged against congestion costs and that there will be no market power in regional wholesale markets. In the event that either of these assumptions turns out to be erroneous, the benefits shown in this scenario are overstated even further. In other words, under this scenario, the FERC's SMD proposal might produce quite minor benefits for the Southeast assuming everything works perfectly. As a result, I submit that CRA rather than Chairman Wood has correctly summarized the implications of FERC's proposal for our region as revealed in the SEARUC study.

The North Carolina Utilities Commission has filed comments in the FERC's SMD proceeding in which we have advanced many of the arguments that have I have presented here this morning. On the other hand, we have also tried to hard to play a constructive role in this process. We do not have any desire to prevent the implementation of reforms that would benefit other regions of the United States so long as no legal precedent is established that would allow the imposition of policies that would harm the Southeast. We do not, by any stretch of the imagination, contend that absolute nirvana has been achieved in our own regional wholesale electric power markets. We do not countenance violations of the open access rules adopted by the FERC in Order 888, and are willing to join with our federal colleagues in working to remedy existing market defects. We are willing to seriously consider cost-effective RTO proposals and other market design changes so long as those ideas do not result in potentially harmful structural alterations in Southeastern regional markets or unduly hamper our ability to protect the interests of the retail ratepayers in our region. About three weeks ago, all seven members of the North Carolina Utilities Commission joined 36 of the 48 Southeastern state commissioners in sending a letter to Chairman Wood setting out the preconditions under which we would work with the FERC to identify problems in wholesale markets and implement appropriate solutions to such problems as exist. We look forward to receiving a response from him in either the form of a reply to our letter or a substantial modification to the existing SMD proposal in the white paper that the FERC has indicated will be released sometime in April.

At the time that I examined the draft legislation that the Chairman circulated approximately two weeks ago, I did not see anything that directly addressed the Standard Market Design issue. I was, however, concerned by a number of provisions that I discovered in reviewing that draft in preparation for appearing here today. The transmission infrastructure improvement rulemaking provisions of proposed FPA Section 215(a) seem to be limited to transmission assets used for wholesale transactions and to new transmission facilities. If I am correctly interpreting this language, then I do not believe that I have any objection to it. On the other hand, if this language is intended to allow FERC to provide a higher return for existing transmission assets or to provide an incentive for the transfer of existing transmission assets to RTOs or other novel entities regardless of the impact of such transfers on end-users, then I would question the wisdom of such a proposal. Similarly, while the North Carolina Utilities Commission has expressed support for cost-causer funding as I have already indicated, proposed FPA Section 215(b) could be construed to limit cost-causer funding to situations involving an RTO or some similar institution. Given our belief that the principles embodied in participant or cost-causer funding represent the correct policy regardless of whether operational control of transmission assets has been transferred to an RTO, an ITP, or some similar entity, I would suggest that proposed FPA Section 215(b) be revised to ensure that those who cause costs to be incurred are the ones who pay those costs whether an RTO exists or not, since the ultimate goal should be imposing costs based on principles of cost causation. The subject of FERC transmission siting authority has been widely discussed in recent years, and I do not intend to debate the issue at length here today. Consistently with the position adopted by many other state commissions, the North Carolina Utilities Commission does not believe that the case has been made for federal transmission siting authority and would oppose the enactment of proposed FPA Section 216. As I have already indicated, the absence of any recognition that RTOs may be beneficial in some regions and not in others suggests that the sense of the Congress findings in proposed Sections 7022(a) and 7022(b)

would not be appropriate. I will be happy to discuss any of these comments in more detail if that would be helpful to members of the Subcommittee.

The ultimate issue that I respectfully suggest that the Subcommittee confront in drafting any energy legislation that it deems appropriate in this Congress is what should be done about SMD. Although the issues addressed in the Chairman's draft legislation are important, those issues pale in importance compared to those raised by the SMD NOPR. The SMD proposal represents nothing less than a fundamental restructuring of the electric industry in the United States. As a matter of basic constitutional law, I believe that fundamental policy decisions should be made by the elected representatives of the people rather than appointed officials like the members of the FERC. In addition to addressing the other issues that are to be discussed by the various witnesses that testified last week and today, I would urge you to give serious consideration to addressing the SMD issues as well in any legislation you choose to mark up and report to the full Committee. While the North Carolina Utilities Commission would obviously prefer that any legislation that you approve preclude the FERC from moving forward with SMD in its current form, compel the FERC to recognize current state-federal jurisdictional boundaries, and require the FERC to give serious consideration to the significant differences in regional electric markets that exist across the country in a way not reflected in the current SMD proposal, we also believe that the issues raised by the SMD NOPR are so important that they call for a decision by the Congress regardless of the substantive outcome. I certainly appreciate your taking these thoughts into consideration as you undertake the important work that lies ahead.

Mr. BARTON. We thank you, Mr. Ervin. The Chair is going to recognize himself for the first 5-minute question rounds. We are only going to have one round of questions because we do have two other panels. We are also going to take a 15 to 20 minute recess beginning at 11 a.m.

Mr. Walter, I am told that your company has a number of high efficiency plants that are currently idle that if we had a law similar to what is in my draft bill, those plants could be providing power at much cheaper prices to certain high-cost regions of the country. Is that true?

Mr. WALTER. That is correct. The power plants that we are constructing are modern natural gas plants that are combined cycle and generally have an efficiency that is 40 percent greater than older technologies that currently exist in a lot of regions of the country. In some regions where we have built these power plants, economic dispatch does not exist, and there is not a regional transmission organization that independently operates the system. And utilities that are in a situation like this where they own the transmission systems as well as their own generation they are obviously going to look out for their own best interests. And so some of these older power plants are operating where some of ours are not operating, and if we were to operate, the obvious cost/benefits would be there of less fuel consumption.

Mr. BARTON. Mr. Moore, you mentioned some improvements that your association would like to see on PURPA in a competitive market. Do you have legislative language that your group would be prepared to present to us so we could try to improve our draft?

Mr. MOORE. Yes, Mr. Chairman, we do. I will have that by the end of the day.

Mr. BARTON. Okay. Because we are going to put out a bill—we hope to put out a bill on Monday so that we have a markup vehicle, so I would encourage you to do that.

Mr. MOORE. Thank you.

Mr. BARTON. Ms. Schori, you indicated in your testimony that there are some changes to the FERC-lite language that is in the

current draft, that if those changes were made, if I understood you correctly, your association could support. Just so that I am clear on what this would mean, can you describe the service that your group, the people you represent, do provide to yourselves and what service you could then be able to provide to others if we made the language change that you at least alluded to? And turn the microphone on.

Ms. SCHORI. Sorry. Yes. We hope to have possible language to the committee by the end of today, if not today, very quickly for your consideration. The issue that we are seeking to address is to have express recognition of our service obligation to our existing customers and load and the need to reflect that in the draft language to assure that with respect to assets that we own or control that we will be allowed to continue to make use of those to serve our own load. And that is the language that we need to have clarified.

We are proposing that with respect to surpluses, as we have been doing voluntarily, to make that surplus available to market participants on the same terms and conditions that we serve our own customers. In the language that was originally negotiated over probably 3 or 4 years ago now, the concern that we have had is that we do have—obviously, we are in support of local control. Our own elected officials at the local level set our rates. There is concern about both that rate setting authority, impacts on our bonds that we use to finance facilities, and we want to assure that we are talking about surplus transmission, transmission that is not already dedicated to the service of our own——

Mr. BARTON. You are going to have some specific language that your group provides us.

Ms. SCHORI. Yes. Thank you.

Mr. BARTON. Okay.

Mr. English, if my little ugly bill had feelings, they would be hurt.

But, fortunately, my ugly little bill has got armadillo skin, and it is pretty hard to get through it. But I just want to try to make sure I understand where your group is coming from. Congressman Dingell and I went to a Kyoto global warming conference in Japan several years ago, and we met with the communist Chinese leaders, and the communist Chinese leadership at that conference was saying they supported the concept of the Global Warming Treaty and at some point in time they would want to be supportive. So Mr. Dingell said, "Well, do you think that is going to be in 10 years?" And they said, "No." He said, "Well, how about 20 years?" And they said, "No." And he said, "How about 100 years." And they said, "No." And he said, "How about 1,000 years?" And they said, "No." So I want to ask you on behalf of your coops, will there ever be a time that you think your coops might be supportive of a comprehensive electricity title that created a national grid that everybody had open access to?

Mr. ENGLISH. What about this year? I would support it this year, Mr. Chairman, and so would the electric cooperatives. Here is the issue that we are dealing with, and I pointed out don't look at all what we described as the bad and ugly because we also had some good, if you want to call it the beautiful, and there are several—

quite a number of features in your bill that we would describe along that line.

The difficulty that we see is this: Standard market design is a real problem with regard to legislating this legislation in a number of those items that I pointed out. The reason being this: That the standard market design is not in final form, and as I mentioned, with the so-called FERC-lite provisions, as we had talked abut with an earlier piece of legislation, which we in fact felt we could live with, works under 888, but when you get to the standard market design we have got a whole new set of rules and suddenly it doesn't work under that, and it presents difficulties. We have got 200 distribution cooperatives as a result of standard market design with these provisions that are going to be drawn in. Now, I don't think that is the intention of this committee. I don't think the distribution systems, the small electric cooperatives, are really what you are getting at. I don't think you want to see those resources used in that area.

Mr. BARTON. You are right.

Mr. ENGLISH. So the problem comes in this legislation coming before we know what the final outcome with the standard market design is is a real problem. Now, unless this committee wants to, and can, legislate and prohibit the FERC from implementing the standard market design, which I think in all reality they can get around anyway because all they have to do is change the rules a little bit and they get around the legislative aspect of it, and I know the frustrations of that as a legislator. But the other side of this is the fact that we are hopeful that we are going to see some major changes in the standard market design proposal that FERC is advancing. We won't know that till April at the earliest. There are over 600 pages of that standard market design, we filed over 200 pages of changes, and we are hopeful that will come about. But we can't say that whatever they end up with is in fact going to exempt those 200 electric cooperatives or not.

The additional issue is this question of incentive rates. It doesn't make any sense to us, because FERC already has the authority to provide incentive rates, and FERC is in some cases doing incentive rates, and one of the frustrations that every legislator has is you can't pass a law specific enough to apply justice to each and every situation as it is going to happen around this country. But, basically, that is what this is an attempt to do. It completely disregards the fact in testimony from the investment community that you can reach the same conclusion of getting more investment what you say that you are after, Mr. Chairman, by reducing risk. This completely ignores that aspect of it. And as I said, the industry itself through its own task force with, I should say, the Department of Energy's task force, came to that very conclusion. There are different options we can do, and why we would want to force FERC to take only one option, ignore anything else doesn't make any sense to us.

The participant funding thing, I know, Mr. Chairman, you are in favor of competition and you would like to see that. Well, why within a given region would we discourage the building of transmission? Why would we discourage the improvement of transmission? Why would it make it more difficult? But just as we have in North Carolina and we have in a lot of other States, you do have

a vertically integrated utility that in fact is benefiting by the lack of transmission, and we know that this exists. This is something that is building that into law. We don't understand why that is the case. We don't think that is the intent, we don't think that is the aim, certainly, of the chairman, but——

Mr. BARTON. We need to let Mr. Boucher ask his questions. You are in the process of giving us about a 6-minute beautiful answer.

Mr. ENGLISH. We can do it this year, Mr. Chairman.

Mr. BARTON. We are going to put you down as undecided with hope.

Mr. Boucher is recognized for 5 minutes.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. Actually, I was enjoying Mr. English's presentation. I thought he was doing quite well.

Let me say thank you to all of the witnesses for your informative testimony this morning and for spending some time with us. Mr. Walter and Mr. Moore, I was very pleased to hear both of you underscore in your testimony the value to the country of combined heat and power operations, both in terms of the addition to overall energy efficiency that CHP offers to the generation base and also to the environmental benefits that arise from that increased level of efficiency.

Last year, the subject of PURPA was considered in the Senate, and the Senate in its wisdom decided, as it was addressing electricity legislation, to craft an alternative to the rather draconian repeal of PURPA which had arisen in the House. And that approach was fostered by Senators Carper and Collins. And I have two questions to you. First, I would like to hear your view of the Carper/Collins provisions with regard to PURPA, which offer an opportunity for PURPA to sunset market by market as the market becomes full competitive and offers an opportunity for the qualified facilities and their industrial hosts to be able to sell electricity into a competitive market when they have excess power to sell and also to be able to buy it from the general market whenever they have those needs. That was the essence of the Carper/Collins provision. And I would like to have your comments on that.

The second thing I would like to have your comment concerning is the provision that is contained in Chairman Barton's draft that moves beyond Carper/Collins and offers other opportunities for PURPA to sunset market by market, and I would focus attention specifically on the provision that says that if the investor-owned utility locally joins an RTO and places its transmission in the RTO, that that would be deemed sufficient to enable to PURPA to sunset in that market. Explain to us if you would why the mere fact of joining an RTO does not guarantee the kind of competitive market in that community that gives the QFs the assurances that the QF would have to have in order to continue operation. Which one of you would like to begin? Mr. Walter.

Mr. WALTER. Let me just make a couple of comments about Carper/Collins. We generally supported the intent, I believe, of what happened last year in that, but I wanted to point out one thing that is very important for cogeneration facilities. In many cases, these facilities need to operate 24 hours a day, 7 days a week in order to supply the necessary thermal needs and electric needs of

industrial hosts. So I think the focus last year was much more on real-time, short-term markets. What we really need here is a focus on the access to the ability to enter into long-term agreements, ones that are baseload, around the clock and with that sort of an aspect I think that would be an improvement on what happened last year.

With respect to the question in regards to RTOs, I think you stated it very well, in order for a PURPA facility to be able to operate to sell its electricity to a customer and to buy backup power, one needs a customer. Just having a regional transmission organization with access to the transmission grid does not give you a customer. It doesn't provide for multiple customers, it simply gives you a pathway. And so the RTO aspect of this would not be I think a test at all with respect to whether PURPA facilities are entering into a fair and open and sustainable competitive market.

Mr. BOUCHER. Mr. Moore, would you like to add to that?

Mr. MOORE. Yes, Mr. Chairman, thank you. Yes, certainly, we supported Carper/Collins last year, and a great effort was made in a short heat of battle timeframe to craft that language and it probably could be improved upon, but we certainly supported it. The problems—and we think that Chairman Barton has moved a long way from where he once was in prior legislative drafts into where we think the spirit he is trying to get to now, which would be basically a Carper/Collins kind of an arrangement. We are worried for the same reasons Mr. Walter is about subparts B and C of Section 7062. This looks like it could be an RTO in name only, and so you really don't have the ability to really get into that and figure out if you really have competition or have you gotten a couple of people who control the market to get together and call themselves an RTO? I don't think that is what the chairman intends.

And then, third, the Commission, the last part C, we have no problems with this Commission and its understanding of competition, but we worry about a future one, and we think since it is not defined some language here indicating what the chairman has in mind about a competitive market would probably be very helpful.

Mr. BOUCHER. Yes. Well, thank you both. I have some other questions regarding the Public Utility Holding Company Act and the FERC's merger review authority, but time will not permit those to be asked at this point. I may submit some questions to members of this panel in writing, and, Mr. Chairman, I would ask unanimous consent that the record remain open for a reasonable period in order to accommodate any answers they might provide.

Mr. BARTON. Without objection.

Mr. BOUCHER. Thank you.

Mr. BARTON. And if you want to ask one more question certainly on your PUHCA, I think it would be helpful for you to do that before we recess.

Mr. BOUCHER. All right. Well, thank you. Let me, instead of asking about PUHCA, just ask a brief question about the FERC's merger review authority. I appreciate the time.

We had a very interesting hearing last week in which Mr. McSlarrow, representing the administration, strongly opposed the repeal of the FERC's merger review authority and in fact recommended that that authority be enhanced. And when the repeal

of that merger review authority is teamed with the perspective repeal of PURPA—I am sorry, PUHcA, which is also contained in the draft bill, I think some major problems arise, because repealing PUHCA will necessarily increase industry consolidation and mean that somebody is going to have to be at the gate in order to look out for the consumer interest. That is what the FERC typically does.

The provision that is in the draft that I have heard the most objection to, if any, is the repeal of the FERC's merger review authority, and let me just ask if there is anybody on this panel that would like to speak out in favor of repealing the FERC's merger review authority? Does anybody want to speak out in favor of that? Somebody? Anybody?

Mr. OWENS. I do.

Mr. BOUCHER. Mr. Owens, you actually want to speak in favor.

Mr. OWENS. I will speak up, not because I am the minority on the panel but because I think I have some persuasive elements here.

Mr. BOUCHER. Thank you.

Mr. OWENS. We believe that it is important to remove duplicative regulatory functions. As you may recall, when the Federal Energy Regulatory Commission considers a merger they look at three factors: The effect on competition, the effect on rates and the effect on regulation. When the Department of Justice and the Federal Trade Commission consider mergers they look at the effect on competition. And we are simply saying that it makes no sense to have two agencies, two Federal agencies, look at the same set of issues in separate records. It makes more sense to consolidate a review on the impact on competition.

I make the same argument with respect to the impact on rates. Any merger, State commissions have the responsibility of looking at the impact on utility rates as a result of a merger. We would not suggest that that authority be weakened in any way; in fact, we would encourage it to be strengthened. And in particularly, as we were arguing for the repeal of the Public Utility Holding Company Act, the States would have greater access to books and records. And so there again we think it makes no sense to have two reviewing entities. The FERC would continue after a merger, however, to have rate-making authority and oversight.

Mr. BOUCHER. So, Mr. Owens, your view is that the Department of Justice is fully as capable as the FERC in order to evaluate the effects of a merger on the market itself and also on the consumer interest? Is that your view?

Mr. OWENS. That is my view.

Mr. BOUCHER. Yes. I think a lot of people differ with that, but I respect your expression of it. Would anybody briefly like to counter that? Mr. English, I saw you seeking the microphone.

Mr. BARTON. And be very brief because I was a good guy.

Mr. BOUCHER. He was a good guy.

Mr. BARTON. No good deed goes unpunished.

He asked a totally different question than I thought he was going to ask, so let us have a brief answer so we can take——

Mr. BOUCHER. Bait and switch.

Mr. BARTON. [continuing] a little time out here.

Mr. ENGLISH. Mr. Boucher, I think bottom line is it is anti-competitive. It allows those with deep pockets to in fact dominate markets. We have seen this in industry after industry, and so if we are not going to apply any kind of review to these mergers, then you are going to wipe out competition.

Mr. BOUCHER. Okay. Thank you, Mr. English. Thank you, Mr. Chairman.

Mr. BARTON. All right. We are going to take a brief recess. If there are no votes on the floor, we should reconvene around 11:30. If there is a vote on the floor, we will reconvene within 10 minutes after the bell expires, the time expires on the floor vote. So we are in recess, subject to the call of the Chair, which should be between 11:30 and 11:45. Yes, I definitely want this panel back, especially you, Mr. English.

[Whereupon, at 11:07 a.m., the subcommittee recessed, to reconvene at 12:18 p.m., subject to the call of the Chair.]

Mr. BARTON. When we had recessed at 11 o'clock, Mr. Boucher had had his questions. We are now ready to resume the question period and in order of appearance it appears that Mr. Whitfield was here before Mr. Norwood. It really does. Yes. And Mr. Whitfield deferred, so Mr. Whitfield is recognized for 8 minutes for questions.

Mr. WHITFIELD. Thank you very much, Mr. Chairman. I probably won't take up my entire 8 minutes, but I just wanted to clarify a few things. Of course, I represent a State that has some of the lowest electrical rates in the country, and any time we have discussions about significant changes, we are very much concerned about the impact that would have on our rates. And I have a lot of small municipal systems and electric coops, and certainly we want to explore to see how many of those would be exempt under some of the changes that have been made in this legislation. But most of these coops in my area and municipal systems receive their electricity supply from TVA, and as a result of that, they distribute that electricity, of course, to their customers. But under the TVA Act, these distributors are guaranteed preferential transmission service.

It is my understanding that just looking at Section 702 of the draft that DOE would be given the authority to determine whether or not TVA's transmission assets would be turned over to an RTO. That is my understanding. Now, if DOE makes the determination that TVA's transmission should be turned over to an RTO, I am assuming that the munis and the coops that buy from them would possibly lose their preferential treatment, and I would like to ask Mr. English, for example, do you know whether or not that is true? Is that your understanding or do you have an opinion on that?

Mr. ENGLISH. It is my understanding. There is one other point that I would add to that, though. It even goes beyond that. As you know, when the PMAs, the dams, were built, when it was constructed in the first place, there were a number of different functions that it had. Some of it had to do with obviously flood protection, it had to do with recreation, it had to do with environment. There is a whole list of things. And as we understand the way this legislation is set up it would abrogate those contracts that have been set to perform all these other functions. So it certainly would be very broad sweeping as far as what the potential is, and I am

not sure that is the intent of the authors to go that far, but that is what it would do.

Mr. WHITFIELD. Okay. Would anyone else care to comment on that at all? Okay.

Also, I have some coops in my district that have higher voltage distribution lines that allows them to move this electricity over longer distances but certainly not across State lines. Under Section 7021 of this draft, it is my understanding that FERC would be allowed to reclassify those distribution lines because of their high voltage and that they would be able to require those coops to transfer operational control over their distribution lines to an independent transmission provider, or mini-RTO. Is that your understanding as well, Mr. English?

Mr. ENGLISH. It is indeed, and that is, again—I don't want to put words in the chairman's mouth, but I notice he was nodding his head when he said he didn't want to regulate distribution coops. And in these cases, we are talking about cooperatives, distribution cooperatives, and that line is just to feed the power to them, to get the power to them and to no one else.

Mr. WHITFIELD. Yes.

Mr. ENGLISH. Now, if the objective is to use up a lot of FERC assets trying to regulate folks that this has no impact—that this would have no benefit as far as the country concerned or any kind of interstate system, then this might be a good device to do that, but I don't—again, I don't think that that is probably what the objective is. And we would hope that the committee would take a very hard look at that and make sure that you are using those resources to the maximum benefit to protect the system and make sure the system works well. This does absolutely nothing to it with those distribution systems.

Mr. WHITFIELD. Right. Thank you, Mr. English. I was trying to find my list of witnesses here. Is it Ms. Schori from Sacramento? I think during your testimony you had talked about trying to protect your particular customers. That was one big concern that you had. And would you elaborate on that for me just a little bit?

Ms. SCHORI. Yes. The concern that we have right now is that public power systems are non-profit, they are customer-owned, we don't have shareholders, we don't build assets as merchant generation or merchant transmission or to earn a rate of return in the traditional private sector sense. Instead we are owned by our customers, the assets that we do have—and in my case in Sacramento we have both generation assets and transmission assets—have been built to serve our load, our customers, they are the ones paying for it, it is all embedded in our rates. The concern that we have, and I am kind of narrowly focused recognizing this bill is much broader and covers many topics, is in reviewing the compromise language on the new FERC jurisdiction that is being proposed over public power systems, such as the members of the Large Public Power Council.

The concern that we have is that right now, in light of some recent court decisions as well as some of the rulings that are coming out of FERC, the old—what I will call the old Order 888, open access language relating to comparability, meaning if you have surpluses on your system, make them available to other participants

in the market on the same terms and conditions that you serve your own load, what I still think of as the golden rule of Order 888. That appears to be changing, moving in the direction of full FERC regulation and potentially even going so far as potentially impacting—the language could potentially open the door to full standard market design type regulations. So what we want to do is work with the committee to attempt to shape the language back to the original compromise wording that we had all agreed to.

Mr. WHITFIELD. Okay. And you all are going to bring forth language to address that issue; is that correct?

Ms. SCHORI. Yes. We do not have any language ready right now that I can present the committee with. We are working very hard to try and put that together and come in with something that hopefully could be supported on a consensus basis. But we have a number of different drafts, and we are trying to put something together, and we will try and work very quickly to do that.

Mr. WHITFIELD. And so you would expect that to be here maybe in the next couple of days or so?

Ms. SCHORI. That is my hope. Let us see, it is Thursday, so it might not be until early next week. We hope to have—we are floating different drafts and trying to put things together.

Mr. WHITFIELD. Okay. Okay. Thank you very much. I waive back the 10 seconds I have remaining.

Mr. NORWOOD [presiding]. Thank you, Mr. Whitfield. Mr. Allen, you are now recognized for 8 minutes.

Mr. ALLEN. Thank you, Mr. Chairman. I want to thank you all for your testimony today. It has been very helpful to old members and new members like me, in particular. Mr. Moore, as you know, the Maine pulp and paper industry uses a fair bit of biomass in generating electricity, both for the plants themselves and for sale back into the grid. And what I would like to know from you is how do you—I don't know how familiar you are with those particular plants, but I am interested in knowing whether the biomass power facilities like them will survive if this bill is enacted into law. And I am also curious about what other options there might be to protect those kinds of plants from continuing.

Mr. MOORE. We are very concerned that if—and the chairman's bill is not talking about outright appeal now of PURPA as was the thought in the last Congress, and that is good news. But we are still worried that there are some loopholes here you can drive somebody's big trucks through. And in the wrong hands those trucks could greatly jeopardize the future of cogeneration. And as you pointed out, 60 percent of our cogeneration is from biomass, and we think it is going to grow. But we have to have access to the grid, and where you don't have real competition in the marketplace that access will not exist without a PURPA protection.

We are working now, Congressman, on a—have been working with the Department on Energy now for about a dozen years on a new technology to gasify all of our liquid waste in a paper mill. That gasification, if all the plants that are doing that throughout the country that have that liquid waste, would amount to 30 gigawatts of new power, all of which are favored under Kyoto, all of which are not using gas, not using oil, all of which are reducing the cost of the operation of our plants so that we are competitive

and we can keep those jobs, but then totally is a byproduct, putting as much as 30 gigawatts of new electricity on the market. We can't see that happening unless changes are made in the legislated language we have now. That is not going to happen. We can't get the money from the financial markets if we can't get that kind of power to the market.

Mr. ALLEN. And can you talk a little bit about how ISO New England operates with respect to your interest as compared to another RTO or another type of RTO?

Mr. MOORE. I have to do some checking into that and get back to you on that, see if we are having any complaints. I am not aware of that being a problem are for us.

Mr. ALLEN. Okay. Good. Thank you. Mr. Walter, in your testimony you talk about—you say that many regions do not yet have fully competitive conditions with respect to transmission and power procurement and that in those areas residential, commercial and industrial consumers have suffered. And you also talk about the key issues today revolving around the availability of adequate capital and the evolution of open and fair competition. Could you talk to us a little bit about which regions you think are competitive and which regions are not doing so well? That is question No. 1.

And question No. 2 is with respect to these different regions around the country, you also said at one point that everyone wants a reliable source of energy, and they want it to be affordable. And I would like you to comment on the question of one piece of the affordability component, which is not just the price at a particular moment but the stability of prices over time. So if you are talking about different regions, I would be very interesting in knowing which ones seem to be successful at maintaining the stability of price over time.

Mr. WALTER. I would be happy to address both of those. We are also happy to have the Westbrook Power Plant in the great State of Maine, along with a couple of other facilities.

Mr. ALLEN. I fly over it every time I come into the airport.

Mr. WALTER. That is good. As far as good and bad, if you want to characterize it that way in respect to markets that are operating well from our perspective and have a good sense of open competition, I think there are a couple of very good examples. I think Pennsylvania, Texas are operating quite nicely. In fact, I think any efforts to forestall SMD or RTOs might be damaging to markets that have sort of evolved in this fashion before we ever started this language on standard market design. Those are good examples, and I think we can look to learn a lot from them as we go forward here.

As to markets where they aren't yet operating, operating well, in my view, I think I would focus on the general region, say the Southeast part of the country where RTO does not exist, where there is a dominance in the marketplace of vertically integrated utilities that not only own transmission and distribution but also generation. And it is difficult for companies like Calpine and others who are building new generation units to break into that market, if you will, to get access to customers and offer a product that we think is a very desirable product. And so that would be my answer to your first question.

Second, how do you create stable pricing for electricity? I think——

Mr. ALLEN. In a deregulated market.

Mr. WALTER. In a deregulated market. I think there is a very simple answer to that: Willing buyers and willing sellers ought to be able to enter into bilateral, long-term agreements for the provision for and the taking of power. And we have encouraged this all along and are willing and able and motivated to do that in any area of the country where a wholesale entity that has end-use customers wants to enter into a long-term agreement to stabilize that cost of electricity. We have entered into many agreements where it is simply a fixed price for a period of time. We have entered into agreements where the electricity prices index to the local cost of fuel. But long-term agreements are the way to stabilize the volatility of electricity costs.

In California, one of the first things that we did before this whole crisis really got out of control was to encourage the State to enter into long-term power purchase agreements, either the State themselves or the utilities. It just turned out it was the States that ended up doing that. We think that is a good way to stabilize prices.

Mr. ALLEN. And you can do that both for the residential market with a State as well as industrial customers?

Mr. WALTER. No, not particularly. In retail——

Mr. ALLEN. Retail is different.

Mr. WALTER. [continuing] it is not a common thing in the country yet. We do have about 9,000 megawatts of cogeneration facilities. In a sense, that is going directly to the end user in the sense that these industrials we have a direct relationship. But retail, in general, it is not widely applied. We focus on the wholesale markets, as I think most of this discussion here is based on.

Mr. ALLEN. Thank you very much. Thank you, Mr. Chairman.

Mr. NORWOOD. Thank you, Mr. Allen. I recognize myself now for 8 minutes, and I would like to take just a second to commend Chairman Barton. There is not total agreement on the bill, but I would like for everybody to know that Mr. Barton and his staff, I think, have run this process probably as well as any committee I have ever been associated with in my years in Congress, and I have some good feeling that we will perhaps be able to come to agreement next week.

Just a quick follow-up on Mr. Whitfield's question to you, Mr. English, because he basically—or you basically said that it is your opinion this legislation is going to abrogate the contracts between power marketing and rural electric coops and therefore interfere with the contracts that you have that I am aware of about furnishing of electricity, flood control, recreation, et cetera. And what I presume by that is that your attorneys are telling you that the wording in this bill will do this, and the problem for people like us is our attorneys are saying, no, that is wrong, that isn't going to do that. And, of course, the difficulty is then a judge gets to decide. But I would invite you not to answer a question but to simply put in writing exactly why you think this language will do that, because I am hearing from other lawyers who say that it won't.

Mr. Ervin, thank you for being here today. I wasn't sure from—other than your name, I wasn't sure if you were from Georgia or Louisiana or Tennessee. I wasn't certain what public service commission you might have served on, because all of them sound alike. But, obviously, with your name, we know——

Mr. ERVIN. I think only North Carolina would claim me, Mr. Chairman.

Mr. NORWOOD. Well, we know by Ervin where it must be. And the reason we all sound alike is that we all enjoy low-cost electricity and reliable services, and all of us want it to continue, and that is typically where those of us in the Southeast come from and apparently the public service commissioners as well.

Last week, the FERC commissioners were before this very subcommittee and Chairman Wood and I were having, if you would like to call it, a discussion discussing my concerns and those of many, frankly, in the Southeast, as outlined by the Southeastern Association of Regulatory Utility Commissioners in the letter that was sent to the chairman February 21. You are aware of the letter of which I speak.

Mr. ERVIN. Yes, sir; I signed it.

Mr. NORWOOD. Well, I appreciated that letter, and I believe it did lay out our concerns about our region very accurately and in a fair fashion and simple enough for even chairman to understand. But I ran out of time last week, and I would like to get right at the meat of this.

Has Chairman Wood responded to this letter to you officially?

Mr. ERVIN. I have not received any indication that he has to date; no, sir.

Mr. NORWOOD. If and when he responds, particularly in writing, I would be very grateful if you would furnish a response to this committee.

Mr. ERVIN. Yes, sir.

Mr. NORWOOD. You have seen no actual response by his actions either, so actually he has been silent on this subject?

Mr. ERVIN. To date, yes, sir. It appears to us that there are two ways that he could respond to it. One would be by return post, the other way would be through the white paper that I think has been alluded to at least once in our hearing this morning. Presumably, one way that a response could be made would be through a modification to the standard market design proposal that is laid out in the white paper. It is my understanding that that document is supposed to be released sometime in April.

Mr. NORWOOD. Well, that document is nice. I am glad they are going to release it. But it has no force of law behind it at all, and therefore it is a little bit meaningless to people——

Mr. ERVIN. One thing that we have suggested in some of our comments was that one thing that the FERC might want to seriously consider, given some of the vagueness of the NOPR as originally issued was instead of issuing a white paper the one thing that might legally preferable would be to issue a second NOPR if they decided to persist and to eliminate some of the vagueness and lack of clarity in the original proposal. I don't know that anybody has suggested that they actually will do that, but that would be

preferable from my point of view to a white paper, but a white paper is better than nothing.

Mr. NORWOOD. Well, from my point of view, I would like to see it spelled out in the language, then there can't be any confusion on anybody's part. What is your view, Mr. Ervin, regarding what constitutes discrimination with respect to transmission reserve capacity?

Mr. ERVIN. It is our belief, Mr. Chairman, that discrimination with respect to transmission reserve capacity would be something which constitutes a direct violation of existing law. The NOPR, as I read it at least, would tend to indicate that somehow that reserving capacity for native load, which has paid for the system that exists, is somehow discriminatory, that treating native load as if it has—that it does not have a right to first call on that capacity is somehow discriminatory. I think one of the fundamental differences between the commissions, of which the North Carolina Commission is one, and FERC is, that FERC somehow seems to think that existing native load priority that gives retail customers—and we consider the IOU customers to be in this group, the mini customers to be in this group and the coop customers to be in this group—priority call on those assets, preferential access to them somehow to be discriminatory. We just don't understand that concept, but FERC somehow seems to think there is something wrong with that idea. We just don't agree with that.

Mr. NORWOOD. Sort of an obligation to serve.

Mr. ERVIN. Yes.

Mr. NORWOOD. And it is a real stretch to use that word. He and I discussed that last week.

Mr. ERVIN. And we just fundamentally don't agree with that.

Mr. NORWOOD. Very quickly, in your view, what should the role of State commissions be in all of this? How will this role change if FERC is successful in implementing the standard market design?

Mr. ERVIN. We believe that if FERC is successful in implementing the standard market design as it is proposed in NOPR, it will be very difficult for the State commissions to implement State law as it exists now, because FERC will effectively have taken total control over the transmission system, which is currently subject to Sate regulation.

Under the existing regulatory model, FERC controls the wholesale market, the States control the retail market. If the States lose control over the transmission component of bundle retail rates, FERC will have the authority to interfere with things that are traditionally subject to State jurisdiction, will be able to mandate changes in the existing retail rate structure, including the terms and conditions of service. We do not think that is a good idea because it will allow FERC to invade areas that are traditionally subject to State regulation and will enable them to do things that may or may not be consistent with existing State retail policies. We do not agree that they ought to be able to do that and would hope that this committee would not adopt measures that would allow them to do that.

Mr. NORWOOD. Well, you implied that in your statement about it being a constitutional issue. I can't remember exactly what you

said in there, but it—what did you say? It was in the last paragraph?

Mr. ERVIN. What I said, in essence, was the following: That it seems to me under constitutional structure that fundamental policy decisions are matters for Congress. And I recognize that the Constitution allows the delegation of some administrative functions to agencies. But fundamental policy decisions are matters for our elected officials. This NOPR goes to such fundamental matters that it appears to me at least that Congress should take an interest in this issue and that Congress should be the one to acts, if anybody acts, in this area.

Mr. NORWOOD. Rather than the regulatory body.

Mr. ERVIN. Rather than a regulatory body, yes.

Mr. NORWOOD. Well, my time is up, Mr. Ervin, but I could not agree with that statement more, not just electricity but the entire running of the Federal Government, and I appreciate you bringing that up.

Mr. Hall, are you ready? You are now recognized for 5 minutes.

Mr. HALL. Mr. Chairman, I am ready, but I have not been here. I have been in another committee, and I don't know what questions have been asked. I will submit with your permission letters to these gentlemen for the things that I want to ask of them. I yield back whatever time I have not used.

Mr. NORWOOD. Mr. Hall yields back. Mr. Shimkus, I believe you are now recognized for——

Mr. SHIMKUS. Should be 8 minutes, Mr. Chairman.

Mr. NORWOOD. [continuing] 8 minutes. That will work.

Mr. SHIMKUS. Yes. And I can wait.

Mr. NORWOOD. My word, did I skip my buddy down there? Mr. Doyle, you are recognized for 5 minutes. Sorry about that.

Mr. DOYLE. Thank you, Mr. Chairman. I thought maybe you couldn't see me hiding behind Ralph here. Mr. Chairman, I have a very interesting and informative opening statement that I didn't get a chance to deliver, so if I could have that entered into the record, I would appreciate it.

Mr. NORWOOD. So ordered.

Mr. DOYLE. Thank you. Mr. Walter, how are you? And welcome to all the panelists. Mr. Walter, we have been hearing for quite some time and repeatedly throughout this morning that FERC's efforts to move toward RTOs and create competitive regional electricity markets will lead to less control of the transmission grid or an increase in speculation in higher prices. But in the area where I am from, I represent Pennsylvania where we are several years into a deregulated market and I have heard quite different reports in recent years. And I believe your company is involved in the Pennsylvania market, and I was wondering if you could just take some time to discuss the record of PGM where many of these policies are in place today and whether they have been good or bad. How is that for a softball?

Mr. WALTER. Thank you. I do have a few statistics that we gathered up on PJM, because, as I said earlier, I think it is a good place and a good model for other regions in the country. Average prices in PJM were 13 percent lower in 2002 than 2001, despite three new all-time peak use records in 2002. The PJM's regional plan-

ning process currently has in its budget $726 million of transmission upgrades, so even though independent companies like ourselves often have to pay for upgrades in PJM, it is actually going on in the planning sort of process.

Hourly average systemwide locational measure pricing in PJM in 2002 was approximately the same as in 1999 and 2000. Rising fuel prices are the most significant contributor to those increases, not the implementation of SMD-like features in PJM. And, finally, since 1999, PJM has connected over 7,000 megawatts of new generation. I might add, Ontowannee is a facility that we own near Reading in Pennsylvania. We are proud to have that in operation as of late last year. And 4,000 megawatts are presently under construction. So I think from a transmission perspective, from a pricing perspective and from a generation perspective, it is a good model.

Mr. DOYLE. Thank you. Mr. Moore, I appreciate many of the comments in your testimony today and share your interest in expanding utilization of the CHP systems. I have seen how these systems, I think, can be effective in increasing the diversity of our portfolio, which is a core goal of mine in our efforts to formulate a comprehensive national energy policy. Now, in your testimony, you mention that you support the formation of RTOs but you have concern with PURPA reform provisions in the draft bill we are examining. But as I understand the bill's provisions, it would terminate the mandatory purchase obligation only in certain cases, such as the qualifying facility as a member of an RTO, which you say you favor. And I know you have already expanded on your concerns with PURPA in response to Mr. Boucher's question but you also suggested that you would like to see us give FERC guidance on how to determine a competitive market. And I guess I am not sure if that is a proper or frankly achievable legislative goal, so I wonder if maybe you could expand a bit on why you see that as appropriate and how we would achieve it if you think it is appropriate?

Mr. MOORE. Legislative language explaining what a competitive market is we recognize the difficulty of that, and the chairman has challenged me to get language back to the committee staff and try to do that, which we will do by the end of the day. We just simply think when you put in legislative language that FERC can do that, FERC would probably appreciate some guidance as to what constitutes a competitive market. That is what we are pointing at. The current FERC I don't think we would have a problem with them being able to figure that out. We don't know what a future FERC would think like. And so we think that some legislative language might be helpful to further flesh out what the chairman means when he says that.

Mr. DOYLE. Thank you. Mr. Chairman, that is all the questions I have. I yield back.

Mr. BARTON. We thank the gentleman from Pennsylvania. We do now recognize the gentleman from Illinois for 8 minutes, Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. This is a great hearing, and I have been—I am on my seventh year of being in the committee, and I think I have sat through about 40 hearings on energy, not only here in Washington but I know I attended one in

Chicago a long time ago. So for those who have said that we haven't fully vetted out energy issues, I don't know where they have been. But is has been fun, and I have made a lot of friends along the way and learned a lot of stuff.

Let me ask a first question. Mr. Owens, you represent the IOUs. Do they generate power that is sold across State lines?

Mr. OWENS. Yes, they do.

Mr. SHIMKUS. Ms. Schori, Sacramento Utility District, do you generate your own electricity?

Ms. SCHORI. Yes. We own about enough generation at this point to serve close to half of our load. We also have long-term contracts that take us up to about 70 percent of our load.

Mr. SHIMKUS. Those long-term contracts are with who?

Ms. SCHORI. We have some in the Pacific Northwest, and we are also——

Mr. SHIMKUS. They are outside the State of California?

Ms. SCHORI. Yes.

Mr. SHIMKUS. Okay. Thank you. How about you, Mr. Twitty? Do you fulfill all your baseload by internal generation?

Mr. TWITTY. We are capable of doing so; however, we do also have outside contracts as well.

Mr. SHIMKUS. And are they across State lines?

Mr. TWITTY. In some cases, yes, sir.

Mr. SHIMKUS. Thank you. Mr. English, good friend, we have seen you traveling all around the country. Do the Rural Electric Co-operatives rely on other generation other than baseload to fulfill the needs of the members?

Mr. ENGLISH. We do.

Mr. SHIMKUS. Are they in other States?

Mr. ENGLISH. In some cases, yes.

Mr. SHIMKUS. Thank you. Mr. Walter, obviously I don't need to ask you this question. Mr. Ervin, also, is any utility within the State of North Carolina do they have contracts that go outside the State to provide basic electricity generation?

Mr. ERVIN. Absolutely.

Mr. SHIMKUS. Great. This is my problem with this whole debate: Transmission—and I am glad we talked about the Constitution, because obviously we know the interstate commerce clause.

Mr. ERVIN. Certainly.

Mr. SHIMKUS. And it addresses the issue, and I would say that electrons that are being used across State lines easily falls into interstate commerce. Would anyone disagree with that?

Mr. ERVIN. If I can maybe anticipate where you are going, Mr. Shimkus. The question, it seems to me, on the table is not necessarily what is the constitutional power of the Congress, because——

Mr. SHIMKUS. It is who designs that? And let me interrupt here because even though I have got 8 minutes it goes pretty quick.

Mr. ERVIN. Right.

Mr. SHIMKUS. But I was interested in the exchange that you had with my friend Charlie Norwood, because he was pretty revved up about your constitutional quote, as he should be. And I think the point is we ought to make those decisions on interstate commerce as elected officials——

Mr. ERVIN. Right.

Mr. SHIMKUS. [continuing] which I concur. But I would also say that what we are addressing here is interstate commerce issues and there is a role for us. As much as I have friends across the board to say that this is not a role of the Federal Government, I don't think would be correct with the intent of the founding fathers or as how we have evolved.

Let me tell you why the concern is here. I have a hard time understanding for the individual consumers how expansion of the grids for any of you is not helpful.

Mr. ERVIN. All right. May I say a couple of things?

Mr. SHIMKUS. It depends on how quickly you can say it.

Mr. ERVIN. All right. I will try to say it very quickly. There are two questions, it seems to me. One is the issue of what is the constitutional power of the Congress, and you talked about the commerce clause, and I am not going to discuss with you what is the extent of Congress' power if you choose to exercise it. The second question is given what the extent of the Congress' power is, you have the prudential issue of given the extent of Congress' power, what should be the manner in which Congress chooses to exercise it? Our argument then becomes, and I am not going to make it because it is in my written argument——

Mr. SHIMKUS. Okay. Let me ask this question——

Mr. ERVIN. [continuing] there are significant regional differences and they should be recognized——

Mr. SHIMKUS. Yes. Well, you made that statement—you made a statement in your opening comments, "Electricity is not performed in a uniform manner."

Mr. ERVIN. Yes, sir.

Mr. SHIMKUS. Now, if it is interstate commerce on transmission, my question is why shouldn't it be?

Mr. ERVIN. Because to go back to the——

Mr. SHIMKUS. Okay. Go ahead, I am sorry.

Mr. ERVIN. Because we have different models in different parts of the country. We have the PJM model in Pennsylvania, we have the vertically integrated model in the South.

Mr. SHIMKUS. Okay. Let me cut in there, and let me tell you why I have a concern on this. I think—and, again, I have friends there—I don't see how any consumer is harmed when they are given more choices and there is more access to the grid. I don't see how any coop is harmed when they don't have the ability to buy more power from multiple choices. I see the country as more protective the more we expand the grid. There is less of an ability to exercise market power over the grid when you have an expanded grid. In Illinois, we got hit 2 or 3 years ago because a transmission grid—a line went down here, power generation fell down, and because of the inability to get power from point A to point B, that hurt an escalation of prices. I think the best way that we address market power concerns, which are credible market power concerns out there, is to expand the grid.

Mr. ERVIN. All right. And I guess the answer that my region would give you to that argument would be that we believe that is a question that is appropriately determined by our State legislatures because retail electric service has traditionally been a State

matter. And our State general assemblies have, to date, looked at the question of whether they prefer to have retail competition or——

Mr. SHIMKUS. Yes. But with all due respect, for you to have competitive retail competition, you need to have competitive wholesale purchasing ability.

Mr. ERVIN. And my point, I guess——

Mr. SHIMKUS. And when we don't expand the grid we don't have that.

Mr. ERVIN. And to finish up what I was going to say, and we may just have a fundamental disagreement and that is, I believe, okay, our general assemblies have concluded that they believe they are better off with the existing system, and our argument is that we ought to be allowed——

Mr. SHIMKUS. Isn't the bigger concern by the constituents of areas is that they don't feel there is going to be any increased competition, they don't think there is going to be more generation, and they feel that the low-cost power will shift outside of the regional boundaries, thus causing increased prices for your individual consumers?

Mr. ERVIN. I think—to put it differently, I think our argument would be that we believe that our existing system works for us, and we are not persuaded that it needs to change.

Mr. SHIMKUS. And with that, I would like to——

Mr. ERVIN. And that is fine.

Mr. SHIMKUS. [continuing] Mr. English and give you a chance, but my time has run out. I have taken full——

Mr. BARTON. No. We want a full hearing record. If Mr. English wishes to comment on that, just try to be as brief as possible.

Mr. SHIMKUS. As you prefer, Mr. Chairman.

Mr. ENGLISH. I will be very, very quick. If that is what you are after, you have got two provisions in this bill that are giving you real problems. One is incentivary provision because it completely ignores the fact by reducing risk you in fact can encourage the building of transmission. The second one is the participant funding provision, which within a region discourages the building and improvement of transmission. So you have got some real problems if that is what your aim and objective is, and I think you need to go through the bill and look at that.

Mr. SHIMKUS. Thank you. Since Mr. Walter is shaking his head, no, in reference our ability to make sure everything is on the record, I think it would be appropriate to have Mr. Walter respond.

Mr. BARTON. Well, before I recognize Mr. Strickland, just a follow-up to Mr. Shimkus' question. Mr. Ervin, what if we mandated—no, let me back away from that. What if we allowed a provision for economic dispatch that if a market provider, a generator, could guarantee lower-cost power to your State, is that a good thing or a bad thing?

Mr. ERVIN. I guess, Mr. Chairman, it is my belief that if a lower-cost producer can sell power to a utility in North Carolina now, it is my belief that our utility is obligated to buy it under——

Mr. BARTON. Not if you have closed State and don't allow a merchant plant to have access to the transmission grid.

Mr. ERVIN. We allow merchant—we have certificated a number of merchant plants in North Carolina within the last 2 years.

Mr. BARTON. Mr. Walter says Calpine has got plants that are idle that are the most effective and efficient generation of electricity plants in the country. I bet his company would love to send some power into your State if they were given the opportunity to do so.

Mr. ERVIN. Calpine would be welcome to come file an application to site a plant in North Carolina.

Mr. BARTON. No, no. We didn't say site a plant in North Carolina. We said have power that is available to be shipped to North Carolina so that Mr. Moore's consumers that use it could buy from Mr. Walter's generators and use the transmission lines that your State public utility commission controls. Economic dispatch. We are not taking away anything from the State, we are just saying if somebody can give your consumers a better deal, maybe that is okay.

Mr. ERVIN. And we may be quibbling over economic dispatch, and I don't mean to do that, Mr. Chairman, if I am, I apologize.

Mr. BARTON. You learned a lot from your grandfather.

I watched those hearings when he was chairman.

Mr. ERVIN. And I don't mean to be quibbling over economic dispatch, but in the event that power from one of Mr. Walter's plants can be economically delivered to North Carolina under—and wholesale transmission rates are set by FERC, we don't control those. The terms and conditions of wholesale transmission are controlled by FERC now, we don't control that.

Mr. BARTON. Well, my understanding is——

Mr. ERVIN. If they can be delivered to North Carolina at an economic rate and at a price more economical than our utilities can dispatch them now under our existing rules, our utilities would be obligated to buy from Mr. Walter's plants and not——

Mr. BARTON. But apparently only if they are sited within your State boundaries.

Mr. ERVIN. No, no. And I don't mean to be under—if you interpret me as having said that, that would be inaccurate. Our utilities are obligated to use the least cost resource, be it their own plant or——

Mr. BARTON. But they have to have access to it.

Mr. ERVIN. Correct.

Mr. BARTON. If they don't have access to it, there is no obligation for them to use it.

Mr. ERVIN. That is correct. But if the access—if there is—and the only problem that would prevent them form having access to our utility system would be the lack of transmission capacity. That is not a problem that results, in our view at least, from the existence of the native load priority, which is the thing that I have defended here today, because we do not believe that the existence of the native load priority is any kind of impropriety.

Mr. BARTON. Well, I think there are a lot of people that are classified as native loadees who would love the opportunity to lighten the load on their pocketbook if we could find a way within the various constraints to make it happen. We are going to recognize Mr. Strickland for 5 minutes. Eight? Five minutes? Okay, 5 minutes.

Mr. STRICKLAND. Five minutes, and Mr. Chairman, I will not take the 5 minutes; I only have one question for Mr. English. As you are aware, FERC has issued a standard market design proposed rule, and I am just interested in your opinion as to what impact this would have on the rural cooperatives?

Mr. ENGLISH. Well, as written, it could have significant impacts on electric cooperatives. We are all across the Nation, we are in 47 States in different regions that would impact far more than it would others. We are very hopeful that FERC is going to amend that. We have got 200 pages of specific amendments we are requesting, and we are hopeful that is going to change. What we are very concerned about is that there are some provisions, not all, some provisions in this legislation that will become intertwined with this standard market design and as it is ultimately written. And until we know the final outcome of that standard market design, these provision complicate the situation. We would hope that this committee would consider targeting those provisions that would be affected by the standard market design and set those aside for the time being until this whole matter has been resolved.

Mr. STRICKLAND. Thank you. I yield back my time, Mr. Chairman.

Mr. BARTON. Gentleman from Oregon for 5 minutes.

Mr. WALDEN. Thank you, Mr. Chairman. I have a question for all of you, I guess, on this issue. I know one of the things that is going on in the Northwest are merchant power plants being sited, and one of the issues that comes up in that process is there is a limited supply of air shed, there is a limited supply in some cases of water, there are limits to how much gas is available, and certainly to the distribution grid. We have a real capacity issue in the Northwest; in fact, this Congress just this year in the 1903 omnibus approved $700 million bonding authority for Bonneville to be able to try and keep pace with building out the grid, because we don't want to be like California and have a lack of capacity.

So I guess my question gets to this issue of the native load. How do you see the provisions in this bill affecting the local ratepayers, because I can envision a situation where you have merchant power plants that seek out areas where there may be easy and cheap access to a gas pipeline, which happens in my district. But as they such up that gas, that means heating prices are going up because of the competition for that same gas. The water rights, the air shed rights, how does this affect that? How do the proposals of this legislation affect that? And if you can keep your answers fairly short, because I have another one after that. Let us start with Mr. Owens and then work across if you would.

Mr. OWENS. Let me take a crack at it, Congressman. I compliment the bill from the standpoint of recognizing that there is a need for infrastructure expansion.

Mr. WALDEN. Right.

Mr. OWENS. One of the areas that you elaborated on, and other witnesses and many of the members of this fine subcommittee have elaborated on, is the need to expand our transmission system. At the heart of this bill is the desirability and the need to do that. We have a transmission system that substantially congested, as other witnesses have indicated today, and as I understand and read the

electricity title very carefully, it suggests way, to enhance the construction of transmission through proper pricing incentives, through expediting the construction of transmission in congested areas that have been identified by the Department of Energy as representing the public interests and eventually lowering rates. It facilitates the siting of transmission across Federal lands. So it does a lot to deal with a resource constraint that we have.

Mr. WALDEN. Well, I hate to cut you off, but we are under 2½ minutes, so if we could be just quick and maybe we can follow-up after the hearing. Push your microphone button in if you would, please.

Ms. SCHORI. Sorry, thought it was on. Yes. Thank you. Just very quickly, I would say that there are many parts of the overall energy bill that I think will be beneficial, but there are a number of questions about how do we figure out if ultimately the cost/benefit analysis in good things happening for consumers? If you look at the industry right now, the key issue, nobody is credit worthy, simply increasing the rate of return is not going to cause Wall Street to want to loan money to PG&E and Edison in California. We need to get to the fundamentals, reestablish a market where long-term contracts are valid and valuable, recognize that we have very scarce resources, as you mentioned—air, water. Simply creating a Federal decisionmaking process, if I—and I am involved in hydro relicensing. That does not necessarily mean you get a speedy decision.

Mr. WALDEN. Okay.

Mr. TWITTY. I think our concern would be, as I mentioned earlier, if you repeal PUHCA, if you take away FERC's merger authority, you do limit the opportunities for customers to benefit. And as community-owned utilities, we are interested only in customer benefits. And if you don't have more competition, that is going to be negative for customers.

Mr. WALDEN. All right. Mr. English?

Mr. ENGLISH. The chairman referred to a national grid earlier today, and I think that he is on the right track with regard to an issue of a national grid. We desperately think that there needs to be some kind of addressing of this fact, and our membership is very dependent on that. But in addition to that, you also have got to determine how are you going to go about doing that. And we need to use all of the options, not just limit ourselves to one or two.

Mr. WALDEN. Okay.

Mr. WALTER. As one of the few companies that actually built merchant generation in the Northwest, we would say this: There aren't going to be anymore hydroplants built. I don't believe that Washington and Oregon want to have more coal generation. There is growth that is going on in the Northwest, they need natural gas-fired power plants. Now, as to emissions and water, as you know, the power plants we are building have 99 percent less SO_2 than coal, they have 95 percent less NO_X, they have 60 percent less CO_2. As to water, we are prepared, and we have in many areas of the country, built air-cooled plants if municipal waste water or other water supplies are not available. So that to us is not an issue in the Northwest.

Mr. WALDEN. Okay. Mr. Moore?

Mr. MOORE. Congressman, basically, the protection of the consumer is a national grid, as the chairman was trying to get to, so you can move power where it is needed and do it efficiently and cheaply. And, second, it is increased generation of all forms of power and all forms of power, which the bill tries to get to. You need more alternative forms of energy, more forms of energy and be able to get it to the consumer.

Mr. WALDEN. Mr. Ervin?

Mr. ERVIN. I feel like I have talked enough today already, but one protection that we have at least in our structure is that under the regulated markets that we have, we have the authority, assuming that we provide an appropriate return on the investment, to compel the construction of appropriate facilities. And our companies have been perfectly willing to make the necessary investment——

Mr. WALDEN. Right.

Mr. ERVIN. [continuing] in needed generation and in transmission and in distribution infrastructure without the necessity for that power to be even be invoked. So that we have had a good cooperative working relationship with our utilities, and the studies that we have done have indicated that that system has worked pretty well.

Mr. WALDEN. Thank you. My time has expired. Thank you.

Mr. BARTON. The gentleman from New Jersey, Mr. Pallone, is recognized for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman. I don't think I will use it all, but I know that Mr. Walter previously gave an overview of the PJM system, and, Mr. Walter, you mentioned in your testimony that timely action by FERC to bring to a final resolution the issues addressed by standard market design is an important way to help develop power resources. I represent New Jersey, which is within the PJM interconnection, and this electricity market works well for us in my State, frankly. We have adequate generation supply today, and companies are willing to invest in the future, because we have clear rules and a stable regulatory environment.

I understand, though, that not everyone likes everything about FERC's standard market design, and I too have some concerns. I also understand that some members of the House may wish to see Congress step in and block FERC from moving forward on its proposed rule. So my question, Mr. Walter, if Congress acts in a way that prevents FERC from continuing its work to ensure electricity markets function well across the country, what kind of harm do you think would come or come to electricity consumers in my State within the PJM? If you could respond to that?

Mr. WALTER. Well, my response would be that it would be a negative impact. We are in favor of open markets throughout the country, and so we have been supportive of the principles, not necessarily SMD and the 600-page form that has been sent out but something that supports those key principles. So it would be negative for markets that aren't yet having open competition. But as you point out, in Texas and in Pennsylvania and in New Jersey and Maryland, if they were to start to unravel the good works that have already been done and created and functioning now, that would definitely be negative, and it would not only hurt consumers

there, it would create insecurity and instability that is now not there.

Mr. PALLONE. Okay. I see Mr. Ervin wants to answer the question too or comment.

Mr. ERVIN. And I think that that is an extremely valid point, which goes to something I said earlier. The PJM market, according to a lot of my colleagues that I have talked to up there, has worked well for the citizens of those States. The markets that we have in the Southeast most of us feel have worked reasonably well for our citizens. And so when I call upon this committee to take action to deal with this, indeed one of the things that I think that I would ask you to consider is how do we take action, how do I ask you to take action in such a way that we accomplish what you suggest at the same time that we accomplish what I suggest.

PJM works well for the citizens of the region that you represent. However, we are concerned that because we don't have the history of tight power pools in the Southeast, that what works well in PJM would not work well in the Southeast, just like what works well in the Southeast might work well for PJM. These regional differences are important and we need to recognize them and move forward in working on these problems in such a way that your interests are protected and our interests are protected. And so I think we need to work cooperatively so that these differences are recognized.

Mr. PALLONE. Thank you. Thank you, Mr. Chairman.

Mr. BARTON. The gentleman from North Carolina, Mr. Burr, is recognized for 5 minutes.

Mr. BURR. Thank the Chair. Commissioner Ervin, in your testimony, you cited an exchange that I had with Pat Wood at our last hearing, which he claimed that the study, I think it was the Southeastern Regulators commissioned by Charles River Associates, actually proved that the Southeast would see savings from the standard market design if implemented as currently written. I asked him if this was one of many scenarios that was in fact brought up in that study. Can you shed some light on what the conclusions were of that study and how it affected the Southeast?

Mr. ERVIN. The ultimate conclusion of the study was that it was not clear that the assertion that Chairman Wood made before you is in fact the case. The actual statement by the consultant was, "There is considerable uncertainty as to whether RTOs in the SMD would provide greater benefits to the Southeast in the implementation costs."

Mr. BURR. They modeled this under several different scenarios, didn't they?

Mr. ERVIN. I don't have—didn't bother to count up exactly how many scenarios they ran, but there were at least 10 discussed in the body of the report.

Mr. BURR. One assumed that if everything were perfect, you might, and I stress the word, "might."

Mr. ERVIN. I think that is a fair conclusion.

Mr. BURR. Ms. Tezak will testify in the next panel, and——

Mr. ERVIN. That is my understanding.

Mr. BURR. [continuing] in her testimony, she says that New York v. FERC in the spring court case is a crystal clear, and I quote, "ruling from the court that FERC has ultimate jurisdiction over the

transmission but has the authority to delegate it when it chooses.'' Let me ask you if that is your opinion?

Mr. ERVIN. No, it is not.

Mr. BURR. What is your opinion on whether that——

Mr. ERVIN. My opinion after having read that case a number of times is that it leaves the ultimate issue raised by standard market design undecided. The court held that FERC did not err by failing to exercise as a matter of policy decision jurisdiction over an unbundled retail transmission. FERC, in essence, in Order 2000 said that it had jurisdiction over unbundled retail transmission but that it did not choose assert jurisdiction over bundled retail transmission. The court held that FERC did not err in choosing to proceed to exercise jurisdiction over bundled retail transmission. One of the reasons that the court said that FERC did not err in making that choice was because to do so would raise serious jurisdictional questions or something to that effect and pointed out that the issues raised by the State of New York, which challenged the FERC's exercise of jurisdiction over unbundled retail transmission itself raised serous jurisdictional issues. So that I think there are serious legal issues raised by the FERC's decision in this and the NOPR to assert jurisdiction over bundled retail transmission.

Mr. BURR. So the term, ''crystal clear,'' would not be something that you would——

Mr. ERVIN. That would not be the way I would choose to characterize it. I made the mistake perhaps going to law school a number of years ago, and I would not choose to characterize the New York decision as crystal clear in FERC's favor.

Mr. BURR. Mr. Chairman, let me also exercise the fact that in my opening comments, I missed the opportunity to acknowledge our former colleague who is on the panel and certainly want to welcome him. I would also ask for unanimous consent to enter into the record additional questions for these witnesses.

Mr. BARTON. Without objection.

Mr. BURR. I yield back.

Mr. BARTON. The Chair recognizes the gentleman from California, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman. Unprecedented market abuses have come to light over the past year, and I want to give the panel two examples that cost consumers millions of dollars. In May 2002, internal Enron documents were revealed that described how the company manipulated the California electricity market to increase prices artificially. Through market manipulation strategies that Enron called fanciful names, like Get Shorty and Death Star, Enron gouged western families and businesses. Earlier this year, transcripts from Reliant Energy revealed a coordinated strategy to shut down power plants in order to drive up electricity prices in June 2000. Cynically, Reliant decided to wage a campaign to blame the Clean Air Act for the power plant shutdowns. I am concerned that the legislation that the chairman is proposing does nothing meaningful to address these problems. To stop market abuses, energy companies need to believe that there is a credible possibility of enforcement, and to have a credible possibility of enforcement you need clear prohibitions with sufficient penalties. Do any of the witnesses believe that fraudulent or manipulative be-

havior of Enron and Reliant should be condoned? None of you responded that you do. Would everyone agree that fraudulent behavior should be prohibited? All the members of the panel seem to be nodding in the affirmative. Would everyone agree that FERC should be able to issue regulations to prohibit fraudulent or deceptive ads? Anybody disagree with that?

Mr. OWENS. I would add, Congressman, FERC should be able to do it and it should be able to apply to all participants of the marketplace.

Mr. WAXMAN. Okay. Now, let me ask about penalties. Section 7084 of the discussion draft increases the amount of penalties that FERC can assess under Section 316 of the Federal Power Act. However, it does not provide for discouragement of profits. Without fear of having discouraged profits, bad actors can continue their bad behavior, confident that market abuses remain profitable as long as they generate more income than the penalties that could be assessed under Section 316 of the Federal Power Act. I want to ask each witness should a bad actor be permitted to keep the profits it makes from fraudulent, manipulative or deceptive behavior? Starting with you, Mr. Owens. Do you agree that there ought to be discouragement of profits?

Mr. OWENS. That is a tricky question. No, I don't believe that a bad actor should be able to keep profits that have been determined to be unjust and unreasonably achieved. I think that the Power Act deals with that.

Mr. WAXMAN. Well, let me put it this way: We have a proposal that Mr. Dingell, Mr. Markey and Mr. Boucher and I are making that penalties be no greater than $1 million or three times the profits made. Would you support such a proposal?

Mr. OWENS. I would have to see it in context.

Mr. WAXMAN. Okay. Let us go down the list.

Ms. SCHORI. Actually, today I am here on behalf of the Large Public Power Council, so I don't have a position on behalf of LPPC——

Mr. WAXMAN. Okay.

Ms. SCHORI. [continuing] on the bill that you have proposed. I do think that the characterization of the marketplace is accurate that you have described, and obviously being from California, having been hammered, having taken a 22 percent rate increase in Sacramento ourselves in terms of what we went through, I personally lived through what you are talking about and experienced it.

Mr. WAXMAN. But is it fair to say—I appreciate that, but I want to get everybody in.

Ms. SCHORI. Excuse me, all I——

Mr. WAXMAN. Is it fair to say do you think a bad actor should not be permitted to keep profits it makes from fraudulent, manipulative or deceptive behavior?

Ms. SCHORI. I think that is a fair statement. I think it is critical that we define what a bad actor is. We need to get the structure right, set the rules and not be still trying to figure it out 2 years after we did the contract, though.

Mr. WAXMAN. Mr. Twitty?

Mr. TWITTY. I think it is certainly something that should be seriously considered. However, I do think that it is difficult to legislate

all the specific kinds of bad actions that can go on. I think you do have to give some broad idea about the things that ought to not occur and then let whoever, the regulator or the courts, have some say in that.

Mr. WAXMAN. Should we let FERC do that?

Mr. TWITTY. I think FERC is as good a remedy as any.

Mr. WAXMAN. Mr. English?

Mr. ENGLISH. On behalf of the consumer on not-for-profit, I say right on.

Mr. WAXMAN. Okay. Thank you. Mr. Walter?

Mr. WALTER. Mr. Waxman, I am not familiar with the draft of your bill. Wrongdoing should be punished and punished, according to others, that I can't judge exactly what the rules ought to be, and it has got to be defined, but I think the punishment should be appropriate to the wrongdoing. I would like to take this opportunity to point out that Calpine as a company has performed very much differently than I think a lot of the accusations that have been made. We were not mentioned in the California report that was issued to FERC last week. We decided early on that we would continue to operate our power plants, and we have a number of them in the State of California. If there was a ever a possibility of an emergency, we operated our power plants. And I should remind——

Mr. WAXMAN. Mr. Walter——

Mr. WALTER. [continuing] you that that was in light of the fact that in many cases we weren't even getting paid and we continued to operate. And so I just want to make the record clear that Calpine is a very much different company in how they approach this whole situation in California.

Mr. WAXMAN. Thank you very much. Mr. Moore, Mr. Ervin, do you want to answer the question that I have asked all the other members: Should a bad actor be permitted to keep their profit it makes from fraudulent, manipulative or deceptive behavior? And whether you have any sense of whether you would support a penalty that is no greater than $1 million or three times the profits made?

Mr. MOORE. Mr. Chairman, our members were badly hurt in California by what went on out there, and certainly we are with everybody else, that nobody ought to profit from it. The specifics we haven't looked at, we don't know anything about.

Mr. WAXMAN. Thank you.

Mr. ERVIN. Congressman, I think I would echo what Mr. Moore said. Without endorsing the specifics, the general sense of what you say makes sense to me.

Mr. WAXMAN. Thank you very much. I thank the panel for responses to the questions.

Mr. BARTON. Before I recognize Mr. Otter, Mr. Walter, if the State of California at the time Mr. Waxman was asking his questions had allowed bilateral contracts outside of the power exchange and the required market transparency provisions such as are in the current bill, in your opinion, would you have had the problem that you had in California?

Mr. WALTER. If the utilities were encouraged and not actually not allowed to enter into long-term power agreements, it would

have mitigated a lot of the difficulties that we experienced that year.

Mr. BARTON. And the reason they couldn't do that was because of the California law; isn't that correct?

Mr. WALTER. My understanding, and I am not a lawyer, my understanding is that its utilities were discouraged from entering into long-term agreements and in certain cases by the PUC not allowed to.

Mr. BARTON. Okay. Mr. Otter is recognized for 8 minutes.

Mr. OTTER. Thank you, Mr. Chairman. I would kind of like to follow-up on that, because the last term I served on the Government Reform Committee, and in our subcommittee we had considerable hearings relative to that. We were told by the witnesses that they were not only discouraged from it but they were specifically told that they could not. In fact, the city of San Diego had an opportunity just several months prior to the crisis hitting of optioning a long-term contract for $25 and they ended up paying $300 because they were told that they could not engage in the—because, "This was the Governor's idea of deregulation." Do any of you—and just yes or no is fine—do any of you believe that what California went through was the result of deregulation?

Mr. WALTER. I think it was——

Mr. OTTER. Yes.

Ms. SCHORI. We ended up with a dysfunctional market structure, and there is 100 percent agreement in California on that point.

Mr. OTTER. I don't doubt that, but did you think that that was a result of the free market working?

Ms. SCHORI. It was a result of a defective structure that then was compounded by a number of additional mistakes including, to be frank, the failure of FERC to act promptly to address the problem.

Mr. OTTER. Do any of you believe that there wouldn't have been considerable conservation had the retail price floated with the cost of the market?

Mr. WALTER. There would have been a response on the demand side if they were able to respond, and in many cases they were not. I want to focus on one thing if I might.

Mr. OTTER. Okay.

Mr. WALTER. One of the biggest issues that we have in California then, today and tomorrow is the fact that there is not enough generation in California to supply the consumers there. That is one of the fundamental issues that we continue to talk about manipulation, we continue to talk about dysfunctional market structures. The fact of the matter is there is not enough electricity in California to supply the demand.

Mr. OTTER. Thank you. Have any of you ever shut down an operation in order to qualify or in order to make sure that you were obeying some of the—or had to take actions within those operations in order to obey the Clean Air Act?

Ms. SCHORI. Virtually all power plants in California, if not across the country, have operating hours restrictions related to how many pounds of pollution you are entitled to emit, and you are in violation of the Clean Air Act if you operate in excess of those limitations. So SMUD does own cogeneration plants in our service area

that are subject to those kinds of limitations. We cannot operate in excess of that, and we try to plan to make sure the hours will be available when we most need the plants.

Mr. OTTER. Well, my point was——

Ms. SCHORI. We haven't been ordered to shut down.

Mr. OTTER. My point is is that there are—operating plants shut down all the time in order to qualify for some Federal regulation, and it just doesn't have to be power plants. But the Clean Air Act is pretty broad. It gives you certain windows, and once you reach a certain level of pollution, to use your term, well, you have to shut it down. Otherwise you are in violation of the law; isn't that true?

Ms. SCHORI. Yes.

Mr. OTTER. Okay. I would like to go to Mr. Moore now if I might briefly. Many of your comments were made relative to PURPA. Under PURPA, I think we still use the avoided cost in trying to establish a term for power; am I not right?

Mr. MOORE. That is still the law. I don't think that happens in the marketplace.

Mr. OTTER. What does happen in the marketplace?

Mr. MOORE. Most all the contracts go into market prices, and that is the way it ought to be. The voided cost thing was created 20 years ago or whatever when nobody knew how to get into this. It is still in the law. There may be some examples of that still going on around the country, but I had a conversation with Mr. Wood of FERC and we looked over recent transactions in many parts of the country and they were all market priced, and that is the way they ought to be.

Mr. OTTER. Are you aware of any operations that had a cogen contract that was selling substantially higher than the market so they sold all their power at that price and then bought back power at a much cheaper price?

Mr. MOORE. No, I am not. There were some rumors of that during the California crisis where it was cheaper to shut a mill down and sell the power at outrageous rates, but that was a special——

Mr. OTTER. Most of that was under take or pay, though, wasn't it?

Mr. MOORE. Right.

Mr. OTTER. And take or pay is much different than what we operate under PURPA in cogeneration.

Mr. MOORE. Right.

Mr. OTTER. I guess I see my time is running out, and I would like to get a response from everybody on the panel. In Idaho, we have what we call the Administrative Procedures Act. The Administrative Procedures Act says that whenever the legislature passes its duty or its responsibility to legislate, to make rules and regulations under the power to enforce clause of a particular act, to carry out a particular function, and that generally reads, "and the director shall promulgate such rules and regulations which are necessary in order to carry out the provisions of this act." But under our Administrative Procedures Act in Idaho, before those rules and regulations can continue more than a year, they must be brought back to the oversight, the germane, committee, to make sure that the committee agrees with all the rules and regulations that were provided. And I see, however, we don't have that oversight—that

kind of oversight in Congress for not only FERC but I suspect many other Federal agencies. Do you think that that would be a good idea for us to adopt that process in Congress? Yes, Mr. English?

Mr. ENGLISH. Having been a member of this body and attempted that back in the 1970's, the Supreme Court told us that that violated separation of powers.

Mr. OTTER. So then should we write the rules and regulations and not then grant our legislative power to the bureaucracy?

Mr. ENGLISH. I certainly had a great deal of sympathy with that when I was a member of this body, there is no question about that, but I think the thing you get down to, bottom line, is that there is no way that the Congress can legislate for each individual situation in different regions of the country. The problem is someone is going to have to be in a position to make sure that intent—and this is where we get into another issue—the intent of the law is carried out, and that is where I think as legislators, certainly I used to and I suspect that you all do, have a great deal of frustration as making certain the intent behind the law is carried out.

Mr. OTTER. At the cost of taking up all my time to continue in this vein, Mr. English, then I would ask you don't we do that all the time, legislate for the entire country? Does the Clean Air Act mean one thing in the Northeast and something else in Idaho?

Mr. ENGLISH. I believe about every law that we have got that works, though, has some flexibility for regulators to make judgments with regard to situations. So if it is drawn so narrow that it is so tight that it allows no room for any kind of regulation anywhere, then we find ourselves in a situation where it doesn't apply to most of the people.

Mr. OTTER. Right. But what do we do about the laws, as you qualified, that work? What do we do about the laws that don't work?

Mr. ENGLISH. That is where I think Congress has an oversight responsibility. That is the reason I think you have hearings before the Congress. You bring regulators before this Congress, and you make the determinations whether they are carrying out the intent of the law. Unfortunately, the Supreme Court told us that those regulations have the same force as the law, so you are going to have to change the law to do that.

Mr. OTTER. Right. Very quickly then, in light of the 10th Amendment, the States' Rights Amendment, how do you feel about the eminent domain portion of the electricity title?

Mr. ENGLISH. I think the issue we are not in opposition to what the chairman has done as far as the siting provisions of this legislation. We think it is a good start.

Mr. BARTON. That is a good answer.

Mr. ENGLISH. Mr. Chairman, I have been searching all day to——

Mr. BARTON. And it is about time.

The gentleman from Arizona is recognized for 5 minutes.

Mr. SHADEGG. Thank you, Mr. Chairman. I want to focus my questions on the issue of transmission line siting. Eighty-seven percent of Arizona is owned by the Federal Government at one level or another, whether it is outright ownership of Federal land or

military bases or Indian lands or otherwise, BLM, Forest Service, you name it. That creates a serious problem for us. For example, recently, in a line siting case involving a 345-kilovolt line for Tucson Electric Power Company last year, our corporation commissions met almost a year reaching a decision to site a particular power line, held extensive public hearings, and the U.S. Forest Service waited until the entire process was finished and didn't appear at any proceeding whatsoever, and then it simply dropped a letter saying, "Oh, by the way, we object." They had never made their objections known before that in any way, shape or form.

Mr. Owens, I would like to begin with you, though. I would be happy if other witnesses want to comment. How do you think we should approach the problem of coordinating line siting with Federal agencies when they have the ability to sit back and do what the Forest Service did in that circumstance?

Mr. OWENS. The approach or the goal that the Barton draft seeks to achieve and say that I think there are some gaps that could be readily addressed. I think it is appropriate to have a lead agency that would seek to coordinate with the input from all Federal agencies that you have to consult with when you are seeking to get across Federal lands and to, at the same time, in consultation with those agencies, to set deadlines and at the same time develop an environmental record that would be required for them to all use as they sought to expedite their decisionmaking on access across Federal lands. Right now there is no lead agency.

As you have correctly pointed out, the process is frustrating, it leads to an inappropriate decision process. In addition, I would have this lead agency also coordinate with independent agencies, the State commission, the tribal units. If you do it in that context, what you would do is you would have a clear and compelling record that would suggest more forcefully that there are issues that are dealt with a coordinated way, that there are environmental issues that are coordinated in an appropriate way, and that deadlines would be achieved so Federal siting would be expedited.

Mr. SHADEGG. Does anybody on the panel strongly disagree with that or want to comment? The Barton draft proposes to use a Memorandum of Understanding process. Do you think that is going to be adequate to deal with this kind of situation, and do you think it is expeditious enough?

Mr. OWENS. I think Memorandums of Understanding are approaches, and they really—I think it is a step in the right direction, but, quite candidly, it really relies on the good faith of the participants. It also suggests to some degree that there will be—that the participants in a Memorandum of Understanding have decisional authority. So it really is not a binding outcome that you would have through a Memorandum of Understanding.

Mr. SHADEGG. Can you give us—or give the panel some idea of how long it takes, how long in your experience or in your member company's experience it takes to get siting decisions out of the Federal Government?

Mr. OWENS. Yes. There have been—I can cite several examples where it has taken as long as 10 years. There are some examples where it has taken as long as 18 months and some examples where we are talking about very small transmission corridors where it

has taken 4 months. Ten months isn't extreme, but it seems to be moving toward the norm where it takes substantially longer than 2 years.

Mr. SHADEGG. You suggest that there be a lead agency. Is there a particular agency you think that should be vested in?

Mr. OWENS. Yes. I think the Department of Energy, as an example, because they have an experience in dealing with access across land such as Canada and Mexico. They certainly have the expertise, they have created an Office of Transmission that I believe is very much up to speed on the need to expand the grid. So I think they would be an appropriate agency.

Mr. SHADEGG. As you envision a lead agency, would it have the ability to say to other Federal departments, "You must meet these deadlines?"

Mr. OWENS. I think it would have the responsibility of working with those other departments, coordinating its decisionmaking, setting the deadlines, making sure that there is a complete environmental record for review that can be relied on and proceeding appropriately.

Mr. SHADEGG. Mr. English?

Mr. ENGLISH. I think that there is an issue here that needs to be recognized. Again, I want to refer to what the chairman was talking about as far as a national grid. If we truly are attempting to make a national grid and if we are attempting to focus what the Federal Government is doing on that national grid and that is where our attention is, then we are talking about selecting out certain portions of the transmission system that meets that. And if we establish that truly as a national goal, then obviously the Federal Government should be expected to be very cooperative, the agencies of the Federal Government. And it may very well require more.

I think the Department of Energy, without question, is a good one to call attention as to what has to be done, where the bottlenecks are, where the difficulties and the restrictions are. And I think that it is a question of how much the Congress is willing to do. But even if the Congress is only willing to say—go along with 20 or 25 sites a year and then providing FERC with the authority to deal with those, I think that would be a huge step forward. But I think you are on the right track. The Federal Government has to be a part of this, all of it.

Mr. SHADEGG. My time is expired but I certainly want to make a comment. I agree with you, the Federal Government, if we are going to create a national grid, should be a cooperative participant in that process. I have no confidence that without doing something in this legislation to assure that that it will.

Mr. BARTON. We want to thank the gentleman from Arizona for his questions. Believe it or not, over 4 hours after we started, there are no other members present to ask questions, so we are going to release this panel. We want to thank you. I want to make an apology to Mr. English. I used an analogy in asking you a question where I referred to Chinese communists. I in no shape, form or fashion think that coops are anywhere close to Chinese—the best people I know are coopers, and I have had the pleasure of meeting your State chairman in Texas, almost all the coop regional presidents. They are the very best people and patriotic Americans.

Mr. ENGLISH. Mr. Chairman, if I might respond.

Mr. BARTON. Sure.

Mr. ENGLISH. My daughter is a constituent of yours.

Mr. BARTON. And I am blessed to have her.

Mr. ENGLISH. And I knew you would be thrilled.

Mr. BARTON. I am.

Mr. ENGLISH. But I want to make another point that you misspoke. You are stating would we ever; we have already done it. We supported the Senate legislation last year and——

Mr. BARTON. We didn't have anything to do with the Senate legislation.

Mr. ENGLISH. That is correct. But you did have something to do with 2944. And if you remember correctly, I delivered you a letter pertaining to——

Mr. BARTON. You all supported a bill either one or two Congresses ago, and that is why I hold out hope that you will yet come into the fold.

Mr. ENGLISH. And I am sure that if we sit down and reason together, in the words of a Texan who rose to some stature in this town, that we could reach some kind of understanding, Mr. Chairman.

Mr. BARTON. We are going to try.

Mr. ENGLISH. Reasonable people. Thank you very much.

Mr. BARTON. Reasonable people. This panel is released, and we want to welcome our second panel as soon as they vacate the premises. We need to expedite the transfer here.

All right. If our audience would resituate themselves. If we could shut the outer doors. Okay. The subcommittee will come to order. We want to welcome our second panel. We have Mr. Michehl Gent, who is the president and chief executive officer of the North American Electric Reliability Council, which we call the NERC. We have Mr. Gerald Norlander, who is the executive director of the Public Utility Law Project of New York, and he is the chairman of the National Association of State Utility Consumer Advocates. We have Ms. Christine Tezak, is that correct, who is an electricity analyst for the Washington Research Group. We have Mr. Marty Kanner, who has testified before this subcommittee before. He is the coordinator for Consumers for Fair Competition. We have Ms. Sharon Buccino, is that correct, who is a senior attorney for the Natural Resources Defense Council.

Ladies and gentlemen, your testimony is in the record in its entirety. We are going to start with Mr. Gent, ask each of you to try to summarize it verbally in around 5 minutes, and then we will have some questions. Welcome to the subcommittee, Mr. Gent.

STATEMENTS OF MICHEHL R. GENT, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL; GERALD A. NORLANDER, EXECUTIVE DIRECTOR, PUBLIC LAW PROJECT OF NEW YORK, CHAIRMAN, NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES; CHRISTINE L. TEZAK, ELECTRICITY ANALYST, WASHINGTON RESEARCH GROUP, SCHWAB CAPITAL MARKETS, LP; MARTY KANNER, COORDINATOR, CONSUMERS FOR FAIR COMPETITION; AND SHARON BUCCINO, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Mr. GENT. Thank you, Mr. Chairman.

Mr. BARTON. You have got to push that button, make sure it is on.

Mr. GENT. Thank you, Mr. Chairman. Good afternoon, committee members and staff. I appreciate the invitation to testify this afternoon. I am going to address the reliability portions of your discussion draft, as distributed by Chairman Barton.

A cascading outage on the bulk power system in 1965 in the Northeast left 33 million people in the dark, and there are probably people in this audience today that can even remember that. Thirty years later, a similar cascading outage in 1996 in the West left over 15 million without electricity. It happened in the daytime so they weren't in the dark. The North America Electric Reliability Council's mission is to avoid such as cascading outages, and we have been extremely successful in the past, as witnessed by that basic 30-year gap. However, that mission to keep the lights on is becoming more difficult, mainly because of our reliability rules have no enforcement mechanism. NERC and a very broad coalition support the reliability provisions in Chairman Barton's draft legislation and strongly urge this subcommittee to approve legislation as soon as possible.

With or without congressional guidance, the electricity industry is changing and changing in very fundamental ways. These changes are disrupting the mechanisms that ensure that the reliability of the North America electric grids remain reliable. In order to prevent these changes from jeopardizing the reliability of our systems in the future, we must establish a mandatory system of rules and rules that are enforceable. We believe that the best way to do this is through an independent, industry-based, self-regulatory organization with oversight in the United States by the Federal Energy Regulatory Commission and in Canada by similar regulators. This is exactly what is proposed in your legislation.

NERC has been successful in ensuring the reliability and the security of North America's three interconnections because we have been able to marshal the industry's very best experts to design and operate the electric transmission systems in North America. And we have been successful because we have served as the industry's point of contact with agencies in the United States such as FERC, DOE, the FBI and the new Department of Homeland Security. Yet our continuing ability to serve this function cannot be taken for granted. We need this legislation to continue to be successful. We believe an industry self-regulatory system with its inherent stakeholder expertise is far superior to a system of direct government regulation for setting and enforcing compliance with greater reli-

ability rules. The language of your bill presents a sound approach for ensuring the continued reliability of North America's electric interconnections.

Everyone would like to have an abundant supply of electricity at reasonable prices. What is often overlooked, however, is the value of reliability of that supply. If someone is operating outside the NERC reliability rules, because the rules are only voluntary and there is no sanction for not following those rules, an upset of the system could very easily cause you to lose a supply of electricity unexpectedly during a critical stage of your manufacturing process, it could spoil your food and your tropical fish could die. And I say that with knowledge that my son runs a pet store, and in the western outage they nearly lost all their fish.

Then if this happens, then the price you pay for electricity or the choices you have for electricity supplier will be irrelevant. The reliability provisions of your draft legislation go a long way toward ensuring whatever restructuring occurs in the electric supply infrastructure in North America, whatever you do as Congress in addition to passing these reliability rules will allow us to keep the lights on by enforcing the reliability rules. I thank you for this opportunity to support this reliability part of your legislation.

[The prepared statement of Michehl R. Gent follows:]

PREPARED STATEMENT OF MICHEHL R. GENT, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Good morning, Mr. Chairman and members of the Subcommittee. My name is Michehl Gent and I am President and Chief Executive Officer of the North American Electric Reliability Council (NERC).

NERC is a not-for-profit organization formed after the Northeast blackout in 1965 to promote the reliability of the bulk electric systems that serve North America. NERC works with all segments of the electric industry as well as consumers and regulators to "keep the lights on" by developing and encouraging compliance with rules for the reliable operation and planning of these systems. NERC comprises ten Regional Reliability Councils that account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California Norte, Mexico.

NERC supports the reliability provisions (Title VII, Subtitle C, Section 7031) of the draft legislation that Chairman Barton released on February 28 and strongly urges the Subcommittee to approve this legislation as soon as possible. With or without Congressional guidance, the electricity industry is changing in fundamental ways. These changes are disrupting the mechanisms that ensured the reliability of the North American electricity grid. In order to prevent these changes from jeopardizing the reliability of our electric transmission system, we must shift how we deal with reliability of the bulk power system. NERC and a substantial majority of other industry participants believe that the best way to do this is through an independent, industry self-regulatory organization to set and enforce mandatory reliability rules, subject to oversight within the United States by the Federal Energy Regulatory Commission.

Section 7031 of the draft legislation embraces this concept and contains the same language that we understand the House and Senate conferees agreed to during the conference on H.R. 4 in the last Congress. NERC requests that you make one minor change to the language in Section 7031, to clarify that a regional entity with delegated enforcement authority may be governed by either an independent board, or a balanced stakeholder board, or a combination independent and balanced stakeholder board. This change will allow flexibility from region to region as to how such regional entities are governed. I have attached specific suggested language for the revision to this testimony.

NERC will be pleased to work with Committee members and Committee staff on the language (Attachment 1).

NERC has appeared before this Subcommittee on a number of occasions, testifying in support of reliability legislation. Today I will focus on two questions: (1) why reliability legislation is needed *now*; and (2) how Section 7031 meets this need.

Why Is Reliability Legislation Needed Now?

NERC sets the standards by which the grid is operated from moment to moment, as well as the standards for what needs to be taken into account when one plans, designs, and constructs an integrated system that is capable of being operated reliably. The NERC standards do not specify how many generators or transmission lines to build, or where to build them. They do indicate what tests the system must be able to meet to ensure that it is capable of reliable operation, regardless of what is built.

Bad things happen on the interconnected bulk power system as a matter of course. Severe weather may knock down transmission lines, lightning strikes may cause short circuits, mechanical equipment may fail due to fatigue or overloading, generating plants may have breakdowns, or we may inadvertently operate in an unstudied state. To that list of everyday occurrences, we now have added the threat of terrorist activity directed at the bulk electric system. The bulk electric system is designed and operated generally in what we refer to as a "first contingency" status, that is, the system must be able to withstand the loss of any large element and remain stable and secure. Otherwise we risk cascading outages with severe economic and public safety consequences that can occur in a matter of seconds.

I have attached to my testimony a table describing five notable occasions when we did have such a cascading outage: November 9, 1965 in the Northeast; July 13, 1977 in New York City; July 2, 1996 in the West; August 10, 1996 in the West; and June 25, 1998 in Northern Mid-Continent Area Power Pool. (Attachment 2) The scope and duration of these outages underscore why we must take all reasonable steps to assure that we do not have more such outages, and why we must have solid restoration plans against the possibility that we will in fact have more. Mandatory, enforceable reliability rules are one major component of those reasonable steps.

NERC's rules, which are not now enforceable, have generally been followed, but that is starting to change. As economic and political pressures on electricity suppliers increase and as the vertically integrated companies are being disaggregated, NERC is seeing an increase in the number and severity of rules violations. Moreover, new issues are arising that demand an institution focused on reliability that can act fairly, but decisively, and in a timely manner.

Let me give you an example. Traditionally, integrated utilities operated their generators to supply both the "real" (MW) and "reactive" (MVar) power necessary to maintain reliable operation of the transmission system, and charged for these services as part of the regulated cost of service. (It's worth noting here that control of flows on an electric system is not accomplished by valves and switches, as in gas or telecommunications systems, but by controlling the outputs of generators.) These "services" provided by generators included such things as spinning and non-spinning reserves and system voltage support. Now, with the generation function separated from the transmission function in many cases, these "services" are no longer provided by a single, integrated entity, but must be arranged and paid for separately through tariffs and contracts with generators. To assure that this is done, we need enforceable standards that require transmission operators (including RTOs) to make adequate provision in their tariffs and contracts for these essential reliability services. How these arrangements are made can be the subject of filings with FERC or other regulators, but they must be made. Absent such enforceable standards, the reliability of our interconnected grids will be at serious risk.

As a result of these changes in the industry, NERC is rewriting all of its reliability standards according to a new "functional" reliability model that sets out measurable and, under Chairman Barton's proposed legislation, enforceable requirements for entities that are responsible for performing critical reliability functions. These new standards will place uniform requirements on those that have the responsibility for maintaining the minute-to-minute balance between supply and demand, for seeing that power flows remain within the physical limits of the system, and that grid voltages stay within tolerance.

Let me give you another, very different example of why this legislation is needed. NERC plays a critical role in protecting the security, as well as the reliability, of the North American grid. Since the early 1980s, NERC has been involved with the electromagnetic pulse phenomenon, vulnerability of electric systems to state-sponsored, multi-site sabotage and terrorism, Year 2000 rollover impacts, and most recently the threat of cyber terrorism. At the heart of NERC's efforts has been its ability to marshall the industry's best experts on the design and operation of electricity transmission systems in North America, and serve as the industry's point of contact with various federal government agencies, including the National Security Council, the Department of Energy, the Nuclear Regulatory Commission, the Federal Bureau of Investigation, and now the new Department of Homeland Security, to reduce the vulnerability of interconnected electric systems to such threats.

I know that this subcommittee understands how vitally important this function is. Yet NERC's continuing ability to serve this function cannot be taken for granted. NERC traditionally has been funded by contributions from its Regional Councils. New entrants and the pressure of competitive markets have made this funding mechanism increasingly unsatisfactory. A new funding mechanism is needed that properly and fairly supports NERC's activities, including its activities related to security. Section 7031 would address this issue by authorizing FERC to certify an electric reliability organization that, among other things, has established rules that "allocate equitably reasonable dues, fees and other charges among end users for all activities under this section." See proposed new Federal Power Act section 217(c)(2)(B).

Section 7031 Would Provide for an Organization Capable of Protecting the Reliability and the Security of the North American Electricity Grid

We need legislation to change from a system of voluntary transmission system reliability rules to one that has an industry-led organization promulgating and enforcing mandatory rules, backed by FERC in the United States and by the appropriate regulators in Canada and Mexico. Section 7031 would do this. Under its provisions:

- Reliability rules would be mandatory and enforceable.
- Rules would apply to all owners, operators and users of the bulk power system.
- Rules would be fairly developed and fairly applied by an independent, industry self-regulatory organization drawing on the technical expertise of industry stakeholders.
- FERC would oversee that process within the United States.
- This approach would respect the international character of the interconnected North American electric transmission system.
- Regional entities would have a significant role in implementing and enforcing compliance with these reliability standards, with delegated authority to propose appropriate regional reliability standards.

A broad coalition joins NERC in supporting this approach to legislation, including the Western Governors Association, the National Association of Regulatory Utility Commissioners, the National Association of State Utility Consumer Advocates, the American Public Power Association, the Canadian Electricity Association, the Edison Electric Institute, the National Rural Electric Cooperative Association, the Institute of Electrical and Electronics Engineers, and the Western Electricity Coordinating Council.

Right now a hole exists in the Federal Power Act, because FERC does not have direct authority over reliability matters and does not have jurisdiction over the entities that own almost one-third of the bulk power system. Having an industry self-regulatory organization develop and enforce reliability rules applicable to all owners, operators and users of the bulk power system under government oversight, as Section 7031 would do, takes advantage of the huge pool of technical expertise that the industry has been able to bring to bear on this subject over the last 30 plus years. Having FERC itself set the reliability standards through its rulemaking proceedings, even if based on advice from outside organizations, would require FERC to develop or acquire technical expertise that it does not now have, and would dramatically expand FERC's workload at perhaps the worst possible time.

The electric industry is in a great state of flux, as regional transmission organizations are forming and reforming, and vertically integrated companies are separating and selling off various portions of their business. Change is happening at different paces in different places. With all the uncertainty as to who will ultimately operate and plan the interconnected transmission system, it is more important than ever that an industry-led self-regulatory organization be created to establish and enforce reliability standards applicable to the entire North American grid, regardless of who owns or manages it, and regardless of whether it is being used for the new markets that are emerging or in more traditional ways. Both are likely to exist side by side for a considerable period of time. The self-regulatory reliability organization authorized in Section 7031 can help assure that grid reliability is maintained, even while new market structures and new RTOs are being formed. Because FERC will provide oversight of the electric reliability organization in the U.S., FERC can ensure that the organization's actions and FERC's evolving market policies are closely coordinated.

The industry self-regulatory organization authorized in Section 7031 also addresses the international character of the interconnected grid. There is strong Canadian participation within NERC now. Having reliability rules developed and enforced by a private organization in which varied interests from both countries participate, with oversight in the United States by FERC and with equivalent activity by provincial regulators in Canada, is a practical and effective way to develop the common

set of rules needed for the international grid. Otherwise, U.S. regulators would be dictating the rules that Canadian interests must follow—a prospect that would be unacceptable to Canadian industry and government alike. Or, regulators on either side of the border might decide to set their own rules, which would be a recipe for chaos. There are also efforts under way to interconnect more fully the electric systems in Mexico with those in the United States, primarily to expand electricity trade between the two countries. With that increased trade, the international nature of the North American electricity market will take on even more importance, further underscoring the necessity of having an industry self-regulatory organization, rather than FERC itself, set and enforce compliance with grid reliability standards.

CONCLUSION

NERC commends the drafters of Section 7031 for attending to the critical issue of ensuring the reliability of the interconnected bulk power system as the electric industry undergoes restructuring. A new electric reliability oversight system is needed now. The continued reliability of North America's high-voltage electricity grid, and the security of the consumers whose electricity supplies depend on that grid, is at stake. An industry self-regulatory system is superior to a system of direct government regulation for setting and enforcing compliance with grid reliability rules. The language of Section 7031, with the clarification of the regional governance issue, presents a sound approach for ensuring the continued reliability of the North American electricity grid. It is also an approach that has widespread support among industry, state, and consumer interests. The reliability of North America's interconnected transmission grid need not be compromised by changes taking place in the industry, provided reliability legislation is enacted now.

INSERT OFFSET FOLIOS 50 TO 53 HERE

Mr. BARTON. And we thank you for your testimony and for your group's support. Mr. Norlander, you are recognized for 5 minutes.

STATEMENT OF GERALD A. NORLANDER

Mr. NORLANDER. Thank you, Mr. Chairman and committee members. First, I would like to clarify that I am speaking as chairman of the Electricity Committee of NASUCA. The actual chairman of NASUCA is from the State of Ohio, named Robert Congren. I am the director of the Public Utility Law Project in New York, and we represent residential consumers in matters affecting energy and utility policy. And we have been in existence for approximately 25 years.

NASUCA is a national association of members from 42 States, mainly consisting of members who are appointed as State officials to look out for the interests of small consumers on energy policy issues. Numerous NASUCA members are from States that have restructured their electric industries, and a number of other NASUCA members are from States that have put it on hold, and still other members are from States that, like North Carolina, remain vertically integrated and do not have current plans to restructure in accordance with the retail competition model that was in vogue for a few years.

And I want to make clear that today we are speaking—I am speaking on behalf of all of NASUCA's members in opposition to the electricity title that is in this bill. This unified opposition represents a national consensus of consumer advocates that the bill would be detrimental to the public interest and to the interest of small consumers. What I think I would like to focus on in my remaining time here is NASUCA's opposition to the transmission incentives provision in the bill. Section 7011 of the proposed bill would add a new section of the Federal Power Act that would authorize FERC within 1 year to establish new years for incentive-based and performance-based rate treatments to promote capital investment by transmission utilities in order to support economically efficient markets for the sale of electricity at wholesale.

This language would authorize a pending FERC proposal that has been floated and comments just came in this week. The FERC proposal was made without the benefit of any enabling legislation. And that proposal would allow automatic increases in the return on equity for transmission investments well beyond the normal level allowed and allowable under the Federal Power Act in the development of just and reasonable rates. These ROE adders are intended to reward utilities for divesting control over transmission assets to RTOs, for outright divestiture of transmission assets to new independent transmission providers and for building new transmission facilities. And these FERC bonuses would be—if cumulative, could be up to 300 basis points in added return on equity.

NASUCA commissioned an examination of that particular proposal, and we filed comments this week. Calculating that the cost of the pending FERC proposal, and, again, I note it was made before there was any enabling legislation for it, the cost of that would be approximately $13 billion. And this was a conservative estimate of the potential cost of these investment incentives, and it would virtually offset the punitive $725 million per year benefit of form-

ing RTOs, which is a fairly optimistic assessment that FERC had commissioned.

NASUCA believes that the $13 billion incentive is unnecessary and really provides no incremental benefit in many areas where transmission owners already have agreed to turn over control of their system. PJM, New York ISO, New England ISO and other areas the ISOs and RTOs already have control of the transmission system. And so we are therefore compensating people, giving extra returns for people for something they have already done. On the other hand, if Congress is seeking to encourage a voluntary migration of systems into a national grid such as has been mentioned, States that haven't approved a divestiture may be less likely to do so as these incentives will clearly raise the cost of the transmission component of the retail service.

NASUCA also opposes repeal of the PUHCA and the merger review authority. I would just note that one of the functions of creating this larger grid is so that buyers can reach more sellers. And these markets are not well understood by FERC that have been created, and it is conceivable that all the expense of creating a large geographic market could be merged away unless FERC has its independent review to determine whether the mergers would interfere with the proper functioning of the markets it has created. Thank you, and I would be happy to answer questions.

[The prepared statement of Gerald A. Norlander follows:]

PREPARED STATEMENT OF GERALD NORLANDER ON BEHALF OF THE NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES

Chairman Barton And Members Of The United States House of Representatives Subcommittee on Energy And Air Quality: Thank you for inviting me to testify today for the National Association of State Utility Consumer Advocates (NASUCA) regarding the proposed Energy Policy Act of 2003. My name is Gerald Norlander. I am the Chairman of the Electricity Committee of NASUCA, and I am the Executive Director of the Public Utility Law Project of New York, Inc. (PULP).[1] NASUCA is a national association of consumer advocate offices with members in 42 states and the District of Columbia. NASUCA members are charged by their respective state laws with the responsibility to represent consumers in utility proceedings before state and federal regulatory commissions and courts.

Numerous NASUCA members are from states that restructured their wholesale and retail electricity industries, others are from states that have halted or slowed industry restructuring, and still others are from states with traditional vertically integrated utility industry structures. Today, I am speaking on behalf of *all* NASUCA members in opposition to Title VII of the proposed Energy Policy Act of 2003, the electricity title of the bill. This unified opposition reflects a national consensus of state consumer advocates that the bill, if enacted, would be detrimental to the public interest and interests of retail consumers.

1. Rate Incentives to Promote Capital Investment in New Transmission Facilities are Unnecessary and the Costs are Not Justified.

Section 7011 of the proposed Energy Policy Act of 2003 bill would add a new Section 215 of the Federal Power Act requiring the Federal Energy Regulatory Commission (FERC) within one year to establish new rules for "incentive-based and performance-based rate treatments to promote capital investment" by electricity transmission utilities, "to support economically efficient markets for the sale of electricity at wholesale." This language would authorize a pending FERC proposal to increase interstate electricity transmission rate allowances.[2] The bill allows FERC to set the amount of the financial incentives. The pending FERC proposal, made without the

[1] PULP, a non profit organization representing the interests of low income utility consumers, is an Associate Member of NASUCA , with offices at 90 State Street, Suite 601, Albany, New York 12207.

[2] *Proposed Pricing Policy for Efficient Operation and Expansion of the Transmission Grid*, FERC Docket No. PL03-1-000.

benefit of any enabling legislation to change the way electricity transmission rates are set under the Federal Power Act, is to allow automatic increases in the return on equity (ROE) for transmission investments, well beyond the level normally allowed in the development of just and reasonable rates. These ROE "adders" are intended to reward utilities for divesting control over their transmission assets to regional transmission organizztions (RTOs), for outright divestiture of these assets to newly created "Independent Transmission Provider (ITP)" utilities, and for construction of new transmission facilities. Control and ownership of the facilities would shift to regional transmission organizations and the new transmission service utilities which would operate new and expanded transmission service spot markets. Cooperating utilities will receive ROE bonuses, well above the normally calculated reasonable rate of return on equity invested, of 200 basis points—2%—for existing transmission facilities, and 300 basis points—3%—for new investments in transmission. Nothing in the proposed FERC rule requires any showing that these bonus-conferring actions are cost effective, and nothing in the proposed bill places any upper limit on the rate making incentives.

In response to the FERC proposals for ROE "adders," NASUCA commissioned an examination of the cost and policy implications, and is filing comments this week in the pending FERC proceeding. I would like to highlight several conclusions of those comments, which are attached to my testimony as an exhibit:

- NASUCA calculates the cost of the current FERC initiative, if fully utilized by transmission owners, will cost consumers over $13 billion, or approximately $711 million per year for the 19 year time horizon in the FERC proposal. This is a conservative estimate of the potential cost of these investment incentives, and it virtually offsets the putative $725 million per year benefit of forming Regional Transmission Organizations, a benefit estimate that is controversial for its optimism.
- The $13 billion incentive is unnecessary and will provide no incremental benefit in many areas where transmission owners already have agreed to turn over control of their systems to regional transmission organizations (RTOs) or independent system operators (ISOs).
- If Congress seeks to encourage national adoption of the system proposed by FERC, such ROE incentives may only impede that result. States that have not approved divestiture of transmission facilities owned by state-regulated utilities may be more reluctant to do so if automatic cost increases are the result, without any clear, offsetting benefits.

PUHCA Should Not be Repealed

Section 7043 of the bill would repeal the Public Utility Holding Company Act (PUHCA). PUHCA is a statutory bulwark against reassembly of vast utility holding company empires, abuse of captive ratepayers to subsidize failing unregulated ventures, and inappropriate transactions between regulated utilities and unregulated affiliates. NASUCA has adopted the following resolution on this subject:

> "in considering action affecting regulation or the structure of the electric industry, including PUHCA repeal or reform, Congress should require federal regulatory agencies to: 1) prevent abusive or preferential affiliate transactions, 2) continue oversight and protection over corporate and market structure to prevent abuses to consumers and competition, 3) disallow costs which are not prudent and reasonable from wholesale rates, 4) exercise sufficient regulatory authority to prevent ratepayers from bearing any risk of utility diversification and to prohibit cross-subsidies between regulated and nonregulated subsidiaries . . ." NASUCA Resolution 1996-04, *Urging the Congress and Federal Agencies to Address Market Power as a Component of Any Federal Restructuring Action.*

The Enron debacle and its aftermath reveals the recurring tendency of holding companies in financial trouble to look to regulated affiliates as a source of credit, cash, or other resources, all at the expense of captive utility consumers. The bill would eliminate current PUHCA ownership restrictions on non geographically contiguous utilities, would limit state and federal regulatory agency access to books and records of the holding company to the costs of regulated entities, would require a showing of necessity for regulators to examine holding company books, and could make much information regarding holding company affiliate transactions, obtained in regulatory proceedings, confidential. PUHCA remains an essential consumer protection which should be vigilantly enforced, not repealed. A copy of NASUCA's resolution on PUHCA is attached.

FERC Merger Review Authority Should Not be Repealed.

Section 7101 of the bill would repeal Section 203 of the Federal Power Act, which includes FERC review of proposed utility mergers. The rationale for the repeal is

that review of a merger of electricity utilities is performed by other agencies and that any further review by FERC would be redundant. FERC review of mergers of electricity utilities under its jurisdiction should be preserved. There is a growing understanding that the nature of electricity and evolving electricity markets may permit the subtle exercise of market power, without overt collusion, even by entities with market shares typically allowed by regulators in other industries. Many of the benefits projected by FERC in its efforts to create broader geographic markets for electricity, at significant expense, rest upon the assumption that flaws in existing markets will be mitigated if buyers can find more sellers in the expanded trading areas. If, however, industry consolidation is allowed to occur simultaneously with costly expansions to marketing areas, that goal may be frustrated if mergers result in a concentration and reappearance of market power. FERC should have continued authority to scrutinize and reject proposed electric industry mergers, under evolving standards for measuring market power in electricity markets, and Section 203 of the FPA should not be repealed.

Reliability

Subtitle C of the bill addresses the issue of system reliability by allowing FERC to recognize a standards-setting Electric Reliability Organization. At the present time, reliability standards for the bulk electric grid system are set by a voluntary organization, the North American Electric Reliability Council. Placing the development and review of electric system reliability on firmer statutory ground has been supported by NASUCA as an independent measure in recent years. In 1998 NASUCA adopted the following resolution, in recognition that the cooperative and voluntary underpinnings of NERC standards need strengthening, particularly in areas where competitive concerns may weaken traditional cooperation among utilities, and thus threaten reliability:

> ***NASUCA supports efforts to develop a national reliability organization that will continue the vital functions now performed by NERC, and will do so in a manner that is competitively neutral and recognizes the paramount concerns of consumers in a reliable electric system;
>
> ***NASUCA supports efforts to establish an independent Board of Directors that will govern NERC (or any successor national organization) in a competitively neutral manner that will benefit all consumers and that will not be dominated or controlled by any particular industry participant or segment;
>
> ***NASUCA supports federal legislation that would clarify FERC authority to review the reliability requirements imposed by NERC (or any successor national organization) and to ensure that such requirements are adopted and implemented in a manner that benefits all consumers***NASUCA Resolution 1998-07, *Urging the Establishment of an Independent Board to Govern Electric Reliability Matters and the Enactment of Federal Legislation to Ensure FERC Jurisdiction Over the Actions of Such a Board in the Future.*

The provisions in Section 7031 are consistent with NASUCA's position regarding reliability. Their inclusion, however, is not sufficient justification to enact any of the other remaining provisions of the electricity title of the proposed Energy Policy Act of 2003.

Conclusion

In conclusion, the bill would allow large and unwarranted rate allowances for owners of existing electricity transmission lines and facilities under FERC jurisdiction. Ultimately these allowances will be translated into rate increases borne by end-use consumers unless the increased allowances are demonstrated to be cost effective. NASUCA has shown in the attached comments regarding FERC's pending transmission incentive proposals that the proposed ROE adders may cost $13 billion, are unnecessary windfalls for utilities that have already done the acts intended to be induced, and are not likely to be cost effective.

The bill would eliminate longstanding protections of the Public Utility Holding Company Act (PUHCA) intended to protect consumers from utility holding company abuses, and would eliminate existing authority of FERC to review proposed utility mergers. In light of recent instances of energy market manipulation, holding company abuses, and the possibility of further industry consolidation in the aftermath of major losses incurred by energy generation and trading companies, it is clear the consumers need continued, not less, protection from the exercise of market power in the electricity markets under FERC jurisdiction. For these reasons, NASUCA has concluded that passage of the Electricity title of this bill is not in the interests of utility consumers. NASUCA thererefore urges that the electricity title be eliminated.

I want to thank Chairman Barton and the subcommittee again for permitting me to share NASUCA's views on these important issues. I would be happy to answer any questions you may have at this time.

[Attachments to statement are retained in Subcommittee files.]

Mr. BARTON. Thank you. Ms. Tezak, we welcome your statement. Try to make it between 5 and 6 minutes.

STATEMENT OF CHRISTINE L. TEZAK

Ms. TEZAK. I usually have portfolio managers who give me 0.3 nanoseconds so I am grateful for your time. My name is Christine Tezak, and I am an electricity analyst for Schwab Capital Markets, Washington Research Group. Schwab Washington Research analyzes for institutional investors the impact Washington makes on the financial markets through politics, legislation and regulation. My clients are institutional equity investors, the majority of whom manage dedicated utility funds. My perspective, therefore, may not include all of the concerns that may be unique to bond holders or to the holders of public power company debt.

Our analysis of the draft legislation in its current form says that the majority of its provisions do not appear to frustrate the FERC's ability to accomplish the unfinished mandate to restructure wholesale markets that Congress gave it in the 1992 Energy Policy Act. We believe that the escalating conflict between the States and FERC, however, poses a problem for investment in this sector if Congress becomes mired in the middle of this fray and the net result is continued delay and debate over restructuring. We believe that capital will be less expensive for all participants in the market if FERC continues, and is permitted to continue, its efforts to provide clear and consistent rules for this business. Merrill Lynch, Solomon Smith Barney, T. A. Creff and Goldman Sachs articulated precisely this opinion as well—that means it is not my idea—at FERC's January 16 technical conference.

The capital markets are, for the most part, disinterested in the specifics of the political fights that are of such great importance to regulators and congressional members. The capital markets, however, will likely demand higher costs of capital to offset the unresolved risks and perceived uncertainty if such disputes persist. I am not going to offer you what we would like to see in the bill, because it is not the appropriate role of markets to make that decision. It is more helpful for us to stay out of the political debate and help you by providing differential pricing according to risk.

We view the draft legislation proposed by Chairman Barton to be generally positive for the industry. This is because the intent of Congress and FERC would appear to be in alignment. Details on our analysis are furnished in the written testimony. Therefore, it is our current assessment that the investment climate for the electricity sector, generally, and for transmission, specifically, can be enhanced somewhat by the provisions in this bill. However, the investment climate would be most dramatically improved in our view if rates were unbundled and if this information were provided to consumers. This is not forced retail choice but the provision of clear information to consumers and to their regulators. In fact, we believe that only through unbundling because we as investors, indeed, we as consumers could determine if the incentive rates pro-

posed are indeed offset by the generation savings that are widely anticipated. Otherwise, the concerns that others have voiced here about their usefulness and their appropriateness cannot be assessed.

The $73 billion in market capitalization decline that Mr. Owens cited applies to the investor-owned utility group, not the IPPs but the utility holding companies. And it is heavily related to Wall Street's concerns and investors' confusion as to whether you, Congress, will reregulate this business or not. Congress needs to determine, in our view, whether it still supports the 1992 Energy Policy Act as written and as upheld by the Supreme Court in March 2002. If so, we believe Congress could hopefully support FERC's efforts to provide regulatory clarity and eliminate discrimination, not subvert FERC with endless debate and a fruitless search for what we fear is the search for a risk-free solution to energy infrastructure needs. If everyone is upset, perhaps FERC is doing it right.

The longer this debate drags out, the more expensive overall costs will be. We are even seeing it in the utility holding companies whose corporate spreads used to be tighter than they are now. Wall Street hates uncertainty and opacity. Resolving these are both in your power. Please allow FERC to work full-time on your behalf to implement the 1992 Policy Act. We would like to see the disclosure of unbundled rate information so that once and for all we all can assess what we are working with. Thank you.

[The prepared statement of Christine L. Tezak follows:]

PREPARED STATEMENT OF CHRISTINE L. TEZAK, ELECTRICITY ANALYST, SCHWAB CAPITAL MARKETS LP WASHINGTON RESEARCH GROUP

The following testimony expands upon Schwab Capital Markets LP Washington Research Group's Electricity Bulletin authored by Christine Tezak (Electricity and Environment Analyst) and distributed to the firm's institutional investor clients on March 3, 2003. Schwab Capital Markets LP Washington Research Group (Schwab WRG) has provided institutional investors with investment analysis of the electricity sector since late 1999. Further information or prior analyses will be made available to the subcommittee and/or committee upon request.

Introduction: House Energy and Air Quality Subcommittee Chairman Joe Barton (R-Texas) has initiated the debate on energy legislation by circulating draft energy legislation Feb. 28, including a title on electricity restructuring. Our analysis indicates that many of the electricity provisions are based on compromises reached during last year's conference on an energy bill. More importantly, the draft language does not currently include language that would substantially thwart the Federal Energy Regulatory Commission's (FERC) current efforts for continued industry restructuring. **In its current state, we would view this draft language as predominantly positive from an investment perspective.** Both chambers of the federal legislature have professed an interest in energy legislation; however, we're not yet convinced that sufficient consensus exists to get an energy bill done. The electricity title has been a sticking point in earlier rounds of energy legislation; however at this early stage, the draft electricity language appears to be less controversial than we had initially expected.

The Federal Energy Regulatory Commission's (FERC) efforts to continue restructuring of the electricity industry have caused considerable concern on Capitol Hill; however the draft legislation circulated by House Energy and Air Quality Subcommittee Chairman Joe Barton (R-Texas) does not yet appear to contain any onerous provisions that could thwart FERC's current efforts to develop its Standard Market Design rulemaking. Schwab WRG continues to view continued efforts to move forward with the restructuring of the electricity industry to be the best investment environment for the widest variety participants in the electricity marketplace—whether they provide generation, transmission, distribution or a combination of these services—and most importantly, the most likely to provide sustained long-term benefits to consumers.

Friction between the FERC and states (expressed through the concerns articulated by state regulators, legislators at both the federal and state levels, governors and others) has been a concern to investors looking at companies in the electric utility space. Uncertainty over the course of continued restructuring has been cited by credit rating agencies among other reasons in their downgrades of various members of the sector, not exclusively independent power producers.

TRANSMISSION INCENTIVES

In its present form, the electricity title of the draft legislation calls for incentive ratemaking to encourage buildout of the transmission grid. This is an effort already underway at FERC, which released a proposed policy Jan. 15, 2003, that has this specific goal in mind.

The Department of Energy and the Edison Electric Institute have both documented the declining investment rate in the nation's transmission grid. As early as the notice of proposed rulemaking for Order 888, the FERC has made it clear that a robust transmission system was, in its view, a necessary prerequisite to robust and functional wholesale markets. However, a multi-year court battle followed, culminating in a Supreme Court decision in March of 2002 that affirmed FERC's regulatory direction.

While *New York v. FERC* and *Enron v. FERC* were being litigated, the industry incrementally and consistently lowered the level of investment it dedicated to transmission resources while the judiciary branch reviewed who had ultimate jurisdiction over transmission—FERC or the states. In spite of the crystal clear ruling from the Supreme Court that FERC a) has ultimate jurisdiction over transmission, b) has the authority to delegate it when it chooses, and c) never abdicated regulatory jurisdiction over retail transmission, substantial friction between the states and the federal agency remain, casting a pall over investment in the sector. Were it not for this unresolved friction on jurisdiction, in spite of a clear ruling from this nation's highest level of the judiciary, we believe that incentives to build out the transmission grid may not even be necessary, as the natural tendency of business in a free market is to put capital to work to resolve inefficiencies. Only in the electricity markets is the attempt to lower supply costs through the addition of more efficient supply, and the attempt to lower transaction costs through better transmission access to generation so vigorously opposed in the name of ''consumer protection.'' Consumers have benefited from restructuring and deregulation in the telecom and natural gas industries, why is it so staunchly opposed in this sector?

It is difficult for investors to understand why, when its regulatory approach has been held up by the highest court in the land, the FERC remains under attack by some state regulators and their elected representatives for attempting to fulfill the mandate that Congress itself had laid before it. When uncertainty exists, investment atrophies. Congress either needs to legislate and clarify that it does not agree with the Supreme Court's interpretation of the Federal Power Act and its subsequent amendments, or it must allow FERC to continue implementing the instructions Congress has issued to it. Must we have catastrophic grid failures before regulators and legislators acknowledge that our electricity infrastructure has atrophied? Will a population center have to withstand a terrorist attack before political leaders realize that regionalization can facilitate infrastructure security? Will the same legislators who are now questioning the implementation of the 1992 Energy Policy Act and the restructuring of wholesale markets be the first to complain again that the regulator was asleep at the switch, when Congress itself has been party to frustrating a clear investment horizon?

The concern over states rights is worry that investors do not share. Frankly, it is viewed as a political ploy fanned by the interests of incumbents who feel their business model may be at risk. The extent to which this impacts the cost of capital is determined by the assumptions investors make about the ability of companies to manage their regulatory environment.

FERC has made a concerted, well-documented effort to incorporate feedback of states throughout the nation into the RTO program and into Standard Market Design rule development. In fact, one of the primary criticisms of the FERC in the capital markets is that it has been too accommodating of the political obstruction undertaken by state regulators and their elected representatives. Institutional investors are extremely frustrated that the FERC is moving so slowly and with such political deference and has not yet provided the clear market rules and policy calls on structural parameters that Wall Street would like to see before substantially deploying capital into this sector. FERC has had an unending circus of outreach and meetings with concerned regulators from the Southeast and the West. However, in spite of all this effort, we as observers have seen only a paranoia driven by vaguely

defined risks now manifesting itself as incremental risk to the regulatory outlook in the federal legislature in the form of continued delay.

Wall Street is fatigued with opacity at all levels of corporate structures and in virtually all industries. Opacity increases the cost of capital. Uncertainty in the regulatory outlook, too, is a form of opacity, and while it may not seem evident now, it is likely to increase costs to consumers over the long term through higher costs of capital and higher rates of return demanded to offset the murky jurisdictional problem that remains perniciously unresolved.

While we believe that the transmission incentive language proposed in this legislation and FERC's transmission incentive policy proposal are encouraging for investment, we do believe that the most compelling incentive that would stimulate investment interest in transmission would be unbundling of rates. While transmission rate incentives are useful, we remain skeptical that they will really be sufficient to offset the risk proposed by continual friction over jurisdiction. Unbundling of transmission and a clear definition of what must be recovered in wholesale versus retail transactions would be very useful to investors assessing the wisdom of investment in generation and transmission assets. Congress needs to decide whether or not it still believes in the 1992 Energy Policy Act. Today, Congress is becoming and increasing part of the reason capital is hard to attract to this business. Congress is calling for FERC to slow down, Wall Street is frustrated FERC won't move faster.

EMINENT DOMAIN PROVISIONS

Barton's current draft includes what is often referred to as "FERC-lite." These provisions would allow the federal government to invoke eminent domain to site transmission assets only if a state fails to act on an application in a timely fashion, or denies siting to a project that the Department of Energy has determined is in the national interest. It would also permit states to force the issue if a federal agency is holding up a siting approval. FERC Chairman Pat Wood III has not sought eminent domain authority in electric transmission for the commission, even though the FERC has such authority when it comes to natural gas pipelines. Such authority for FERC in electric transmission, however, was part of Vice President Dick Cheney's May 2001 energy plan and is reflected in Barton's draft. We do not feel that it is essential for FERC's efforts to improve regulatory certainty to force the issue on eminent domain in legislation, and would view it as neutral if this provision did not ultimately survive in a final bill. This is conflicting interest that Congress can remedy by opting not to act on eminent domain for electric transmission.

At a recent meeting of the National Association of Regulatory Utility Commissioners, Congressman Rick Boucher (R-Va.) discussed his concerns over eminent domain authority with an example of a transmission line sought by **American Electric Power.** The state forced the re-siting of this line based on environmental and social concerns raised by the local communities. The RTO planning structures hold appeal for investors because regional planning has the potential to provide a forum in which such siting issues can be thrashed out early in the project development phase. Economic, social and environmental considerations absolutely should be weighed carefully in the siting of both generation and transmission infrastructure. Here, too, unbundled rates can give empowering information to state regulators and project developers. However, we are still in the early stages of RTO development and large-scale projects have not been proposed.

If a transmission project is proposed that impacts customers who are not direct beneficiaries of that investment, (i.e., that state regulators are now identifying with the pejorative moniker of "economic improvements" instead of native load accommodation or reliability improvements), there is nothing in the RTO construct that deems those impacts to be without cost. Ideally, the additional costs of remedying environmental and social concerns should be part of the stakeholder vetting of any project.

If resolving such concerns makes the "cost" of the project too high, then the customers seeking the benefit would then have economic incentive to seek an alternative solution. If customers in a load pocket want a transmission line to them that would cross environmentally sensitive areas, however the cost of breaching those areas is too "expensive" in terms of the appropriate remediation of local concerns in the areas in between, then perhaps the solution to the load pocket is not transmission, but siting generation in its own neighborhood. This is sound regulatory policy, fair to both communities and precludes one city or state from forcing another to subsidize its policy decisions.

Without the benefits of unbundled rates to make the assessment of costs and benefits feasible on a project-by-project basis, and without the establishment of regional decision-making through the RTO program, the electricity sector will continue to be

starved for investment. Transmission enhancement beyond small incremental additions for retail service will not take place, and generation will not get built where it is needed, in our view.

Again, we believe that the real incentive that transmission needs is clear regulatory policy. Congress either needs to revise the law that was upheld by the Supreme Court if it objects to the court's interpretation or it must facilitate, not obstruct, FERC's efforts to implement regional markets based on unbundled rates.

PARTICIPANT FUNDING

One of the most significant issues for Southeast state politicians and regulators who staunchly oppose the imposition of FERC's restructuring issues in their states is the question of participant funding. Although the 1992 Energy Policy Act (1992 EPAct) required open access to all utilities' transmission systems, there has been a backlash from some incumbent utilities, some of which believe that the costs of hooking up all independent generators are more prohibitive than the law intended. It is true that a large amount of unregulated generation has been sited near the gas pipelines that emanate from the Gulf of Mexico.

Participant funding is shorthand for a program under which independent generators would contribute to the buildout of the grid at the time of interconnection. Southeast incumbents **Entergy** and **Southern Co.** have been the staunchest advocates of participant funding. It is their position that independent generators have been siting capacity throughout the Southeast in a manner that burdens the incumbent's transmission system beyond the requirements of the 1992 EPAct mandate for open access and would result in unnecessarily expensive upgrades to the existing transmission and rate hikes for local ratepayers.

For their part, independent generators and their investors are not opposed to the concept of participant funding, however, they have serious concerns about the allocation of transmission capacity they have paid to build. Sen. Trent Lott (R-Miss.) proposed legislative language last session that suggested that generators fund 100 percent of network upgrades, but fully half of the capacity created by such upgrades would be given free to the incumbent utility. Such a proposal is a poor investment proposition for the party funding it and therefore would likely be, in our view, impossible to defend as a good business strategy in execution. The net result would be no incremental investment in the grid by generation participants, and such behavior would solve no transmission investment concerns. Newer efficient generation would continue to have trouble getting access to the grid in some parts of the country.

Barton's draft, however, directs FERC to permit participant funding when an approved RTO requests such approval of FERC. The current language does not require FERC to use this funding methodology in all cases, nor does it require its consideration simply upon the request of a market participant (i.e., a transmission owner). We find this to be consistent with where FERC is currently headed in its Standard Market Design development discussions. FERC has made room in its political philosophy for participant funding, and was even included in the agency's much maligned July Notice of Proposed Rulemaking.

Further, participant funding *in an environment of unbundled rates* has the potential to help stimulate more technologically innovative investment in the transmission grid, and we would consider this an incentive for the industry to really begin experimenting with new technologies for transmission improvements. If a generator is faced with high congestion costs to reach customers, then a generator will be motivated to find the most cost efficient remedy to this fact. New grid technologies in development by **American Superconductor, Composite Technology Corporation,** and **3M** (Minnesota Mining & Manufacturing) have the potential to dramatically increase grid capacity through the installation of new cable on existing right of ways. CTC's product—which proposes to double line capacity for one-fifth the cost of existing cable, can be strung on existing power lines and promises one half the electromagnetic field disturbance of current cables—will be tested at the Tennessee Valley Authority this summer. American Superconductor's pilot projects continue to be successful and draw interest in urban settings. However, transmission owners need to be rewarded for improving the grid and under the current regulatory paralysis, transmission owners—whether vertically integrated or unbundled—have little reason to invest in the grid when their regulators oppose it because it might benefit ratepayers outside of the immediate service area.

Transmission owners today do not have the incentive to make "economic" transmission improvements, as they do not benefit from higher throughput or the relief of congestion. Therefore, under the current regulatory outlook, most transmission owners will continue to make legacy-technology grid additions, as this larger capital

layout will earn a higher regulated return. That, or they will not invest in the grid as they are currently benefiting from preferential dispatch of their own generation or congestions charges earned thereon. Participant funding has the potential to change this dynamic, as do performance-based rates for transmission operators and owners.

On Feb. 20, the FERC declined a request to authorize participant funding in a four-docket batch, when it chose to implement existing interconnection policy (which does not include participant funding). The commission based this exercise of discretion on the fact that the participant funding methodology under the Standard Market Design proposal is precisely that—a proposal; and secondly, the current situation in the referenced dockets does not meet the criteria expected in the Standard Market Design proposed treatment of participant funding (specifically, an independent system operator and locational marginal pricing, one of the rate methodologies that emerges when transmission rates are unbundled). From an investment perspective, this appears to be the correct course of action.

Only in an unbundled environment with a way to evaluate the costs of congestion (in this case through the evaluation of locational marginal pricing information) would a party with the burden to participant fund be able to present the necessary economic information to defend this investment to Wall Street. Blanket obligations to build capacity without guaranteed access to that capacity or offsets that reflect the contribution made to the overall grid system through the reduction of congestion and transaction costs are simply indefensible as investments.

Barton's legislation appears to be consistent with FERC's approach that the availability of the participant funding methodology would be contingent on an RTO being in place. The proposed Barton language tracks closely with FERC's current policy position, and for this reason we find the similarity in policy direction to be an incremental positive for the sector's investment outlook if it remains close to its current form.

PUHCA REPEAL AND REPEAL OF FERC MERGER REVIEW

When electricity restructuring legislation was considered in the 105th, 106th and 107th Congresses, it was our sense that broad-based consensus existed to repeal the outdated Public Utility Holding Company Act (PUHCA) and substitute these restrictions with the authority for FERC to summon books and records to ensure that ratepayers are not inappropriately subsidizing unregulated operations through regulated rates.

As a practical matter, investors view repeal of PUHCA as a positive. The reality however, is that PUHCA notwithstanding, companies that are exempt of PUHCA requirements have drawn the attention of both state and federal regulators who have been concerned that companies facing difficult financial outlooks could attempt to subsidize overall operations with the loans backed by the assets of regulated businesses and guaranteed by rates. At the federal level, the concern has been predominantly focused on natural gas, and on cross financings undertaken by **Enron** ahead of its bankruptcy. Lately FERC has been looking closely at the capital restructuring underway at **El Paso Corp.**

In electricity, California regulators were and remain frustrated that PUHCA exemption permitted **Edison International** and **PG&E Corp.** to dividend regulated returns to the parent companies that were later unavailable to the regulated subsidiary during the California power crisis to the extent they believed was appropriate.

Indeed, the repeal of PUHCA could facilitate merger and acquisition (M&A) activity among the regulated businesses; however, **we caution investors that free flowing funds between regulated and nonregulated affiliate companies are not likely to be in the offing.** Current policy development on financial transactions and cash management practices have signaled that FERC does not intend to be less vigilant in managing the exposure of regulated assets, and in fact the commission has been strongly encouraged by representatives of the fixed income sector that holds long-term utility debt to be more vigilant of their interests. Further in meetings we had just this week, jaded utility investors said they see precious few companies left that have the balance sheet to do M&A anyway, and the spreads on the assets in the cash strapped unregulated businesses are still too wide.

FERC review of M&A of electricity assets is defined under Section 203 of the Federal Power Act. The Barton legislation would repeal this section of the law. Ironically, the General Accounting Office, the investigative arm of Congress, recommended last June that FERC oversight authority be broadened not narrowed, and merger review is one way better oversight can be actualized. In combination with PUHCA repeal, we would expect that the repeal of Section 203 might be dif-

ficult to achieve. We view PUHCA, and not Section 203 approvals, to be the primary obstacle to greater M&A activity in the group.

PURPA MODIFICATIONS

The Barton draft also includes modifications to the Public Utility Reform Policy Act (PURPA). In its current form, the legislation would require that real-time metering be provided to any customer that requested it.

The language proposed would terminate mandatory purchase and sale requirements for cogeneration (qualifying) facilities, also known as QFs. Support for this measure depends on the asset owner. QF owners who have the opportunity to sell power at a premium through green power providers such as **Green Mountain Energy** (private), advocate the termination of mandatory purchase and sale provisions. Those who have no obvious customer base willing to pay a premium for their energy may not.

RENEWABLE ENERGY NET METERING PROVISIONS

These provisions would facilitate the ability of a renewable fuels generator to interconnect to the grid. Such treatment would be beneficial to wind and solar generating companies which often provide power on an intermittent basis.

RELIABILITY LANGUAGE

Making participation in reliability organizations and observance of their rules mandatory has been a consensus item since the last Congress. The primary opponent of the legislation in the Barton draft is likely to be the existing North American Electric Reliability Council (NERC), which almost certainly will bristle at the prospect of being put under FERC jurisdiction. Mandatory reliability provisions impacting transmission owners are not generally a hotly debated topic within the industry; as such ''mandatory'' spending is usually quite easily recovered in regulated transmission rates.

MARKET TRANSPARENCY, POWER TRADING, AND ENFORCEMENT

The Barton draft would order FERC to develop rules establishing an electronic information system that would provide the commission and the public with data to facilitate understanding of the markets and price transparency. These obligations appear to be substantially met already by Order 2001 released by FERC last April mandating the filing of electronic quarterly reports of wholesale electricity generation and transmission sales.

FERC's Office of Market Oversight and Investigation and its Office of Markets, Rates & Tariffs, however, have not yet begun posting this information on the FERC website or educating consumers how to use it. Neither office has provided any public analysis of this data either, something that we find very frustrating during the debate over the quality of natural gas and electricity price indices. In our view, it would be enormously useful to the industry generally and to that debate specifically if the FERC were able to cross reference actual data with reported prices and assess whether there is correlation between the two, or whether indeed, the trade publication price indices are truly out of whack with reality. Therefore, the good news for FERC is that this legislative requirement echoes efforts it is already pursuing, if slowly. Again this legislative proposal suggests harmony with the direction the FERC is taking, not opposition.

The proposed legislation would put a prohibition on wash trades executed with ''a specific intent to distort reported revenues, trading volumes or prices.'' The industry is already taking measures to police itself better, and we view the legislating of such a provision to be redundant. However, if it ''plays well in Peoria,'' so be it, we do not view such a provision as having incremental adverse investment impact as currently written.

The Barton legislation would increase criminal penalties that can be assessed under the Federal Power Act, and would extend their applicability to any market participant, not just utilities. The language would also increase civil penalty authority; however, it appears to remain short of the expansion of civil penalties sought by legislators such as Sen. Dianne Feinstein (D-Calif.).

CONSUMER PROTECTIONS (REFUNDS)

The proposed legislation would change the refund effective date for complaints from 60 days subsequent to the date of filing, to the date of filing. This is a direct reflection of the frustration California parties experienced when the refund date for the California power crisis was set for Oct. 2, 2000, and thereafter. The original

compliant filed by Sempra was filed on Aug. 2, 2000. We do not believe that shortening the refund effective date is a serious threat to the industry's ability to do business.

The proposed language also prohibits slamming and cramming of retail customers in open access states, a relatively non-controversial measure.

WHAT CAN/SHOULD CONGRESS DO TO HELP THE ELECTRICITY INDUSTRY?

Electricity today is not an attractive arena for investment. Wall Street is fully capable of healing from the excesses of the merchant power frenzy and the overvaluations that have since been viciously corrected, and can manage through the losses associated with the fraud perpetrated by Enron and the misbehavior of other firms both within and outside of the electricity business. However, it cannot, with any sense of fiduciary responsibility, pour the billions of dollars in investment into the transmission grid that it appears we could so clearly benefit from when the argument over who will pay for it remains a fight to the death between FERC, the states and now their representatives on Capitol Hill.

For all of the value destruction that has taken place in the electricity sector in the shares of independent power producers, traders, marketers and even some regulated utility concerns, the losses borne by investors far outweigh those that will be assessed on ratepayers. This is simple math. The state of California claims that it is owed $8.9 billion in refunds for excessive power costs in 2000-2001. The market cap of six independent power producers coughed up a combined $30 billion in market capitalization over the two days that FERC acted on price caps in June of 2001. In spite of the criticism levied against the FERC, California ratepayers are going to see at least part of their $8.9 billion outlay refunded, and frankly, the $43 billion in forward contracts the state signed are likely to continue to see modification, if not by FERC then in state proceedings under the California Business and Professional Code (our research on this topic was published in two Electricity Bulletins, dated Feb. 24, and March 6, 2003). We believe that ratepayers are still coming out far ahead relative to investors in the wake of this market dysfunction. Certainly no small part of the risk of this business has been transferred to the investment community from ratepayers, and isn't that what Congress intended in the 1992 Energy Policy Act?

Differences of opinion on policy will always take place, but investment is paralyzed by the fact that the highest court ruled on this issue 12 months ago, yet the FERC remains under attack in a variety of venues. Frankly, the industry would be best served if Congress would either endorse the interpretation of the Supreme Court in March 2002 and let FERC get on with its job, or have the intestinal fortitude to go in and change the law if it does not agree.

The regulators and legislators from the Southeast and the West are demanding that Congress decree that any implementation of the RTO program must be made on a risk-free basis. This is preposterous. Since when is zero risk the only prerequisite for sound regulatory policy? Are regulators omniscient when it comes to defining a path that precludes risk? The colossal cost overruns of the investment in this nuclear generation capacity were made under the aegis of a fully regulated environment and paid for out of the pockets of ratepayers.

Independent power and merchant trading sector losses have not been transferred to the ratebase except where state regulators have permitted it to happen. California's regulators refused to allow their incumbent utilities to contract power on a bilateral basis, in spite of repeated pleas for that ability. When FERC imposed price caps and dramatically changed the business outlook for traders and independent power companies, these companies experienced losses on business transactions and in the capital markets. Yet these independent power companies and failed merchant traders have not come running to regulators or to Capitol Hill to recoup their losses.

They have asked for fair treatment in the marketplace in the form of clear rules, but they have not requested absolution from their business risk. In fact at every turn, FERC has been vigilant, as witnessed in the scrutiny afforded inter-affiliate lending by Enron and El Paso Corp. over the last year, in its efforts protect ratepayers from precisely that risk. The failure by the Public Utilities Commission in California, however, to permit bilateral contracting was a regulatory decision and unfortunately it will be recovered in rates.

There is no risk-free proposition in this country. The request to prove that no harm could come to anyone under a proposed standard market design strikes us as equivalent to saying that a newly elected official should not be allowed to assume office until it is proven that he or she will never offend a single member of his or her constituency. It verges on the absurd. We take risk in this country every day, all the time, in every single sector of the economy and in every aspect our social

environments. We do our best to manage these risks. We do not sit around and do nothing waiting for them to subside for they do not.

To say that FERC should be arrested in its efforts to resolve the problems clearly presented by the California crisis and by incomplete restructuring reminds me of a captain's excessive concern for the ship and its crew such that it never leaves port. That is no way to oversee our energy infrastructure, and puts the nation as a whole at risk to higher energy prices jeopardizing any economic recovery that Congress is dedicated to facilitating.

Several companies that are performing well at this date are considered "overvalued" relative to their growth rates. Investors are not rewarding these companies or indicating their positive view of the vertically integrated utility model, they are parking cash until something better comes along because it pays better than treasuries. It will be their fiduciary duty to diversify out of these positions as soon as something else looks better. Several of the stocks trading at the top of the sector's valuation range are vulnerable to the downside for this reason.

From 1999 onward until late 2001, fund managers outside of the classic utility fund arena began to hold shares in the electricity sector. This was net new investment interest. Today, however, I can tell you that the list of clients that I call because they hold positions in the electricity sector has decreased dramatically. Even in utility funds, managers are uncomfortably "overweight" in low-growth but relatively well-performing shares, and have indicated that as soon as telecom and or natural gas local distribution companies or anything else in the economy begins to show some more life they will be diversifying away from even these electricity assets because of the intractable regulatory situation and the poor capital structure common to so many participants. I am not speaking here of the independent power companies, I am speaking of the large integrated (some vertically, some unbundled) utility holding companies.

On Jan. 16, FERC hosted a technical conference to collect financial industry feedback on the status of the electricity market. This was yet another meeting, through which FERC continued to study, define and improve its policy development. At this meeting, every representative of the financial community present stated that it would benefit the industry if FERC continued its work on restructuring the power markets and developing consistent rules and improving regulatory certainty. This happens to be in stark opposition to the political considerations that are hamstringing the development of precisely such policies.

Investors can accommodate regional differences; however, they do like consistency wherever it is feasible and appropriate. The capital markets do not require the risk free solution that is currently sought by regulators and state representatives in the Southeast and West. Nor is there a widespread call in the capital markets for re-regulation of the industry. While re-regulation would cause a reversion back to the prior norm, there is no indication that the industry cannot manage to survive in a new, restructured form.

Otherwise, investors are confronted with the following conundrum. In the Southeast, for example, incumbent utilities' CEO's have begun bragging to Wall Street about their plans to buy assets presently owned by financially distressed independent power producers and put them into rate base. It is interesting for investors, who are familiar with the business plans of both types of participants, that the independent generation assets when owned by an independent can't seem to get transmission capacity to move power today, yet these same assets are being touted as a productive part of an incumbent-owned portfolio. Where should dollars be invested—which story is the truth?

From a capital markets perspective, we would ask that Congress approach the problem like Hippocrates with the mantra: "First, do no harm." If Congress is not inclined to make a call on jurisdiction for transmission once and for all, then help FERC do the job that Congress itself directed it to do, not frustrate it with never-ending deliberation and paralysis. The fastest way to get information into the hands of state regulators who are concerned about restructuring is to give them unbundled rate analysis. Then Wall Street can ascertain the capital requirements needed for each course of investment to rationalize both generation and transmission, empowering consumers and their regulators to make better decisions.

Mr. BARTON. Thank you. We now want to hear from Mr. Kanner.

STATEMENT OF MARTY KANNER

Mr. KANNER. Thank you, Mr. Chairman, members of the committee. I thought the last panel near the end had a very healthy and thoughtful discussion on what we need to do to foster competi-

tive markets to give consumers access to lower-cost power supplies. We heard some of the elements. Mr. Shimkus, you talked about the need for enhanced transmission investment, as did Mr. Walden. And frequently there was mention of PJM and how the system is working there. And I think all of us would probably agree that that system has a history of being operated in a coordinate fashion, having the economic dispatch generation. That has been talked about today. I think it is also important to look at it and realize that in fact it is not perfect.

Noted economist Paul Jaskow, in his comments to FERC on standard market design, looked at the PJM interconnection and had these observations: That during the period 1998 to 2001 the hours in which transmission constraints occurred increased 661 percent despite the fact that transmission congestion charges increased by 500 to 1,000 percent; that PJM during that time period also experienced increases in wholesale spot energy prices and despite all of these price signals, investment in transmission in PJM stagnated. Well, I think that tells us the lessons we can draw from that is even in a region that has tremendous experience in dealing with central dispatch, in dealing with competitive wholesale supplies and operating an integrated grid, that achieving workable competitive markets isn't an easy task.

So the question I think before you is what do we do, what are the steps that are needed if in fact we want to foster sustainable, effective competition in wholesale power markets?

Let me share with you the recommendations of Consumers for Fair Competition. First of all, as was discussed a little earlier today, we need to band fraudulent and manipulative practices and take those actions necessary to provide effective remedies. This is not simply a question of one bad actor. If you look at the trade press, the general press from virtually every region of the country, you will realize that there have been instances of market manipulation and abuse. Part of the reason it is a complex system and that complexity creates opportunities for parties looking to make money, to do things that with hindsight many of us would agree are not the right thing to do.

We need to facilitate effective market oversight. If we are going to treat electricity as a commodity, then just like other commodities the regulators need to have access to transactional data in order to see whether or not abuses have occurred. Third, we need real market transparency. Participants in the market will benefit if they know how much is available, what things are being sold for, at what times and what volumes and at what price? Relying on aggregated information, statistical data or delays in the filing of that information won't work.

Fourth, we need to separate the regulated and unregulated utilities in terms of their investments or regulated and non-regulated activities of utilities. Another financial analyst was quoted recently in the general press as saying, "Utility investments rarely go wrong and utility unregulated investments rarely go right." If that is the case, then we need to make sure that when the consumers of those regulated utilities that they are not on the hook for those investments gone bad. So we need strict financial firewalls between the

affiliates and the operating utilities, and we need to make sure that they stand alone.

We need to review all outstanding PUHCA exemptions. I think the last couple years have shown us that Congress was prescient in 1935 when it enacted PUHCA, that the reasons for PUHCA remain valid today and that there are parties that currently have exemptions, not subject to the same restrictions as the registered holding companies, that a thoughtful review of those exemptions are needed to make sure that they remain in the public interest.

We also need to recognize that there is gaps in merger review. There are certain types of mergers, mergers at the holding company level, convergence mergers are between electric and gas utilities that escape regulation, and we need to close those gaps. And, last, we would recommend that Congress look at the private power exchanges where third party deals are facilitated and whether there needs to be a separation to ensure that those are truly independent and not run by parties that have an interest in the energy markets, avoid the intent we saw before where Enron received proprietary information from Enron Online, it exchanged platform, and used that to choose what positions to take in the market.

There is a gap between what CFC recommends and what is contained in the Barton bill. It is not an insignificant gap, but we, as always, pledge to work with the members of the committee to try and craft legislation that does what I think is the desire of everyone here, which is to facilitate those effective competitive markets, but it is a real challenge.

[The prepared statement of Marty Kanner follows:]

PREPARED STATEMENT OF MARTY KANNER ON BEHALF OF CONSUMERS FOR FAIR COMPETITION

Mr. Chairman, members of the Subcommittee, my name is Marty Kanner; I am testifying today on behalf of the Consumers for Fair Competition (CFC), an ad hoc coalition of small and large electric consumer representatives, small business contractors, consumer owned utilities and others. Consumers for Fair Competition was formed to advance policies necessary to promote effective wholesale competition and has been active in the restructuring debate and efforts to block repeal of the Public Utility Holding Company Act (PUHCA) absent sufficient replacement provisions designed to protect consumers and investors.

Much has transpired since this Committee last discussed electricity legislation. CFC believes it is important to reflect on the turmoil that has occurred in the utility industry over the past few years and proceed cautiously, focusing on those provisions needed to prevent market manipulation and abuse and, thereby, restore consumer and investor confidence in the industry.

At previous hearings, CFC testified about the difficulties associated with transitioning the wholesale market from cost-of-service rate regulation to reliance on competitive market pressures. The features of the utility industry—the historic dominance of vertically integrated utilities, the financial and regulatory barriers to market entry and the physics of the electric system—pose significant hurdles for effective competition and numerous opportunities for consumer abuse. As witnessed over the past few years, these hurdles are real and the consequences are severe.

LESSONS LEARNED

What are the "lessons" we can learn from events of the past few years?

1. It's not just Enron. When the full breadth of the Enron scandal became known, some discounted the revelations as an anomaly—the distasteful actions of a rogue market player. Regrettably, the problems are much broader. A cursory review of the general and trade press—compiled as an attachment to my testimony—underscores the breadth of the problem. A significant number of market participants, both traditional utilities and new market entrants, have been accused of, con-

fessed to or been sanctioned for engaging in questionable activities, market manipulation and consumer abuse.

2. It's not just California. Again, a common assumption was that the problem was isolated to California (and those states with the bad fortune to be located close to it) and the result of California's ill-conceived market rules or failure to foster construction of new generation. While California's overly complex system and short supply certainly *created* opportunities for abuse, similar problems have occurred throughout the country—in Oregon, Minnesota, Kansas, Ohio, Pennsylvania, New England, Louisiana and elsewhere.

3. Good Markets Need Good Information. Efficient markets require complete, accurate and timely information. Reports of phantom "wash trades" intended to boost perceived revenues, trading volume and prices were fairly common in the electric industry. Similarly, there have been multiple instances of parties reporting false information on gas prices to private clearinghouses. Without good information, effective market oversight is compromised, market confidence and liquidity are shattered and consumers run the risk of paying excessive prices.

4. Utility Diversifications Can Harm Consumers, Stockholders and Competition. The record of utility diversification efforts is far from stellar. An analyst with Williams Capital recently noted that "utility investment rarely goes terribly wrong; non-utility investment rarely goes right." But, unlike other industries, it's not just the utility and its investors that suffer from bad investment decisions. As detailed in a December 26, 2002 Wall St. Journal front-page article (which is attached to my testimony), utility customers suffer the consequences. Utilities have inappropriately sought to charge consumers of their regulated entities for the costs of unrelated diversifications (i.e., buying unregulated assets at inflated prices and tap utility assets to back the debt of nonutility ventures). Utility affiliates must stand on their own: utility consumers should not subsidize diversifications—either through cash infusions, backing affiliate debt, or receiving inadequate compensation for services or assets provided by the utility for the benefit of unregulated affiliates.

5. Enhanced Tools Are Needed to Oversee Markets. As noted by Chairman Barton in a recent interview and FERC-nominee Joe Kelliher at his recent confirmation hearing: Reliant's intentional withholding of generation in California was not illegal under the Federal Power Act. I hope we all agree it should be. If we are going to rely increasingly on markets, then FERC needs market oversight authorities and tools akin to those of the SEC.

6. PUHCA Does Matter. PUHCA includes a series of structural requirements designed to maintain financially healthy utilities, prevent abusive affiliate transactions and protect consumers and investors. A central thesis of PUHCA—that investors and consumers are better off when utilities concentrate on providing utility service—has been borne out by recent events. In fact, an October 2002 report by Moody's Investors Service noted "a growing sense that the more traditional power company business model, once considered outdated, is again in fashion" and that the credit ratings of these traditional utilities have "remained relatively stable as they have exhibited solid financial flexibility".

7. We May Only Have Seen the Tip of the Iceberg. The allegations of market abuses are numerous. There may be much more occurring under the surface—but we may never know. It is troubling that the two most glaring "smoking guns"—the Enron memo detailing abusive trading schemes and the transcripts of Reliant traders and plant operators engineering artificial shortages in order to raise prices—where disgorged by the offenders, not uncovered by any regulatory oversight body. If such blatant manipulative tactics have evaded federal and state regulators, how many more covert abuses are occurring?

You are faced with an enormous challenge. The problems plaguing the utility industry and its consumers and investors are numerous—real and perceived market abuse, soaring and highly volatile prices, sinking financial conditions and a lack of consumer and investor confidence. CFC would urge you to only take those steps that you are confident will address the shortcomings of the industry and our current system of regulatory oversight and provide the needed structural protections for consumers and investors.

CFC RECOMMENDATIONS FOR ELECTRICITY LEGISLATION

Given the anticipated timeline for action, deferring action on electricity legislation may be the wise course of action. However, if you choose to include electricity provisions in the pending energy bill, CFC believes that the following elements must be included:

- **Bar fraudulent and manipulative practices.** If Reliant's activities were not illegal, they should be. Rather than attempting to ban specific trading practices,

any electricity legislation must make it unlawful for any entity, directly or indirectly, to undertake fraudulent, manipulative, or deceptive actions in wholesale energy markets.

- **Facilitate effective market oversight.** Today, the nation's financial markets require the recording and submission of transactional data. This information provides an "early warning system" for potentially inappropriate trading practices and an audit trail for any resulting investigation. FERC must have similar access to transactional data in utility markets.
- **Provide genuine market transparency.** Efficient markets require timely and effective price discovery. In addition, market transparency alerts market participants and market overseers with indications of anomalous trends that might suggest manipulative activities. Actual—not statistical or average—price information must be required on a real-time basis.
- **Separate regulated utilities and their unregulated affiliates and prohibit cross-subsidization.** Markets are distorted and consumers and competitors are harmed when utilities charge ratepayers for the costs of unregulated ventures or tap ratepayers' revenues and ratepayer-financed tangible and intangible assets to fund their diversification. FERC recently took a step in the right direction by barring the issuance of utility-backed debt for unregulated ventures. While only a first step, this initiative should be codified and expanded to shield consumers from the risks and costs of utility diversifications. In addition, federal law should clearly prohibit cross-subsidization and consideration should be given to the proper form of separation needed to truly protect consumers and investors and preserve competition.
- **Review All PUHCA Exemptions.** Enron, after its acquisition of Portland General Electric, self-certified that it qualified for an intrastate exemption under Section 3 of PUHCA. CFC has previously questioned Enron's qualification for that exemption and noted that—had Enron been subject to the stricter PUHCA requirements for Registered Holding Companies—many of Enron's improper activities could have been prohibited or detected. Interestingly, an SEC judge recently ruled that Enron did not qualify for the intrastate exemption based on the percent of revenues Portland General Electric earned from interstate sales. A mandated review of all outstanding Section 3 PUHCA exemptions is needed to ensure that those exemptions are still appropriate and in the public interest. In addition, CFC would support amending the statutory PUHCA exemptions for merchant generation and telecommunications affiliates to require PUHCA Section 10(b) review to ensure that the interests of investors and consumers are protected.
- **Gaps in the review of utility mergers must be closed.** The weakened financial condition of the utility industry may translate into a significant increase in mergers and acquisitions (in fact, low stock prices of some utilities may well encourage further acquisition efforts). Such activities may be economically beneficial—but that can be determined only after careful review. Certain M&A activities—disposition of generation-only assets, mergers between holding companies and acquisitions of gas utilities by electric utilities—may not be subject to review by FERC. Congress must close this gap.
- **Private exchanges must be run independent of market participants.** Enron benefited from the proprietary information it received from its private brokerage platform: Enron online. The integrity of private trading platforms to facilitate third-party trading is dependent on their market neutrality. The best means of achieving this neutrality is to bar utility ownership of exchanges that are designed to facilitate third-party transactions.

COMMENTS ON DISCUSSION DRAFT

I have shared with you the views of CFC on what provisions should be included in any electricity legislation. I would now like to share our comments on Title VII of the February 28 Discussion Draft.

While CFC commends Chairman Barton for his interest in promoting wholesale competition, Title VII of the Discussion Draft, unfortunately, does not include the needed provisions outlined in my testimony—and in fact eliminates existing consumer protections in several key respects. Consequently, CFC cannot support Title VII in its current form.

Most significantly, CFC opposes the proposed repeal of FERC merger review and repeal of PUHCA.

As we have testified, CFC believes that PUHCA should not be repealed—and numerous national organizations join us in this view (see attached letter). If PUHCA is to be repealed, it must be accompanied by strong consumer protections—outlined

above—that are, regrettably, absent from the Discussion Draft. Moreover, it is discouraging that the lone "protection" touted by repeal advocates—access to books and records—is an empty promise under the provisions of the Discussion Draft, which includes an expansive exemption that is likely to swallow the rule.

Mr. Chairman, our position on PUHCA repeal is clear. Nonetheless, if the subcommittee is committed to lessening this important consumer protection statute, we would encourage you to consider targeted revisions designed to address specific limitations contained in PUHCA that the Committee finds unreasonably restricts a valuable activity. This is the general approach taken by Congress in 1992 and 1996—and is a far preferable model to outright repeal.

We are similarly troubled by the legislation's repeal of FERC review of proposed utility mergers. As the primary utility regulator, it is appropriate and necessary for FERC to review proposed mergers. This oversight is all the more important if we are to successfully transition to a competitive market. Only FERC has the expertise to assess the competitive impacts of a proposed merger on regional power markets, and FERC is in the best position to condition a proposed merger to mitigate anticompetitive impacts and oversee the merged entity's compliance with those conditions. Given the limited resources and utility expertise of the Justice Department and Federal Trade Commission, reliance on those agencies for utility merger review is inadequate. Moreover, the simultaneous repeal of merger review under PUHCA is likely to create a regulatory black hole in which few proposed mergers receive the necessary scrutiny.

CFC appreciates that the proposal includes provisions intended to discourage or prevent abusive practices—increased penalties, transparency and a prohibition on round-trip trades. However, as outlined above, these provisions are not enough:

- Increased penalties will have little effect if, like in the Reliant case, those actions are not illegal. Moreover, without strong market oversight and enforcement, imposition of occasional penalties is a minor cost of business when companies can reap millions on profits from manipulative schemes.
- CFC supports transparency requirements—and the language in the Discussion Draft is an improvement over prior proposals by removing the explicit submission of statistical data and narrowing the exclusion for "sensitive" information. However, we remain concerned that the provision could still result in submission of averaged prices if volumetric reporting is not also explicitly required. In addition, Congress must also require transparency—and accuracy—in gas price data submission.
- Barring a specific trading practice—such as round-trip trades—is unlikely to have the needed remedial impact. In fact, it may be seen as a tacit suggestion that other shady transactions—not specifically banned—are deemed "acceptable". What is needed is a strong and unambiguous prohibition on any and all fraudulent, deceptive and manipulative practices. I have heard some suggest that "manipulative practices" is an ill-defined term. I would submit that so was the phrase "just and reasonable" when Congress passed the Federal Power Act in 1935.

The provisions on incentive- and performance-based transmission rates, as well as participant funding, are less prescriptive than those included in prior legislation. While we appreciate those changes, we remain troubled by the tension created between these provisions and Sections 205 and 206 of the Federal Power Act. Under accepted case law, FERC sets rates of return that reflect the risk of the relevant investment and sufficient to attract needed capital. Admonishing FERC to set rates to reflect those factors—as directed by the Discussion Draft—and then require adherence to Sections 205 and 206 creates an ambiguity that could lead to unnecessarily high transmission rates. I would note that, in an effort to encourage participation in the Midwest ISO, rates of return as high as 36 percent were proposed. Simply inflating transmission costs will foster neither competition nor consumer benefits. I will also note that the provisions on incentive rates and participant funding are in conflict: would a transmission owner receive an inflated rate of return for a transmission line that is participant funded? CFC would urge you not to adopt an inflexible system on participant funding.

CONCLUSION

There are significant differences between what CFC believes is needed in electricity legislation and what is included in the Discussion Draft. As always, Mr. Chairman, we are committed to working with you, your staff and the members of the Committee. However, we are skeptical that appropriate and beneficial electricity legislation can be negotiated and crafted at this time. If Congress cannot include the provisions needed to detect, prevent and mitigate the opportunities for market

manipulation and consumer and investor abuse, then CFC would urge deferral of action on electricity legislation until those provisions can be included.

On behalf of Consumers for Fair Competition, I thank you for this opportunity to testify.

March, 2003

ALLEGATIONS OF MARKET FLAWS AND ABUSES

February 20, 2003—The Federal Energy Regulatory Commission launched an investigation into whether Enron illegally retained ownership of two cogeneration plants after it no longer qualified for sole ownership once it bought the Portland General Electric utility. (Source: The New York Times)

February 19, 2003—Federal regulators asked California's grid operator for more information on energy companies that may have engaged in questionable electricity trading tactics to avoid the state's price caps in mid-to-late 2000. (Source: The Wall Street Journal)

February 6, 2003—A Securities and Exchange Commission (SEC) judge rejected Enron's request to retain its exemption from the Public Utility Holding Company Act (PUHCA), concluding that the company's significant revenues from sales outside the state of Oregon—where it's utility subsidiary is located—disqualified the company for the exemption. (Source: Reuters News Service)

February 5, 2003—Reliant Resources Inc. was fined $13.8 million in a settlement over allegations that the company intentionally withheld power in the California market in order to drive up prices during the state's electricity crisis. (Source: The Energy Daily)

January 30, 2003—Staff for the Federal Energy Regulatory Commission concluded that natural gas markets remain ripe for potential gaming this year despite stepped-up federal and industry scrutiny. The report concluded that "without proper monitoring, the likelihood of successful manipulation could increase under current tight supply conditions." (Source: The Energy Daily)

January 7, 2003—The California ISO released a report charging that other companies engaged in Enron-like market manipulation tactics, including the creation of phantom transmission congestion. (Source: Low Angeles Times)

January 6, 2003—FERC Chairman Pat Wood has decided to bring before the Commission an appeal that companies seeking to join the PJM Interconnection and Midwest ISO are earning enormous rates of return—as high as 63 percent—on their transmission assets. (Source: The Energy Daily)

January 6, 2003—In a December report, the General Accounting Office determined that federal regulators are unprepared to police the deregulated market for natural gas. (Source: Public Power Weekly)

December 26, 2002—Energy companies, burned by disastrous forays into commodities trading and other unregulated businesses, are increasingly seeking to pass some of the financial burden of these failed ventures on to their utility units—and some experts are worried that this could lead to higher electricity rates for consumers in coming years. For instance, Duke Energy Corp. agreed to pay $25 million to its utility customers to settle regulators' accusations that the company improperly stuck its utilities with expenses that rightfully belonged to unregulated affiliates. Similarly, Kansas regulators found that Westar Energy quietly shifted more than $12.95 billion of debt from unregulated affiliates onto the utility side of the business. (Source: The Wall Street Journal)

December 20, 2002—The Commodities Futures Trading Commission (CFTC), in the first enforcement action over energy date reporting scandals, issued an order in which Dynegy Inc. agreed to pay a $5 million fine to settle charges that two affiliates—for more than two years—deliberately reported false gas market data to manipulate published price indexes. (Source: The Energy Daily)

December 5, 2002—A former El Paso Corp. vice president and natural gas trader has been arrested and charged with knowingly providing false data to an energy industry newsletter that develops and publishes a monthly index of gas prices. (Source: The Energy Daily)

December 4, 2002—In a letter to the Financial Accounting Standards Board (FASB), Florida-based Teco Energy said current price quotes are "unreliable" and "misleading" due to the lack of effective mechanisms to ensure accurate reporting by energy companies and data collection by publishers. (Source: The Energy Daily)

November 19, 2002—A former energy trader and one-time employee at one of the country's best-known index publishers told California legislators that misreporting of energy prices by large companies was routine, underscoring the scope of a practice now under review by federal regulators. (Source: The Wall Street Journal)

November 16, 2002—A report by federal energy regulators—made public after the Wall Street Journal sued to obtain the full record of the Federal Energy Regulatory Commission investigation—details how two power companies, Williams Cos. and AES Corp. may have conspired to drive up prices during California's 2000-2001 energy crisis. The report lends credence to allegations that California's generators colluded to withhold power from the state. (Source: The Wall Street Journal)

November 13, 2002—A federal grand jury investigating the California energy crisis appears to be focusing on whether major electricity suppliers in the state worked together to rig prices—in violation of the antitrust laws. (Source: Los Angeles Times)

October 28, 2002—Williams reported that employees "misreported natural gas trades" to industry publications that compile price indices. The same story also reported that earlier in October Dynegy fired six people for similar actions. (Source: Platts Power Markets Week)

October 28, 2002—A class action lawsuit has been filed against AEP, claiming that AEP investors were misled about the value of AEP stock based on false information created by AEP "wash trades" and manipulation of gas index prices through false transaction reporting. (Source: Platts Power Markets Week)

October 24, 2002—FERC initiated an investigation to determine if ENRON improperly certified three wind generation facilities as Qualifying Facilities in 1997. (Source: FERC Order Initiating Investigation and Hearing)

October 23, 2002—The Commodity Futures Trading Commission's inquiry into U.S. energy markets involves many companies and includes a review of intentional reporting of false price data to publications that produce indexes against which energy contracts are pegged. (Source: The Wall Street Journal)

October 17, 2002—The head of Enron's energy trading operation in the West, Timothy Belden, agreed to plead guilty to a criminal charge for his role in manipulating electricity prices in California. (Source: Los Angeles Times)

October 9, 2002—American Electric Power dismissed five employees in their gas-trading unit for providing "inaccurate price information" to industry trade publications. (Source: AEP News Release)

October 7, 2002—Standard & Poor's Rating Services has long held a view that the lack of regulatory insulation of a regulated utility from the nonregulated operations of the Parent company is the cause of many credit ratings downgrades over the past few years. (Source: Standard & Poor's)

October 7, 2002—The Securities & Exchange Commission opened an inquiry to determine whether Enron should maintain its exemption from the Public Utility Holding Company Act. (Source: The Oregonian)

October 2, 2002—The Securities & Exchange Commission charged Andrew Fastow, former ENRON CFO, with fraud. The SEC filed in civil court "seeking disgorgement of all ill-gotten gains." (Source: SEC News Release 2002-143)

October 1, 2002—An official with the Federal Energy Regulatory Commission said that owners of U.S. power plants and transmission lines may be required to take "personal responsibility" and certify that plant outages which impact market prices occur due to legitimate reasons.

September 24, 2002—Dynegy settled fraud charges with the Securities & Exchange Commission. The SEC alleged Dynegy engaged in "wash trading", selling and purchasing equal amounts of energy for the same price from the same counter party, and improper accounting for special purpose entities. Dynegy agreed to a cease and desist order and paid $3 million, but was not required to admit to any wrongdoing. (Source: SEC News Release 2002-140)

September 23, 2002—El Paso Pipeline was found to have withheld gas line capacity. The Chief Judge found that El Paso had market power into the California markets and exercised that market power by withholding gas line capacity. The Chief Judge went on to recommend that FERC impose penalties. (Source: Initial Decision Docket # RP00-241-006)

September 18, 2002—The California Public Utility Commission alleges that five power generators deliberately withhold output during the state's energy crisis in order to drive up prices. (Source: The Wall Street Journal)

September 13, 2002—The Commodity Futures Trading Commission reached a settlement with a former Avista Energy trader regarding his role in the alleged manipulation of forward electricity prices in California on the New York Mercantile Exchange. The illiquidity in the market enabled price manipulation through large volume trades in the closing minutes of the exchange. (Source: The Energy Daily)

September 10, 2002—IdaCorp admits violating FERC affiliate rules, saying that its trading unit did not always buy transmission access from its regulated utility affiliate on a third-party basis. (Source: The Energy Daily)

August 19, 2002—Bill Hederman, the first director of the new FERC Office of Market Oversight and Investigation, said that the Commission does not yet have a clear definition of market power, and that a "a hard and fast definition will be closer to a year away." (Source: Clearing Up)

August 16, 2002—Utility regulators in several states are moving to ensure that the financial problems that decimated companies in the wholesale-energy sector don't unduly hurt consumers of the electric companies they regulate. (Source: The Wall Street Journal)

August 14, 2002—The market monitor for the PJM Interconnection LLC said certain companies repeatedly created congestion in the Mid-Atlantic electricity grid by gaming the system. Faulty incentives induced market participants to shift power flows to capture more profit, the monitor said. (Source: The Energy Daily)

August 13, 2002—The Federal Energy Regulatory Commission launched a formal investigation into instances of possible misconduct by five companies alleged to have manipulated short-term electric and natural gas prices in the West. (Source: FERC Press Release)

July 23, 2002—The PJM Interconnection found discrepancies in prices sold from energy providers in neighboring regions, with marketers booking transactions along transmission paths that were different from the actual path used in order to distort congestion pricing. (Source: The Energy Daily)

July 16, 2002—Duke Energy acknowledged that it made 23 "round trip" energy trades over the Intercontinental Exchange electronic trading platform, of which Duke is one of 13 equity owners. (Source: The New York Times)

June 28, 2002—The biggest reason Californians paid $7 billion more for electricity in the summer of 2000 was the ability of power suppliers to ask for and get high prices, says a new study by university economists. (Source: Los Angeles Times)

June 24, 2002—A report by the Pennsylvania Public Utility Commission alleged that PPL EnergyPlus deliberately withheld electricity from the capacity market in early 2001 to create an artificial shortage. (Source: Public Power Weekly)

June 18, 2002—A study by the General Accounting Office concluded that the Federal Energy Regulatory Commission is not yet up to the task of protecting consumers and ensuring that electricity is sold at just and reasonable rates. The report determined that FERC is hobbled by antiquated procedures, legislation and perhaps a mind-set more suited to the old days when energy producers were regulated monopolies. (Source: The New York Times)

June 10, 2002—Traders at Xcel Energy and Mirant discussed "games" to profit from California's chaotic electricity market in 2000 as they negotiated energy transactions, according to transcripts Xcel has given to federal regulators. The Xcel and Mirant traders discussed schemes to schedule nonexistent power use and to take advantage of congestion payments on California's overburdened electric grid.

June 8, 2002—Perot Systems was peddling ways to exploit market loopholes in the California energy market, which the company had helped develop. (Source: Los Angeles Times)

May 27, 2002—As noted by the head of the PJM market-monitoring unit: "I don't think any energy market is immune to manipulation". (Source: Business Week)

May 15, 2002—In a 2001 probe of Enron's online trading system, FERC did not uncover either the looming financial collapse or its manipulative trading practices. Senate Governmental Affairs Committee Chairman Joseph Lieberman faulted the investigation for being "incomplete" and "more noteworthy for what it overlooked than for what it scrutinized, leaving consumers unprotected". (Source: Wall Street Journal)

May 8, 2002—Electricity industry analysts warned yesterday that the memos showing how Enron Corp. manipulated California's power supply in the past two years demonstrate that smart, very detailed market rules have to be devised and enforced. (Source: The Washington Post)

May 7, 2002—Internal Enron documents outline trading strategies to manipulate prices in California's power market. (Source: Wall Street Journal)

May 2, 2002—Coal plant developer alleges that Illinois Power is frustrating plant interconnection of the plant to favor a competing coal plant owned by an affiliate of the utility. (Source: The Energy Daily)

March 5, 2002—Cambridge Energy Research Associates issued a report that noted "we're a decade into deregulation and most power markets remain ill-defined". (Source: Wall Street Journal)

March 4, 2002—Staff of the Public Utility Commission of Texas accuse six (unnamed) market players of manipulating the market in Texas by intentionally mis-scheduling power needs to reap more than $1 million in load imbalance credits. (Source: The Energy Daily)

January 11, 2002—A coalition of major generators complained to FERC that Entergy is charging excessive rates and deny comparable service to competitors. (Source: The Energy Daily)

January 8, 2002—A coalition of generators (including Calpine, Exelon, Mirant and Reliant) charged that Entergy is abusing market power through its generator energy imbalance program, overcharging independent generating facility customers for imbalances resulting from generation under-deliveries. The coalition alleged that Entergy claimed its incremental costs of meeting the imbalance were more than $100/mwh greater than the prevailing market rate. (Source: Public Power Weekly)

October 5, 2001—FERC accused Exelon of illegally manipulating the transmission system in the Pennsylvania-New Jersey "Maryland (PJM) Interconnection to enrich its power marketing affiliate (PECO Energy). (Source: Energy Daily).

July 12, 2001—The Federal Energy Regulatory Commission (FERC) decided to develop new tests to determine whether power providers should be allowed to charge market rates for electricity. (Source: Dow Jones Newswires)

June 29, 2001—a General Accounting Office study found that FERC lacked the information or analysis needed to conclude that generators in California had intentionally withheld electricity supply to influence prices. (Source: GAO Report)

June 21, 2001—The New York Independent System Operator asked FERC for emergency action on a plan to police the market and guard against abuse in the wholesale electricity market. (Source: Energy Daily)

May 24, 2001—NSTAR, a Boston utility, accused two independent power producers of charging excessive rates in the New England market during times of power grid congestion. (Source: Energy Daily)

February 1, 2001—Consumer Federation of American and Consumers Union write President Bush claiming that FERC "has repeatedly allowed sellers to charge "market-based rates' when the underlying market conditions are highly concentrated and the level of competition is far from sufficient to discipline abusive and anticompetitive behavior by electricity suppliers, or to ensure effective market functioning." (Source: CFA/CU Letter)

January 13, 2001—Leading economists Paul Jaskow and Edward Kahn conclude that "high wholesale prices observed in summer 2000 [in California] cannot be explained as the natural outcome of "market fundamentals' in competitive markets since there is a very significant gap between actual market prices and competitive benchmark prices". (Source: CATO Policy Analysis)

September 6, 2000—Economists on the California ISO Market Surveillance Committee conclude that "uncorrected market design flaws . . . have enhanced the ability of market participants to exercise market power in the California electricity market" and that these flaws caused or contributed to the June 2000 price spikes. (Source: Market Surveillance Committee report)

July, 2000—The staff of the Federal Trade Commission found that "as regulation is reduced and competition is encouraged, there is a significant potential that these utilities [vertically integrated utilities] will use their existing market power in generation, transmission and distribution services to deter competition that could benefit consumers". (Source: FTC Staff Report)

May 24, 2000—New York State Electric and Gas claims that Consolidated Edison can use Local Reliability Rules to require use of its own generators—regardless of price—to relieve congestion and raise prices in the area in which NYSEG operates. NYSEG claims a proposed merger between ConEd and Northeast Utilities will exacerbate this problem. (Source: Energy Daily)

May 5, 2000—An analysis by Tabors Caramanis & Associates alleges that two transmission owning utilities, American Electric Power and Entergy, claim more transmission capacity than necessary to serve retail load in order to block competitive entry. (Source: Dow Jones Newswire)

December 21, 1999—The East Central Area Reliability (ECAR) executive committee asserted that Cinergy showed "blatant disregard" for reliability rules. The action was prompted by Cinergy "leaning" on the transmission grid and taking as much as 1,600 MW of power—which they had not purchased—during high-price periods. The power would be "returned" when prices were lower.

Mr. BARTON. Thank you. Now we would like to ask Ms. Sharon Buccino from the Natural Resources Defense Council. You have 5 minutes for opening statement. Thank you for being here.

STATEMENT OF SHARON BUCCINO

Ms. BUCCINO. Thank you. I appreciate the opportunity to testify today. The Natural Resources Defense Council is a non-profit orga-

nization with 500,000 members across the country dedicated to the protection of public health and the environment. My testimony addresses the siting of electric transmission facilities on Federal lands. NRDC acknowledges the importance of removing bottlenecks and ensuring reliability in the Nation's electricity grid. Improvements to the grid are necessary to encourage development of renewable resources, such as wind and geothermal power, and to serve consumers better, including those on tribal lands. Solving these problems, however, does not require the reallocation of authority over Federal lands proposed in the draft bill.

In my brief time this morning, I would like to focus on one particular provision in the bill, it is Section 216(j) which allows a State to trump decisions by Federal land managers regarding the siting of transmission facilities on Federal lands. This provision would override fundamental protections that Congress put in place almost 30 years ago to balance competing interests in deciding how to use the public's land and most importantly to give the public a say in the decision. Such drastic steps are unnecessary to ensure affordable and reliable electricity.

Efforts are already underway among utilities, States and the Federal Government to increase the efficiency of siting transmission facilities. For example, last summer, the Western Governors Association signed a protocol with four Federal agencies designed to streamline siting decisions. Legislative changes are not necessary to make this work. Section 216(j) of the draft bill will result in more conflict and controversy, not less.

The Federal public lands are owned by all Americans and are to be managed to the benefit of us all. The Federal Government, not an individual State, is in the best position to manage these lands in the national interest. These lands have tremendous value for a variety of purposes, including energy development and distribution but also recreation and the preservation of the natural historic and cultural resources that help shape our American identity. The Federal Land Policy and Management Act of 1976, also known as FLPMA, explicitly provides for rights-of-way across public lands for transmission facilities, but it does so in a way intended to protect the many other values of these lands and to give the public a say in how their lands are managed.

Section 216(j) of the draft bill would remove the public participation guarantees provided by Federal law. FLPMA, together with the National Forest Land Management Act and the National Environmental Policy Act, provides citizens the opportunity to lend their voice in making decisions about how their land should be used. State requirements simply do not substitute for the loss of Federal participation requirements. State agencies do not provide citizens the same guarantees to participate that apply to Federal agency decisions.

There is a savings clause in the bill, but in my view, this does not adequately preserve Federal protections. The simple fact is that FLPMA and NEPA only apply to Federal decisions. So once you take the decision away from Federal hands, it is difficult to argue that the protections of NEPA and FLPMA apply. Even if the savings clause did in fact preserve the application of NEPA and other Federal protections to State decision, the result would not be desir-

able from any perspective. Presumably, the Federal land manager has already completed or at least started a NEPA review when a State steps in under the bill. It makes little sense for the State to then conduct a separate review under NEPA once it takes over the right-of-way decision.

Furthermore, one of the key elements of NEPA is the consideration of alternatives to the proposed decision, including a no action alternative. Yet this portion of NEPA would be rendered meaningless under Section 216(j), for the only reason a State would step in and trump the Federal land manager's decision to approve a right-of-way is where the Federal Government had not done so. And in these circumstances there can be no meaningful consideration of alternatives or any meaningful opportunity for members of the public opposed to the project to influence the decision.

Cooperation and resources, not legislative changes are what is needed to accelerate siting of transmission lines on Federal lands. Federal land managers are the right officials to make decisions regarding the use of Federal lands. There is little evidence that Federal land managers prevent the siting of transmission facilities. In fact, of the hundreds of rights-of-way applications of the Bureau of Land Management and the Forest Service each year, only a handful are denied. And I would, again, like to refer the committee to the ongoing efforts to address these issues. I mentioned the protocol of the Western Governors Association. These efforts should be given a chance to work before drastic changes to the management responsibilities for Federal lands are made.

And I would just like to make one final point, which is it is very important to remember that what we are talking about here are Federal lands. They are lands that belong to all of us. And if you look at the bill, it seems that things are all mixed up, because at the same time you give States authority over Federal lands, the bill gives FERC the authority to make decisions on State lands. And in my view, even the most ardent advocate of State rights is unlikely to support such divestiture of authority from the entities most entitled to make decisions about land use, and that is the owner of the property. Thank you.

[The prepared statement of Sharon Buccino follows:]

PREPARED STATEMENT OF SHARON BUCCINO, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

My name is Sharon Buccino. I am a Senior Attorney with the Natural Resources Defense Council. NRDC is a non-profit organization with over 500,000 members across the country dedicated to the protection of public health and the environment. I appreciate the opportunity to testify today. My testimony addresses the siting of transmission facilities on federal lands. NRDC acknowledges the importance of removing bottlenecks and ensuring reliability in the nation's electricity grid. Improvements to the grid are necessary to encourage development of renewable resources such as wind and geothermal power, and to serve consumers better including those on tribal lands. Solving these problems, however, does not require the reallocation of authority over federal lands proposed in the draft bill.

The draft bill's proposal to allow a state to trump decisions by federal land managers regarding the siting of transmission facilities on federal lands would have severe consequences. *See* Title VII, § 7012 (adding Section 216(j) to the Federal Power Act). The federal public lands are owned by all Americans and are to be managed to benefit us all. The federal government, not an individual state, is in the best position to manage these lands in the national interest. These lands have tremendous value for a variety of purposes. Section 216(j) would override federal protections that

ensure a balancing of competing interests in deciding how to use the public's land and, most importantly, give the public a say in the decision.

Such drastic steps are unnecessary to ensure adequate, affordable and reliable electricity. In fact, efforts are already underway among utilities, states and the federal government to increase the efficiency of siting transmission facilities. For example, just last summer the Western Governors Association signed a protocol with four federal agencies designed to streamline siting decisions. Legislative changes are not necessary to make this work. Section 216(j) of the draft bill will result in more conflict and controversy, not less.

A. VALUE OF THE PUBLIC LANDS/FEDERAL RESPONSIBILITY TO MANAGE FOR BENEFIT OF ALL AMERICANS

The Federal Land Policy and Management Act of 1976 ("FLPMA") declared that "the public lands be retained in Federal ownership." 43 U.S.C. § 1701(a)(1). After years of disposal of federal land to the states and private interests, Congress recognized that the remaining federal lands were of tremendous value and should not be transferred except under specific, limited circumstances. FLPMA was designed to ensure that taxpayers receive fair market value for the use of public resources and that these resources are managed in a way that protects their scenic, historical, ecological, environmental, and archeological values. 43 U.S.C. § 1701(a)(8) & (9).

The federal estate contains 630 million acres.[1] The vast majority of the federal public lands are managed for multiple use by the U.S. Forest Service and the Bureau of Land Management ("BLM").[2] They provide boundless recreational opportunities, sustain diverse ecosystems and species, and preserve historic and cultural resources that help shape our American identity. The overwhelming majority of Americans participate in outdoor recreational activities,[3] and increasingly they are heading for the public lands. In 2001, Forest Service lands received over 214 million visits.[4] The total number of visits to BLM lands was over 60 million.[5] These recreational resources in turn provide major economic benefits to businesses, including recreation-based businesses and communities adjacent to the public lands.

FLPMA explicitly provides for rights of way across public lands, including national monuments, for transmission facilities. 43 U.S.C. § 1761(a)(4); see also 43 C.F.R. Part 2800 (BLM right of way regulations); 36 C.F.R. Part 251, Subpart B (Forest Service right of way regulations). But it does so in a way intended to protect the many other values of these lands and to give the public a say in how their lands are used. It is the federal government, not an individual state, that can determine the best way to manage these lands in the national interest, that is to benefit us all.

Section 216(j) of the draft bill abandons this responsibility. The provision transfers to the states the authority given by Congress to the Secretary of Interior (for BLM lands) and the Secretary of Agriculture (for Forest Service lands) to determine when rights of way should be granted across federal lands. Nothing in the provision requires the state to balance competing interests. The purpose of the provision is get projects approved. Section 216(j) provides that a state can trump the decision of federal land managers where a "right-of-way has not been issued within one year after the date on which [an] application was submitted." Sec. 216(j)(1). The provision creates a one-way street. States get to trump the failure of federal land managers to approve a right of way. No provision exists for state action where state interests oppose the proposed right of way. Even if a state were to try to determine what was in the national interest, it simply is not in a position to do so. This is precisely why these lands have been retained in federal ownership.

B. PROMOTING PUBLIC INVOLVEMENT

Section 216(j) would remove the public participation guarantees provided by federal law. The provision would remove decisions about how federal lands are used from federal decision-makers. The provision allows the state to make a right of way decision in place of the Secretary of Interior or Secretary of Agriculture. Federal requirements that apply to federal decisions would arguably not apply to the state's decision.

---

[1] U.S. Department of the Interior, *Public Land Statistics* (2000), available at www.blm.gov/natacq/pls00/.

[2] *Id.*

[3] *See, e.g.*, Bureau of Land Management, Recreation 2000: A Strategic Plan, at 12.

[4] U.S. Department of Agriculture, *National Forest Service Use Monitoring National and Regional Project Results* (September 2002), available at http://www.fs.fed.us/recreation/programs/nvum/reports/year2/2002__national__report__final.htm.

[5] U.S. Department of the Interior, *Public Land Statistics* (2001), www.blm.gov/natacq/pls01.

Federal laws lay out a planning process for federal lands. FLPMA governs lands managed by the BLM. 43 U.S.C. § 1712(a). The National Forest Management Act ("NFMA") governs planning in the national forests. 6 U.S.C. § 1604. Although the details vary between agencies, the basic process is the same. First, federal agencies must write long-range plans that identify how areas of land will be managed. If these uses will cause significant environmental impacts, agencies must also write environmental impact statements evaluating the impacts and considering alternatives. National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332(C). Based on these written land use plans, federal land managers then make decisions about how individual pieces of land will be used—for preservation, recreation, or the siting of transmission facilities, for example.

FLPMA, NFMA and NEPA provide citizens the opportunity to lend their voice at each stage of the process. 43 U.S.C. § 1712(a) & (f) (land use plans under FLPMA must be written "with public involvement" including "adequate notice and opportunity to comment"); 16 U.S.C. § 1604(d) (NFMA requires "public participation in the development, review, and revision of land management plans"); 43 C.F.R. § 2802.4(d)(1), citing to NEPA's requirements for public involvement in authorizing right of way, see 40 C.F.R. 1503.1(a)(4); 36 C.F.R. § 251.54(g)(2)(ii). Citizens unhappy with the plans, or with specific decisions, can challenge them in hearings before the agency and in court. 5 U.S.C. §§ 702, 706 (provides right to challenge agency decisions in federal court that are arbitrary and capricious or not in accordance with the law); 43 C.F.R. § 2804.1 (providing for appeal of BLM right-of-way decisions to Interior Board of Land Appeals); 36 C.F.R. Part 251, Subpart C (providing for appeal of Forest Service special use decisions).

State requirements simply do not substitute for the loss of federal public participation requirements. State agencies do not provide citizens the same guarantees to participate that apply to federal agency decisions. Many of the processes for public involvement in state land decisions are informal, rather than formal ones required by law. In addition, the ability of citizens to challenge state agency decisions varies across states. Some states lack a formal administrative appeals process to provide citizens the right to challenge state land management decisions. Even where citizens have the right to go to state court to challenge state agency decisions, the public's ability to get a court to overturn an agency decision varies across states.

The attempt at a savings clause in the draft bill (Section 216(j)(2)) does not adequately preserve federal protections. The simple fact is that NEPA, as well as protections under the Endangered Species Act and the National Historic Preservation Act, apply to federal decisions. Once the decision has been removed from federal hands it is difficult to argue that these laws apply. Congress arguably does not have the authority to impose the requirements of NEPA and other federal protections on state decisions.

Even if Section 216(j)(2) did in fact preserve the application of NEPA and other federal protections to state decisions under 216(j)(1), the result would not be desirable from any perspective. Presumably, the federal land managers already completed or at least started a NEPA review. It makes little sense for the state to then conduct a separate review under NEPA once it takes over the right of way decision. Furthermore, one of the key elements of NEPA is the consideration of alternatives to the proposed decision including a no action alternative. 42 U.S.C. § 4332(C)(iii); 40 C.F.R. § 1502.14. Yet, this portion of NEPA would be rendered meaningless under Section 216(j). The only reason that a state would step in and trump the federal land manager's decision is to approve a right of way where it was rejected, not acted on or conditioned in a way that makes the proposed construction or modification "not economically feasible." Section 216(j)(1)(C). In these circumstances, there can be no meaningful consideration of alternatives nor any meaningful opportunity for members of the public opposed to the project to influence the decision.

C. ASSURING DEVELOPMENT IN ENVIRONMENTALLY RESPONSIBLE WAY

Section 216(j) would also circumvent the process created by federal law to ensure that development of public land resources, including for electric transmission facilities, is done in an environmentally responsible way. FLPMA allows for a variety of uses of the federal public lands, but directs that they be managed in "a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values." 43 U.S.C. § 1701(a)(8). NEPA sets up a process for the analysis of potential environmental impacts of a proposed federal decision, such as approval of a right of way for transmission lines. 42 U.S.C. § 4332(C). As part of this process alternatives to the proposed action are considered and ways to mitigate the adverse impacts are identified. 40 C.F.R. § 1502.14.

Other federal laws ensure that federal land managers assess the impacts of a proposed right of way on endangered and threatened species, as well as cultural resources. The Endangered Species Act requires federal land managers to consult with the U.S. Fish & Wildlife Service prior to approving an action that may affect an endangered or threatened species. 16 U.S.C. § 1536(a)(2). Likewise, the National Historic Preservation Act requires federal agencies analyze the impacts of their decisions on historic and cultural resources. 16 U.S.C. § 470. These requirements are not intended to prevent the siting of transmission facilities on public lands, but instead to ensure that the siting is done in a way that preserves other values of these lands.

As previously discussed, the draft bill's attempt at a savings clause does adequately preserve these federal protections. Once the decision becomes a state decision, requirements that govern federal decisions arguably would not apply. Furthermore, the direction of Section 216(j) is clear. Its goal is to get transmission facilities approved. The provision leaves no room for balancing competing interests or consideration of impacts on natural or cultural resources.

SECTION 216(J) IS UNNECESSARY TO PROVIDE AFFORDABLE, RELIABLE ENERGY

Cooperation and resources, not legislative changes, are what is needed to address bottlenecks in the nation's electricity grid. Federal land managers are the right officials to make decisions regarding the use of federal lands. There is little evidence that federal land managers prevent the siting of transmission facilities. Of the hundreds of rights of way applications BLM and the Forest Service receive each year, only a handful are denied. The existing regulations of both agencies require them to work with applicants to help develop proposals that can be approved. 43 C.F.R. § 2802.1(a); 36 C.F.R. § 251.54(e). The regulations also explicitly require consultation with state and local agencies. 43 C.F.R. § 2802.4(d)(3); 36 C.F.R. § 251.54(g)(2)(ii) & (iii).

Current efforts are in fact underway to enhance coordination and cooperation among utilities, states, and the federal government in addressing transmission siting proposals. In June 2002, the Western Governors Association signed a protocol with the U.S. Department of Interior, the U.S. Department of Agriculture, the U.S. Department of Energy and the Council on Environmental Quality governing the "Siting and Permitting of Electric Transmission Lines in the Western United States."[6] The purpose of the protocol is "to establish a framework that will enable affected states, local governments, federal agencies and tribal governments to participate in a systematic, coordinated, joint review process for siting and permitting of interstate transmission lines" in the West.[7]

In addition, the BLM has initiated an effort to identify priority corridors that once incorporated into land management plans will simplify the environmental review for transmission lines within these corridors. From the environmental perspective, permitting can proceed more quickly by expanding capacity along existing rights of way and avoiding environmentally sensitive areas such as roadless areas, critical habitat, and national monuments.

None of these efforts require the dramatic shift in management responsibilities over federal lands contained in Section 216(j) of the draft bill. Instead of promoting existing cooperative efforts, the draft bill promotes conflict and controversy. It is important to come back to the fundamental point that the provision deals with *federal* lands. As mentioned already, the federal government, not an individual state, is in the best position to determine whether a right of way application is in the national interest. It is the federal government, not an individual state, that can best assure that *all* interested members of the public have a say in the decision, including those who treasure the scenic and recreational values of the lands involved but may not reside in the state in which the proposed project would be located.

In fact, the draft bill seems to have things all mixed up. At the same time the bill gives states decision-making authority over federal lands, it gives the Federal Energy Regulatory Commission the authority to make decisions on state lands. *See* Title VII, § 7012 (adding Sections 216(b)-(d) to the Federal Power Act). Even the most ardent advocate of state rights is unlikely to support such divesture of authority from the entity most entitled to make decisions about land use—the owner of the property.

Thank you again for the opportunity to testify on these important issues.

---

[6] Available on the Western Governors Association website at http://www.westgov.org/wieb/electric/Transmission%20Protocol/wtp__page.htm.

[7] *Id.*

Mr. SHIMKUS [presiding]. Thank you. And, Ms. Buccino, let me ask you one question. All Federal lands are not national forest or national parks; is that correct?

Ms. BUCCINO. That is correct.

Mr. SHIMKUS. Thank you. I would like to—Ms. Tezak, do you agree with the State commissioner's characterization that we had in the first panel of the Supreme Court decision and the Cirrus cost/benefit study?

Ms. TEZAK. No. I will take them in order. I based my analysis on my reading of the Supreme Court decision, which is something that is freely available to any member of the investment public. And I would say that the statutory text, I am quoting now, "This statutory text thus and unambiguously authorizes FERC to assert jurisdiction over two separate activities—transmission and selling. It is true that FERC's jurisdiction over the sale of power has been specifically confined to the wholesale market. However, FERC's jurisdiction over electricity transmissions contains no such limitation. Because the Federal Power Act authorizes FERC's jurisdiction over interstate transmissions without regard to whether the transmissions are sold to a reseller or directly to a customer, FERC's exercise of this power is valid." And I would say that based on the questions you asked earlier, specifically Mr. Shimkus, you got nothing but affirmation from the representatives in the previous panel of the relevance of the Interstate Commerce Clause.

Second, on the Cirrus study, when it was presented at the National Association of Regulatory Utility Commissioners' annual meeting in November, I was present and I asked the gentleman from Charles River Associates who prepared that study to help me understand why $2.8 billion of transmission is required in the Southeast. And I asked him whether or not that assumed any retirements or any rationalization of the alleged over build capacity in the Southeast. The answer to that question in front of about 100 people was no. My follow-up question to him then was, is it possible that the benefits that you have defined in this study then may be moderately expressed or modestly expressed, they could be higher? His answer to that was, "Why, yes."

Mr. SHIMKUS. Thank you. Let me also follow up with you on—there was obviously the debate on repeal of PUHCA. How would you feel that that would affect capital markets, especially with the expansion of the opportunity for the transmission grid?

Ms. TEZAK. Eighteen months ago I think that I could tell you that every one of my clients would have said unequivocally it would facilitate merger and acquisition activity. However, the damage that has been sustained on balance sheets probably makes that reality less feasible than it would have 18 months ago. Generally, I would say Wall Street looks favorably on the repeal of PUHCA, and I would also tell you that Wall Street is also looking very carefully at taking its own measures to limit the ability of companies to use regulated assets as security for unregulated benefits, regulated activities. In fact, Kara Silver from MBIA testified at both the Senate hearing and at FERC that they are taking steps as bond holders to tighten up those from their side. So I believe that you can repeal PUHCA and not be absent completely of addressing the concerns that people have regarding rate based.

Mr. SHIMKUS. Thank you. Mr. Kanner, I appreciate your comments. In the draft bill, have you looked and are you satisfied with the transparency provisions that are listed there?

Mr. KANNER. I think the transparency provisions are an improvement over last year where in conference the language had statistical information. I think it could be clarified in terms of making clear that it is volumetric as well as price information so that by price we don't end up with the same sort of averaging that statistical information would be problematic on. But I think there is also an important absence, which is price data on gas prices. As we have seen, everyone from the CSTC to GAO, to the investment community, to participants in the market have said we cannot rely on the submission of gas data to these data clearinghouses, and we need to have a standardized systemic and honest system.

Mr. SHIMKUS. Thank you. I want to get this last one in. Mr. Gent, based upon my line of constitutional questions earlier, isn't—talk to me about the constitutional aspect of the delegation of the Federal Regulatory Authority to a private organization, and has that been done before and where, and how does that fall in line with this whole constitutional debate?

Mr. GENT. The delegation of authority from the FERC to the organization presumably authorized by this legislation is enabled by Congress. There are other organizations that do this. I think the security exchanges, NASDAQ, NASD and others operate under similar type arrangements. We model this organization after NASD.

Mr. SHIMKUS. Thank you. My time is up. I would like now to turn to the ranking member, Mr. Boucher, for 5 minutes.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman, and thanks also to the witnesses for sharing their expertise with us this afternoon. Mr. Norlander, let me begin with you. We have heard calls from some members of this subcommittee and some externally interested parties also for a repeal of the FERC's merger review authority. The administration, I would note, does not support removing FERC review of mergers, and in fact is arguing that the FERC's jurisdiction to do that be enhanced and that it have even a greater review of mergers. That also happens to be my position.

You have testified to the general subject during the course of your commentary, and so let me get you to explain to us, if you will, why with the Department of Justice reviewing mergers from an antitrust perspective the review of that single Federal agency is not sufficient in order to protect the range of interests that Federal review is designed to protect? In other words, with the DOJ reviewing mergers, why is it necessary that we also have another review independently taking place at the FERC?

Mr. NORLANDER. I think that one reason has to do with the unique nature of electricity. It can't be stored, it is not fungible in the same way that corn flakes or other commodities, other substances might be. And so therefore the expertise of FERC in looking to see whether markets are going to be affected by a merger should be retained at the FERC.

Second, I think that the FERC even now is changing its understanding of what it means to exercise market power in the markets that have been created. It has changed its standards for market

power assessments. It has an interim standard now that is quite different from the sort of basic market share approach, which is like if no one has more than 20 percent or so, you have got 5 or more participants, everything should kind of get the green light at the other agencies. And now we know, both from experience in every one of these markets, and we know from laboratory research on trying to model behavior of people in these markets, in game simulation, and we know from the mathematicians that these types of markets encourage a Nash Equilibrium among the participants, that playing by the rules, no collusion, none of the traditional kinds of antitrust behavior. Many more participants may be needed to have a market—to create a market that doesn't have market power.

So as we go on—as FERC is spending $13 billion to increase the size of these geographic markets, if the number of sellers condense, we will have merged away any gains that were achieved by expansion.

Mr. BOUCHER. Okay. Thank you, Mr. Norlander. Ms. Tezak, let me ask you, does Wall Street have an opinion about whether or not FERC remains in a position to review mergers?

Ms. TEZAK. Not specifically. I would say that on the topic of mergers——

Mr. BOUCHER. Well, it wouldn't do any harm to the——

Ms. TEZAK. Right.

Mr. BOUCHER. [continuing] efforts to attract capital or to carry out effective mergers where they are appropriate if FERC reviews these.

Ms. TEZAK. I have never had a discussion with a single client regarding Section 203 merger authority. PUHCA is their focus.

Mr. BOUCHER. Okay. Thank you. Mr. Kanner, let me ask you this: You have suggested in your statement that there might be some amendments to the Public Utility Holding Company Act that you would find to be appropriate, and you are recommending to this committee perhaps targeted amendments to PUHCA rather than wholesale repeal. What are the targeted amendments you would suggest?

Mr. KANNER. Congressman, actually what my testimony says is if there are specific impediments that PUHCA poses on needed investment or needed activities, then we should look at those. In our review of the Holding Company Act, there are really—if you take both the statutory exemptions that have been created and the SEC's rules, there are really two types of activities in which PUHCA may be an inhibitor. One is the acquisition of one utility by another, and I would question whether that provides competitive benefits or not. And the second is investments in transmission, certain types of investments in transmission if a utility on one coast wanted to create a subsidiary to build transmission to relieve congestion on the west coast.

Congress, in the past, in 1992 and 1996, had targeted amendments to the Holding Company Act designed to address specific concerns. If there is a specific concern, we are more than happy to entertain targeted fixes, making sure that it is structured in a way that provides consumer benefits.

Mr. BOUCHER. Thank you. Mr. Chairman, with your permission I just have one additional brief question I would like to propound, and it shall be brief. Ms. Buccino, let me ask you if anything is happening within the purview of your study that would serve to facilitate the siting of transmission lines? I think you mentioned some activity among the western Governors. Could you take just a minute, and I mean really just 1 minute, to tell us about that?

Ms. BUCCINO. Yes. I did mention the protocol that was signed just last summer by the Western Governors Association and the U.S. Department of Interior, the Department of Agriculture, the U.S. Department of Energy and the Council on Environmental Quality which is designed specifically to coordinate the various reviews and accelerate the siting of transmission facilities on public lands. The Bureau of Land Management is also moving forward to identify priority corridors and incorporate those within the land use plans and therefore streamline and coordinate the environmental review that is necessary. So I think it is very important to recognize that these efforts are moving forward. Legislative changes are not necessary, and in fact these efforts should be given a chance before these drastic changes are made.

I would, if I could, just like to quickly respond to a couple of comments that were made in the last panel on this issue of siting transmission facilities, because Mr. Walden referred to the bill containing and MOU process, and as I read the bill, that is not what it does, it is much more than that. These exercises, like the WGA protocol, is an MOU approach. But what the bill does is drastically change the process that Congress put in place a while ago to manage these lands and to balance competing interests and to include the public. And those drastic steps are not necessary to address these problems, the siting problems.

Mr. BOUCHER. Thank you very much. Thank you, Mr. Chairman.

Mr. BARTON Thank you, Mr. Boucher. The Chair recognizes himself for the last 5-minute question period. Ms. Tezak, the coop representative on the earlier panel, and several others, have expressed displeasure about incentive rates for transmission lines, even though the incentive language in the current draft simply makes it discretionary, it is not mandatory. And it would only be in the areas that the FERC rules are highly congested areas or areas that it has been difficult to raise the private capital, to get the new line built. What is your industry's view of incentive rates? Do you think that would encourage more transmission which over time the more capacity you have, the lower the unit cost to use that capacity should be if the market is truly functional, or do you agree with the coops that the incentive language in the current draft would be a negative?

Ms. TEZAK. I believe that the reason a lot of people are concerned about the negative impact of increased transmission rates under an incentive schedule is because if remains in the minds of many very clear whether or not the generation offsets that are promised—the generation savings that should be offsetting those expenditures are being realized. And so I think for that perspective, they do have a valid point.

What I would say that is investors feel that the playing field for transmission extremely, extremely slanted against them. And a lot

of that has to do with the ambiguity of the jurisdiction over transmission and whether an expenditure is defined as being related to wholesale or being related to retail. Retail transmission is relatively easy to site and recover. Wholesale transmission is not, and I believe that all we view this as is an attempt to compensate for the fact that the jurisdictional issue has not been revolved, that wholesale ratemaking has not been fully refined, and it is a way of attempting to keep the ball rolling while those disadvantages are in place.

Mr. BARTON. But in general you think your group would be supportive.

Ms. TEZAK. Absolutely.

Mr. BARTON. Okay. what is your electricity analyst view this concept of economic dispatch where the generation that is the most economic and the least cost to develop gets some sort of a priority to be used first before you go to the less economically, which tends to be the older, plants that have been in the—basically, in the baseload for a number of years. Does your group have a view of this concept of economic dispatch?

Ms. TEZAK. Bring it on.

Mr. BARTON. Oh, you are for it.

Ms. TEZAK. Absolutely, because not only is there the opportunity for a variety of generation owners to compete to provide the most efficient power, but the spill-off effects into the economy to us seem rather compelling because it makes it incrementally less expensive for every consumer, whether they be retail or industrial, to consume energy, and that has got to be good for the economy.

Mr. BARTON. Well, what would your answer have been to the gentleman from North Carolina, the Honorable Mr. Ervin, when I was asking him some questions he seemed to indicate that at least within North Carolina either they didn't need it or it could be utilized now even though North Carolina is a closed State. How you have responded to him when I was asking him about that?

Ms. TEZAK. Well, my question, first, would be is what is the cost of the generation that is being dispatched? Because what is not clear to consumers that are in—not always clear to vertically integrated utility customers is that there is cheaper generation available, and particularly in the cases of much older generation that has been fully recovered in rate base already, there may be an opportunity to substitute away from a plant that is in rate base, eligible for retirement and use it for something else.

Mr. BARTON. Mr. Norlander, I think you wanted to make a comment.

Mr. NORLANDER. Just briefly. New York before we had our utilities put there divested generation, we did have efficient dispatch through a tight power pool. And so the plants would run in the order of their cost. Today, we have a situation where plants are dispatched based on the bidding behavior in the stock markets. And I think that has actually led to situations where we have coal plants with hockey stick bidding where they break the plant up into 10 or 20 segments, and they bid some of it based on what they think tomorrow's real-time market will be. And that is evidenced in an arbitration decision.

Mr. BARTON. But you have a bidding system, which——

Mr. NORLANDER. Yes.

Mr. BARTON. [continuing] should, by definition, if it is a true auction market, get the most——

Mr. NORLANDER. That is the problem. That system—if you wanted a marginal cost dispatch, then they should bid in their marginal cost, but instead they are bidding what they think they can get. and that kind of gaining behavior is the kind of market analysis that FERC needs to get into.

Mr. BARTON. Mr. Kanner, did you want to make a comment?

Mr. KANNER. I just wanted to add on, Mr. Chairman, that in a constrained system, you don't necessarily have bidding reflecting cost but rather what price you think you can get.

Mr. BARTON. Well, I agree. In a constrained system, obviously it is a demand price as opposed to a cost base price.

Mr. NORLANDER. Right. And, unfortunately, there are more constraints throughout the country than I think is generally realized, so there are more opportunities——

Mr. BARTON. Which is the whole purpose of our bill, to minimize some of those constraints. I mean that is why we are here—less constraint, more capacity.

Mr. NORLANDER. If I might, Congressman, my——

Mr. BARTON. My time is expired, so I am going to have—but, sure.

Mr. NORLANDER. My suggestion to Mr. Ervin afterwards was that he should have suggested to you that he might have looked to Texas for some——

Mr. BARTON. Oh. I don't think he would—and he is in the audience so we are not talking behind his back—or he was in the audience earlier. He is right—he is in the front row in the audience. And he will have a chance on the record if he wants to put in written rebuttal to what we are talking about, we will give you that.

Well, I am going to let this panel go. You all have been a delight, and—oh, I am sorry, we have a member who I did not—Mr. Shimkus has already asked questions. Yes. All right. Then we are going to release this panel and go to our third and last panel. But thank you and appreciate your testimony.

If I could have our third panel seat themselves, the audience resituate. While we are getting resituated, I am going to take a point of personal privilege. My cousin from Spigotville, Texas and his wife and son are here, Lee Ray Bice and Regina and their son, and they are visiting Washington, DC, I think, for the first time and wanted to see how friendly we do these hearings and how everyone loves each other, so we are glad to have them here. She is in the green, he is in the green and he is in the blue coat there in the front row.

Okay. We are going to have our panel on ethanol and MTBE and ETBE. We have still got a couple of people that are not here, but we are going to start with those that are here. This is our last panel of the day. We have Mr. Edward Murphy, who is the general manager for Downstream Activities with the American Petroleum Institute. We have Mr. Bob Slaughter, who is the president of the National Petrochemical & Refiners Association. We have Mr. Bill Douglass, who is CEO of Douglass Distributing Company, who is here on behalf of the National Association of Convenience Stores

and the Society of Independent Gasoline Marketers of America. We have Mr. Blakeman Early, who is an environmental consultant for the American Lung Association, who is here on behalf of the Northeast States for Coordinated Air Use Management. We have Mr. Erik Olson, who is a senior attorney for the Natural Resources Defense Council. And we have places if they attend for Mr. Bob Dinneen, who is president and CEO of Renewable Fuels Association, and Mr. Scott Segal, who is the counsel for the Oxygenated Fuel Association.

We are going to start with you, Mr. Murphy. Your testimony is in the record in its entirety, and we would welcome you to summarize it in 5 minutes. And you need to push that button to turn the microphone on.

STATEMENTS OF EDWARD MURPHY, GENERAL MANAGER, DOWNSTREAM, AMERICAN PETROLEUM INSTITUTE; BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION; BILL DOUGLASS, CEO, DOUGLASS DISTRIBUTING COMPANY, ON BEHALF OF THE NATIONAL ASSOCIATION OF CONVENIENCE STORES AND THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA; A. BLAKEMAN EARLY, ENVIRONMENTAL CONSULTANT, AMERICAN LUNG ASSOCIATION, ON BEHALF OF NORTHEAST STATES FOR COORDINATED AIR USE MANAGEMENT; ERIK D. OLSON, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL; BOB DINNEEN, PRESIDENT AND CEO, RENEWABLE FUELS ASSOCIATION; AND SCOTT M. SEGAL, COUNSEL, OXYGENATED FUELS ASSOCIATION

Mr. MURPHY. Thank you very much, Mr. Chairman and members of the subcommittee. My name is Edward Murphy, and I am the downstream general manager for the American Petroleum Institute, a trade association representing more than 400 companies from all sectors of the oil and natural gas industry.

API appreciates the opportunity to address the fuels supply problems facing U.S. providers and consumers. Time is of the essence because individual State MTBE bans will start to take effect soon, with Connecticut's starting in October and New York's and California's beginning in January of next year. Differing start dates and gasoline requirements from various states, combined with a Federal oxygen content requirement for reformulated gasoline, will complicate an already tight fuel supply system and increase the potential for disruptions in the supply and distribution system.

As Congress considers a comprehensive national energy bill, we urge it to address problems with fuel supplies that have plagued the petroleum industry and energy consumers over the last 8 years. Those problems were underscored in recent days by the decision of the New York Mercantile Exchange to suspend gasoline futures trading beginning in 2004 due to uncoordinated State MTBE bans. The New York Mercantile Exchange decision can be seen as a shot across the bow regarding the worsening fuel problems we will face in the future if Congress fails to act.

We believe Congress should repeal the oxygen content requirement for RFG that is in the Clean Air Act and require a national phasedown of MTBE. As part of a package that meet these objec-

tives, we also support a renewable fuels standard that phases up to 5 billion gallons over several years nationally, with an averaging and credit and trading program to allow the use of renewable fuels where most feasible and cost-effective. In addition, we support provisions that would protect and enhance the environmental benefits already achieved from RFG.

Finally, we support limited liability protection that recognizes that when Congress mandates the use of fuel components, it is quite reasonable to disallow defective product claims for introducing that product into commerce. This limited liability relief would not affect liabilities for cleanup costs, and the legal regime for cleanup of hazardous spills would be left in full force.

These steps are a much better solution than the alternative, which is continued State MTBE bans and further aggravation of the already troublesome situation of a patchwork of fuels requirements across the country. A solution that relies on state-by-state MTBE bans to fix the problem is not efficient and will exacerbate supply problems that are likely to arise out of uncoordinated and disjointed State requirements. Unique State fuel requirements isolate affected markets and in the event of a supply disruption, could cause shortages and price volatility, as experienced in 2 of the last 4 years in Chicago and Milwaukee. Sixteen States already have enacted MTBE bans or caps and additional States are considering bans.

The carefully crafted provisions I have discussed are supported by an historic coalition, including API, numerous farm and ethanol interests, Northeast State air quality officials and environmental interests. They offer carefully considered solutions to the fuels problems that have challenged fuel providers and burdened American consumers. They protect important environmental benefits achieved by reformulated gasoline. API and its member companies stand ready to work with Members of Congress to help ensure expeditious enactment of this urgently needed legislation.

In short, the members of API are asking Congress to change the law to allow us to produce the clean, affordable, environmentally friendly supplies of gasoline that consumers want and deserve to have. Thank you.

[The prepared statement of Edward Murphy follows:]

PREPARED STATEMENT OF EDWARD MURPHY ON BEHALF OF THE AMERICAN PETROLEUM INSTITUTE

Thank you, Mr. Chairman and members of the Subcommittee. My name is Edward Murphy and I am the Downstream General Manager for the American Petroleum Institute (API), a trade association representing more than 400 companies from all sectors of the oil and natural gas industry.

API appreciates this opportunity to address the fuels supply problems facing U.S. fuel providers and consumers. Time is of the essence because individual state MTBE bans will start to take effect soon, with Connecticut's starting in October and New York's and California's bans beginning in January 2004. Differing start dates and gasoline requirements from various states, combined with a federal oxygen content requirement for reformulated gasoline (RFG), will complicate an already tight fuels system and increase the potential for disruptions in the supply and distribution system.

As Congress considers a comprehensive national energy bill, we urge them to address problems with fuel supplies that have plagued the petroleum industry and energy consumers over the last eight years. We believe Congress should repeal the oxygen content requirement for reformulated gasoline that is in the Clean Air Act and require a national phasedown of MTBE. As part of a package that meets these ob-

jectives, we also support a renewable fuels standard that phases up to 5 billion gallons over several years nationally, with an averaging and credit trading program to allow the use of renewable fuels where most feasible and cost-effective. In addition, we support provisions that would protect and enhance the environmental benefits already achieved from reformulated gasoline. Finally, we support limited liability protection that recognizes that when Congress mandates the use of fuels components, it is quite reasonable to disallow defective product claims for introducing that product into commerce. This limited liability relief would not affect liabilities for cleanup costs and the legal regime for cleanup of hazardous spills would be left in full force.

Repeal of the oxygen requirement and a significant reduction in the use of MTBE were two of the key recommendations of the U.S. Environmental Protection Agency's 1999-2000 Blue Ribbon Panel on Oxygenates in Gasoline. The report is also important because it recognizes that refiners today can provide clean-burning reformulated gasoline without the oxygen requirement. Three years have passed since those recommendations were made.

These steps are a much better solution than the alternative—which is continued state MTBE bans and further aggravation of the already-troublesome situation of a patchwork of fuels requirements across the country. A solution that relies on state-by-state MTBE bans to fix the problem is not efficient and will exacerbate supply problems that are likely to arise out of uncoordinated and disjointed state requirements. Unique state fuel requirements isolate affected markets and, in the event of a supply disruption, could cause shortages and price volatility, as experienced in two of the last four years in Chicago and Milwaukee. Sixteen states already have enacted MTBE bans or caps and additional states are considering bans.

In addition, there needs to be recognition that even without federal legislation, ethanol is going to be in our gasoline system in increased amounts—at a minimum to fulfill the federal oxygen content requirement for RFG. But the current rules allow little flexibility in how, when, and where ethanol would be used. We need a federal solution that phases down MTBE in a uniform manner and allows the use of renewable fuels where it makes the most economic sense.

API believes the provisions I have mentioned would provide a solution to the serious problems affecting fuels supplies vital to the motoring public. They would ensure needed flexibility in our fuels policies. They would maintain stringent air quality requirements. And they would serve the best interests of American consumers.

Let me briefly review the situation we face: In 1990, Congress amended the Clean Air Act to require the use of RFG in areas with the worst ozone pollution. Congress decided that RFG had to meet certain emissions performance standards but also had to include a specific amount of oxygen. The two most widely used oxygenates at the time were MTBE and ethanol. Most of the RFG oxygenate demand was on the coasts, where ethanol use faced significant economic, transportation, and handling challenges relative to MTBE. As a result, as Congress full well expected, MTBE became the most commonly used oxygenate in areas near the coast. Ethanol became the oxygenate of choice in the Midwest due to favorable economics and proximity to ethanol supply. However, when gasoline was spilled or leaked and MTBE came into contact with water supplies, odor and taste issues arose with even very small concentrations of MTBE.

Many state governments reacted by banning the use of MTBE. Unfortunately, there is considerable variation in the start dates and requirements for these laws. For example, Connecticut's ban starts on October 1, 2003, while neighboring New York's starts on January 1, 2004. Some allow incidental amounts of MTBE to remain, while others do not. Differing state gasoline requirements will complicate and increase the likelihood of disruptions in the supply/distribution system; this will place considerable stress on the efficiency and, therefore, the reliability of the gasoline distribution system—*unless* federal legislative changes are made to the fuels provisions of the Clean Air Act.

In the absence of federal legislation, consumers will be subject to the costs of uncoordinated state actions. Individual states are restricting the use of MTBE, but they cannot change the federal RFG oxygen content requirement. That requirement is unnecessary, uneconomical and inflexible. It requires the use of an oxygenate in each gallon of gasoline in RFG areas. It is driving New Hampshire, for example, to opt-out of the federal RFG program and try to impose a state oxy-flexible RFG program, which could add yet another boutique fuel to the system if they are successful. Maintaining the status quo—with the federal RFG oxygen requirement in place and states continuing to ban MTBE—will require using ethanol in RFG areas where it may not be cost-effective. Alternatively, other states may pursue solutions that further fragment the market in new and different ways.

Currently, most of the RFG is required on the east and west coasts, yet ethanol is predominantly manufactured in the Midwest. As additional state MTBE bans start to take effect, RFG markets will, by default, need to use ethanol in each and every gallon of RFG in order to meet the federal oxygen content requirement. The Connecticut, California and New York MTBE bans alone are expected to result in ethanol demand in those states of about 1.1 billion gallons in 2004. There are no assurances that the full extent of the infrastructure needed to transport the added amount of ethanol will be in place in time to assure a smooth transition. As states get closer to the implementation date for their fuel programs, the greater the temptation to change the date rather than deal with the uncertainty. California has already delayed its ban once. Such a changeable environment does not make the investment decision process easier. A federal solution would remove much of the uncertainty that exists now.

Individual state bans have the effect of balkanizing the fuels markets, requiring that fuels with different characteristics be moved through the limited distribution system. With more types of fuels comes more complexity and less flexibility as the fuels used under one set of requirements cannot be used to supply an area with other requirements. This is a problem where adjacent states require different grades. It is also harder to ensure that gasoline with MTBE does not intermingle with other gasoline volumes since all gasoline is moved via the same pipelines.

These factors all argue for a national phasedown of MTBE. In order for such a phasedown to have the least impact on supply, it needs to be done over a four-year timeframe.

While oxygenates are not necessary to make clean-burning fuels, there is a public desire to increase the use of renewable fuels, such as ethanol. We believe this goal and that of a flexible gasoline distribution system can be met by a repeal of the federal oxygen requirement, a uniform nationwide phasedown of MTBE, and a renewable fuels standard rising to 5 billion gallons over several years. However, for the renewable fuels standard to function effectively, it is absolutely critical that refiners be allowed to freely buy and sell credits for renewable fuels under a national average and credit-trading program. That would allow for flexible and economical use of renewable fuels.

Let me emphasize that the cost of an approach that includes a federal phasedown of MTBE, repeals the federal RFG oxygen content requirement and includes a renewable fuels standard with a flexible national averaging, banking and trading program, would be less than maintaining the status quo of state MTBE bans and maintaining the federal RFG oxygen requirement. A study by the U.S. Department of Energy (DOE) revealed that the cost of the renewable fuels standard would be minimal, between 0.5 and 1.0 cents per gallon and likely less with an effective banking and trading system. Importantly, a state-of-the-art study in 2002 by MathPro, Inc., a leading economic analysis firm, concluded that replacing the 2 percent oxygen requirement with the renewable fuels standard would be less costly than the status quo outcome of continued state MTBE bans and continuation of the federal RFG oxygen requirement.

To conclude: If Congress fails to enact the proposed legislation, consumers are going to face the increasing costs of uncoordinated state MTBE bans—leading to increased strains on the fuel distribution system. While individual states are restricting use of MTBE, they cannot change the inflexible federal RFG oxygen requirement. Maintaining the status quo of the federal oxygen requirement and state MTBE bans will force the use of large volumes of ethanol in a very inflexible and unnecessarily costly fashion—and it could severely burden, if not disrupt, fuels distribution and supply.

The carefully crafted provisions I have discussed, as part of a package that meets our objectives, are supported by an historic coalition including API, numerous farm and ethanol interests, Northeast state air quality officials and environmental interests. They offer carefully considered solutions to the fuels problems that have challenged fuel providers and burdened American consumers. They protect important environmental benefits achieved by reformulated gasoline. API and its member companies stand ready to work with members of Congress to help ensure expeditious enactment of this urgently needed legislation.

Mr. SHIMKUS [presiding]. Thank you, Mr. Murphy. I will now turn to Mr. Bob Slaughter, president of the National Petrochemical & Refiners Association. It is good to have you here, and you are recognized for 5 minutes.

STATEMENT OF BOB SLAUGHTER

Mr. SLAUGHTER. Thank you, Ms. Shimkus. NPRA thanks the subcommittee for the opportunity to offer recommendations on an updated national energy policy. NPRA is a national trade association with more than 450 members who own or operate most U.S. refineries and petrochemical manufacturing facilities. I am Bob Slaughter, NPRA's president.

NPRA favors a supply oriented national energy policy with the twin goals of energy supply and energy security. Our energy policy should also recognize the importance of a healthy and diverse domestic refining industry that produces most products consumed here in the United State. NPRA recommends that the subcommittee reaffirm many of the positions in last year's House bill or in the subsequent conference.

NPRA supports quick elimination of the 2 percent RFG oxygenation requirement. This will give refiners greater flexibility to manufacture and distribute this important environmental product in the most efficient and cost-effective manner and also allow refiners to respond to State and local concerns about MTBE without subjecting those areas to mandatory use of ethanol, which is inappropriate during the summer ozone season.

NPRA also urges the House to maintain its position in opposition to a Federal MTBE ban. EIA has pointed out, and we agree, that MTBE volumes and desirable blending attributes will hard to replace leading to potential gasoline supply problems. The States where most MTBE is used are already dealing with this matter. Several have already delayed or are expected to delay their target dates to limit MTBE use because of supply concerns. There is no reason why these few States cannot deal with this problem on their own. DOE and EPA can monitor the supply and environmental impacts with the oversight of this subcommittee.

NPRA strongly opposes a national ethanol mandate in gasoline because fuel mandates are inefficient, inflexible and costly policy mechanisms. Many NPRA members already use large quantities of ethanol in their gasolines. They, along with other industry experts and analysts, expect ethanol markets to increase substantially because of the shortage of available gasoline blend stocks. Thus, there is no need to impose a national ethanol mandate on gasoline consumers to expand the ethanol market. A mandate will stimulate only extra ethanol usage that is economically inefficient, and it will increase the cost of ethanol that would have been used in gasoline without the mandate.

One size does not fit all in diverse America. There is no need to force gasoline consumers in places like Main, Massachusetts and Washington, DC, to name just a few, to either use ethanol in their gasoline or pay for the privilege of not doing so. This mandate really just creates a new tax on consumers who live in parts of the United States where ethanol use makes no sense. Some seem to view adoption of this unfair tax as a great victory and boon to those who will pay it. It would be of much greater benefit to repeal the 2 percent RFG requirement, reject the ethanol mandate and allow consumers to decide for themselves what gasoline is most appropriate for their region's supply profile and environmental requirements. The argument that the only alternative is a rigid eth-

anol mandate in all our RFG areas looks like a straw man to us. It would have been very controversial and hard to implement.

The Senate language even encouraged ethanol use in the summer months, which creates environmental and potential gasoline supply problems. As Mr. Douglass points out, that is another remarkably bad idea. The national ethanol mandate is already responsible for one miracle. It has succeeded in uniting the editorial pages of the New York Times, Wall Street Journal and Washington Post in firm opposition to the idea. And they are right, and we urge the subcommittee to reject an ethanol mandate.

NPRA supports the position taken by House conferees to extend product liability protection to MTBE. Those who comply with the government mandate should not be penalized and subjected to large punitive damages for obeying the law. We ask the committee to use care in evaluating the impact of boutique fuels programs. State and regions have varying fuel needs. Attempts to legislate fuel conformity could place additional investment burdens on refiners who are concentrating on sulfur reduction in gasoline and diesel. The impact on supply and distribution of any proposed new boutique fuel problems should be carefully considered, however.

The committee should also reject the Senate language liberalizing opt-in requirements to RFG due to continuing supply and investment concerns. The energy bill should also stimulate additional gas supply, natural gas supply as soon as possible. Natural gas usage has increased with little or not thought given to supply availability. This places traditional users of gas for feed stocks, like the domestic petrochemical industry and those employed in it, to great risk. Natural gas supply and demand must come back into balance.

In closing, we would urge you to maintain also the viability of combined heat and power cogeneration systems during the electricity market's transition to full competition. We thank you again for the opportunity, and we look forward to your questions.

[The prepared statement of Bob Slaughter follows:]

PREPARED STATEMENT OF BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the need for a comprehensive U.S. energy policy. My name is Bob Slaughter, and I am President of NPRA, the National Petrochemical & Refiners Association.

NPRA is a national trade association with about 450 members who own or operate virtually all U.S. refining capacity, as well as petrochemical manufacturers who operate similar manufacturing processes. NPRA's refining members include large integrated refiners, large independent refiners, and regional independents as well as small refiners.

Needed: A Focus on Increased Supply

To summarize our message today, NPRA urges policymakers in Congress and the Administration to encourage production of an abundant supply of petroleum products. A healthy and growing U.S. economy needs a steady secure and predictable supply of petroleum products, at reasonable cost. NPRA believes that federal policy in recent years has drifted away from the need to emphasize the supply side of the energy equation, and that an adequate energy supply has been largely taken for granted. We need to reinstitute an energy supply ethic in federal policy to provide both national energy security and maintain U.S. economic growth.

To summarize our energy policy recommendations, NPRA urges Congress to: repeal the 2% RFG oxygenation requirement; avoid a federal ban or mandatory phase-out of MTBE; reject calls for an ethanol mandate; extend product liability protection

to MTBE and ethanol; avoid unnecessary changes in fuel specifications; take steps to increase natural gas production and supply; and ensure the continued viability of combine heat and power systems in transitioning energy markets. We will discuss these recommendations in more detail in subsequent sections of this statement.

Domestic Refining is a Critical Asset, But a Challenging Business

We also ask policymakers to extend the concern over petroleum product supply to include the domestic refining industry. Total daily U.S. demand for petroleum products is approximately 20 million barrels, and only 17 million barrels of this is supplied by U.S refineries. The remaining 3 million barrels of demand is supplied from a combination of several sources: the Caribbean, South America, Canada, Europe, and more rarely, the Middle East and Asia.

No new refinery has been built in the United States since 1976, and it is unlikely that one will be built here in the foreseeable future, due to economic and political considerations, including siting costs, environmental requirements, industry profitability and public concerns.

U.S. refining capacity has increased somewhat in recent years, but it is increasingly hard to keep pace with growth in demand for petroleum products. As it is, refiners have increased capacity at existing sites to offset the impact of capacity lost elsewhere due to refinery closures.

It is becoming more difficult to add capacity at existing sites due to increasingly stringent environmental regulations and the challenging economic climate faced by the refining industry. EIA projects that U.S. refining capacity may increase by 2 million barrels per day by 2010; this would still not keep pace with the increase in U.S. demand for petroleum products, which EIA estimates will grow by 1.6% per year each year through 2025.

Product Imports Could Increase

This means that the United States, which has had a hard time adjusting to the fact that 60% of its crude is now imported, may have to become accustomed to another unpleasant fact: an increasing percentage of petroleum products such as gasoline, diesel, jet fuel and heating oil may also come from imports.

NPRA suggests that balanced and temperate actions, adopted now, can prevent excessive dependence upon foreign refined products. It seems clear that it is in the nation's best interest to manufacture a significant portion of the petroleum products we need here in domestic refineries. Reduced U.S. refining capacity clearly affects the amount of control we have over our supply of refined petroleum products and the flexibility of the supply system, particularly in times of stress or disruption.

Currently, about 95% of such products are manufactured in U.S. refineries. (U.S. exports of refined products to non-U.S. destinations are relatively insignificant.) This indicates that we are at a good time to adopt a policy to maintain a healthy and diverse U.S. refining industry. Although the precise percentage of refined product manufactured here will vary, adopting this policy now will help mitigate or prevent any abrupt slide in U.S. refining capacity and any adverse impact on the nation's energy security. And that policy is founded in good common sense.

Refiners Are Investing Billions to Improve the Environment

Refiners currently face a massive task of complying with four regulatory programs with significant investment requirements, all in the same timeframe. Refiners must shortly invest about $20 billion to sharply reduce the sulfur content of gasoline and both highway and much of off-road diesel. Refiners face additional investment requirements to deal with state and possible federal limitations on ether use, as well as compliance costs with Mobile Source Air Toxics reductions and other limitations. This does not include additional significant investments needed to comply with stationary source regulations affecting refineries.

On the horizon are other environmental requirements which will necessitate significant investment. They are: the challenges and cost of increased ethanol use, expected federal or state programs mandating changes in diesel fuel properties (cetane and aromatics content, lower gravity), and the potential for significant proliferation of new fuels caused by the need to comply with the new 8 hour ozone NAAQS. These factors will also significantly impact fuel manufacture and distribution.

Average Refining Returns Are Modest

Refining earnings have recently been more volatile than usual, but refining returns are generally quite modest when compared with other industries. The average return on investment in the industry is about 5%; this is about what investors could receive by investing in government bonds, with little or no risk. This relatively low level of return, which incorporates the cost of investments required to meet environ-

mental regulations, is one reason why domestic refinery capacity additions are modest and new facilities are unlikely to be constructed here.

A Key Government Advisory Panel Urged Prudent Regulation

The National Petroleum Council (NPC) issued a landmark report on the state of the refining industry in 2000. Given the limited return on investment in the industry and the crushing investment required for environmental regulations, the NPC urged policymakers to pay special attention to the timing and sequencing of any changes in product specifications. Failing such action, the report cautioned that adverse impacts on the industry with supply ramifications could result. As the above discussion shows, this warning has been widely disregarded.

Refiners Face Additional Facility Investment Requirements

In fact, release of the NPC report was roughly concurrent with an ill-considered "enforcement effort"' under the New Source Review Program, an effort to add additional billions of unanticipated cost to refiners just to stay in business. The enforcement initiative went forward despite near-universal agreement that the NSR program requirements were hopelessly confused and thus fertile ground for arbitrary enforcement. The refining industry has been struggling to resolve the enforcement issue on top of the many other challenges it faces. (Going forward, the recently effective final rule reforming NSR will add much-needed clarity and consistency to that program's requirements. That rule, and the current proposal to clarify the definition of routine maintenance under NSR, are rare instances in which policymakers heeded the NPC's warning.)

Refiners Will Meet the Challenges, But Some Facilities May Close

Petroleum refining has never been an industry for the faint of heart.

Domestic refiners will rise to meet the challenges of the current situation. They have demonstrated the ability to adapt to new challenges and keep the flow of products going to consumers across the nation. But certain economic realities cannot be ignored and they will impact the industry. Thus, refiners will, in most cases, make the investments necessary to comply with the environmental programs outlined above. In some cases, however, where refiners are unable to justify the costs of investment at some facilities, those facilities may close.

EIA summarizes the impact of past and future refinery closures:"Since 1987, about 1.6 million barrels per day of capacity has been closed. This represents almost 10% of today's capacity of 16.8 million barrels per calendar day . . . The United States still has 1.8 million barrels of capacity under 70 MB/CD (million barrels per calendar day) in place, and closures are expected to continue in future years. Our estimate is that closures will occur between now and 2007 at a rate of about 50-70 MB/CD per year . . . All refineries face investments . . . But smaller refiners may find their lack of economies of scale and the size of the investments required put them at a competitive disadvantage and would keep them from earning the returns needed to stay in business." (EIA, J. Shore, "Supply Impact of Losing MTBE & Using Ethanol," October 2002, p. 4.)

Reasonable Regulation Will Help Refiners Maintain Supply

As the Committee can plainly see, the domestic refining industry has major challenges ahead. NPRA's members ask that policymakers help by insisting that future fuel specification changes be carefully timed and sequenced consistent with the National Petroleum Council's recommendations. This should be adopted as part of the nation's energy policy revisions.

In addition, NPRA asks that an updated energy policy adopt the principle that in the case of new environmental initiatives the environmental objectives must be balanced with energy supply requirements. As explained above, the refining industry is in the process of redesigning much of the current fuel slate to obtain needed improvements in environmental performance. This trend will persist because consumers desire higher-quality and less-polluting fuels. And our members want to satisfy their customers. We ask only that the programs be well-designed, appropriately timed and cost-effective. The Committee can advance both the cause of cleaner fuels and preservation of the domestic refining industry by adopting this principle as part of the nation's energy policy.

Industry Diversity Benefits Consumers and the Nation

As demonstrated above, a healthy and diverse U.S. refining industry best serves the nation's interest in maintaining a secure supply of energy products. Rationalizing and balancing our nation's energy and environmental policies will protect a key American resource, the domestic refining industry. Given the challenges of the current and future refining environment, the nation is fortunate to retain a

refining industry that has many diverse and specialized participants. Some of the largest companies in the world maintain their positions in U.S. refining, while a vibrant set of entrepreneurial independents, among the largest in the industry, are increasing their prominence and importance in that industry. At the same time, regional and smaller independents reliably and conveniently serve regional or smaller niche markets. The U.S. refining industry has experienced difficult periods before, but the continuing diversity within the industry suggests that it has more than enough vitality to continue the industry's important work, especially with the help of a supply-oriented national energy policy.

The Market Situation Demonstrates a Need to Focus on Supply

NPRA believes that a new national energy policy initiative is long overdue. And our testimony thus far has shown why that new policy must be supply-oriented, and why it should view the need for a healthy and diverse domestic refining industry as a cornerstone of a pro-supply policy. We believe that any neutral observer would see the wisdom of these two policy elements, especially because current events in the crude oil and product markets demonstrate the need for them.

As this testimony is written, speculation about crude and product price and supply is a hot topic in the media. Once again, the supply of crude and products is stretched tight due to a confluence of external factors. In this case, those factors are: the consequences of a strike in Venezuela that crippled that country's export capability for months; weather much colder than normal in parts of the country where energy use is extremely sensitive to temperature; and uncertainty over crude oil supply in the immediate future due to the international situation involving Iraq.

The Energy Information Administration (EIA) Explains the Market

NPRA urges anyone interested in how we got where we are to take a look at EIA's webpage and read the articles "This Week in Petroleum" since the beginning of this year. You will find each step in the process explained, along with accurate predictions of subsequent developments.

In summary, according to EIA, these are the facts: the strike in Venezuela deprived the U.S., that country's largest customer, of a significant amount of crude imports for several weeks. This happened when crude oil inventories were at modest levels because OPEC lowered production quotas for most of 2002. That action had already limited the supply of crude.

Refiners tried to keep up refinery runs, and hence production, by utilizing the crude available in the market and by drawing on crude stocks. This delayed the impact of the Venezuelan disruption for a short period and helped meet strong product demand. That is a considerable achievement, given the extent of the crude supply impact and the difficult time of year in which it occurred. It is another example of the expertise and resourcefulness of the domestic refining industry.

As crude inventories fall, crude runs to refineries decrease because less crude is available. When crude runs are reduced, product output declines. This may require tapping product inventories to meet demand. The reduced product inventories then give rise to concerns about the sufficiency of gasoline, diesel and heating oil supplies. EIA refers to these possible occurrences as "Dominos" in its January 15 "This Week in Petroleum." Subsequent issues of that analysis described what happened as the domino scenario unfolded. We have attached the January 15 publication for your information.

Strong evidence such as this, and broad agreement that these are the key factors should answer questions about the genesis of today's crude and product supply situation. The fact that the nation is possibly on the brink of war in Iraq certainly offers an additional reason to believe that these are uncertain times when concern about crude availability and supply are understandably present. And those concerns have impacts in the marketplace.

Refiners are Working Hard to Supply Needed Products

Unfortunately, some of the media and a few policymakers have alleged that industry misconduct is somehow responsible for the current situation. This is not so now, just as it was proven not so in past supply disruptions and uncertainties. Refinery runs are close to where they were last year at this time, despite general agreement that crude supplies are tight. Slightly lower utilization rates this time of year are often due to planned maintenance when product demand is usually low. Refinery maintenance is often non-discretionary and scheduled well in advance of a largely inflexible date. The need for the refining industry to run at high rates of utilization, 92-93% on average, well above the 85% utilization rate considered full utilization in other industries, is an important reason why the time available for turnarounds is at a premium and hard to change. Another factor is that some maintenance cannot be postponed for safety reasons, which cannot be compromised.

This is also a difficult time of the year for refiners to face so many market uncertainties. They will soon implement the required changeover from winter to summer grade gasoline, which often requires a delicate balance as winter product is drawn down to make way for summer gasoline in time for the required certification date.

Many California refiners will experience the first seasonal turnaround involving CARB3 and California RFG with ethanol, due to the partial phase-out of MTBE in California this year. Please do not misunderstand this point. It is not clear that today's market conditions reflect problems involving seasonal changeovers. We mention this subject to remind non-industry observers that this time of year is an especially sensitive one if available crude supplies are stretched thin and demand remains high, which is the case at present.

The current situation is not totally dissimilar to the summer of 2000 and early summer of 2001, when supply problems surfaced due to market-related and operational difficulties beyond industry's control. Investigations conducted of industry behavior at that time found no basis for legal action against the industry. We are certain that the investigations now being called for will result in the same findings which exonerate the industry.

We note that one investigation, conducted by the Senate Permanent Subcommittee on Investigations, made several recommendations regarding imposing mandatory product inventory levels and restricting mergers. No action has been taken on the findings and recommendations of that investigation. The most prominent suggestion, regarding mandated inventories, would actually increase the cost of business operations for refiners, which might be passed on to consumers.

Refiners are constantly responding to difficult situations like the present one, which make it a challenge to maintain adequate product supplies. Modern energy policy has given them a tool which helps them determine the most efficient way to continue meeting consumer demand. The free market swiftly provides the industry with price and supply information which they can respond to. Refiners also need maximum flexibility to respond to this market information in their decisions about product manufacture and distribution. Mandates and other command-and-control policy mechanisms reduce flexibility and add unnecessary cost to gasoline manufacture. Congress should remove existing mandates and avoid legislating new ones, such as the proposed ethanol mandate.

A modern, supply-oriented fuels policy would give refiners greater flexibility to meet fuel demand within broad performance standards. Such a fuels policy would also rely on the free market to determine appropriate product supply and allocation. It would avoid inflexible command-and-control regulation such as prescriptive mandates, and emphasize the development of new fuel legislation and regulation through an open process involving all stakeholders, aimed at obtaining the best practical answer rather than one that satisfies temporary political aims. But most importantly, such an energy policy must focus on balancing the duel goals of increased energy supply and continued environmental progress.

NPRA Policy Recommendations

With this concept of a supply-oriented energy policy as a backdrop, NPRA has reviewed the National Energy Policy legislation approved by the House in 2001 and by the Senate last year. The Association offers the subcommittee these specific recommendations regarding the fuels provisions that may be under consideration for inclusion in this year's energy bill.

First: Repeal the 2% by weight RFG oxygenation requirement [Clean Air Act section 211(k)] to provide refiners with more flexibility to meet supply and air quality requirements.

Elimination of this 2% requirement will give refiners increased flexibility to deal with changing market conditions. It will also allow them to blend gasoline to meet the standards for reformulated gasoline most efficiently and economically, without mandated oxygenate content. In some cases, refiners would probably continue to use some MTBE, because of its good blending qualities and demonstrated ability to reduce air emissions. The overall volume of MTBE in gasoline would very likely decline, while providing relief to those who are concerned about MTBE usage.

Second: Avoid a federal ban or mandatory phase-out of MTBE use in order to maintain adequate gasoline supplies at reasonable cost; direct DOE and EPA to work with any states that implement limitations on MTBE usage to coordinate the implementation of these restrictions and to maintain adequate supply.

NPRA is concerned about proposals to ban MTBE nationally or to mandate a national phase-down of MTBE. Last year's Senate bill called for an MTBE ban in four years. (A Governor could allow continued use of MTBE in his own state, but this would be unlikely.) EIA predicts that an MTBE ban would raise the national aver-

age price of RFG in 2006 by several cents per gallon and reduce supply. ("Supply Impacts of an MTBE Ban," September 2002)

MTBE elimination may cause an 11% reduction in some gasoline volumes when fully implemented. (MTBE provides over 10% of RFG volume in many RFG areas.) NPRA is concerned about the possible impact of this change on supply and manufacturing costs. The supply and demand balance in the nation's gasoline market is increasingly tight. Supply and price can be affected by weather, unforeseen outages, and accidents, resulting in economic losses and negative public reaction, and we are seeing this happen with increasing frequency.

We should not exacerbate a tight supply situation by arbitrarily eliminating a significant contributor to the nation's gasoline supply. If concerns about MTBE usage continue, more deliberate but responsive measures can be taken. But recent experience in the gasoline market suggests that such significant changes should be taken only with caution, and with full disclosure to the public regarding any possible supply and cost impacts.

NPRA also does not believe that current evidence warrants the drastic step of a national ban on MTBE. Taking such action based on limited current knowledge would set a dangerous precedent for all chemicals in widespread commerce. EPA is currently evaluating MTBE's status under TSCA (the Toxic Substances Control Act), and NPRA suggests that is the only appropriate course of action based on the evidence today.

As EIA noted in a presentation last October: "MTBE is a very clean component from an air emission standpoint. It contains oxygen and has no sulfur, no aromatics, no olefins and an RVP that is very close to the RVP of the remaining gasoline components."

The author also wrote: "What is not appreciated by many people outside of the petroleum business, is that losing MTBE is more than just losing the volumes of this blending component . . . no other hydrocarbon or oxygenate equals the emission and engine performance characteristics of MTBE. Hence, losing a barrel of MTBE results in losing more than a barrel of gasoline production. When you remove a clean, high performance gasoline stream from the gasoline pool, it is difficult to find material to replace its volume and quality contributions." (EIA, J. Shore, "Supply Impact of Losing MTBE & Using Ethanol," October 2002, pp. 10, 12)

Recent EIA studies confirm that elimination of MTBE will also affect many refiners' abilities to comply with the Mobile Source Air Toxics rule, which requires refiners to maintain their average 1998-2000 gasoline toxic emission performance levels. Loss of MTBE would make it difficult to match historical toxics performance, and the result might be that those refineries would have to reduce their production of RFG to achieve compliance.

NPRA believes that these circumstances support a policy of considerable caution towards any proposal to eliminate the option of continued MTBE use, at least until there is certain and convincing evidence that adequate supplies of replacement fuel components are available.

Some stakeholders advocate a federal ban or phase-down of MTBE as a means of securing an "orderly" market transition away from that product in states where large quantities of MTBE are currently used. This is a largely theoretical argument that assumes that federal regulators and those who seek to eliminate MTBE can choose the one appropriate date when MTBE usage should end. This argument ignores actual experience in which affected states have modified their plans to limit MTBE usage as they become aware of the difficulties inherent in replacing it without adverse impact on gasoline supply.

In short, imposition of a uniform federal scheme to restrict or eliminate MTBE usage runs a considerable risk that the decision will be uniformly *wrong.* Experience with the 2% RFG oxygenation mandate has taught us that if this occurs, political power can be brought to bear to block the changes necessary to meet unanticipated problems.

For example, even the largest state in the nation found it impossible to obtain a waiver of the 2% provision under similar conditions, when it was clear to most observers that a waiver was justified. This suggests that supply problems arising from an arbitrary federal phase-out or ban of MTBE might be difficult or impossible to correct, or that they might only occur accompanied by dubious new policy initiatives influenced by the politics of the moment.

Third: Reject calls for an ethanol mandate—Imposing an ethanol mandate on gasoline suppliers will make it more difficult and expensive to manufacture gasoline and provides no compensating benefit to consumers or the environment. An ethanol mandate immediately creates winners and losers among fuel providers and regional consumers based on their geographic location and history of ethanol usage or nonusage. Thus it is both highly arbitrary and unfair. Inclusion of a credit trading

mechanism in the mandate scheme does nothing to temper the injustice and economic inefficiency of the provision, because it requires fuel manufacturers and their customers to pay for the privilege of not using ethanol in their gasoline.

Many NPRA members already use significant volumes of ethanol, and they expect to increase their ethanol usage in the years ahead. EIA and other policy analysts also predict a significant increase in ethanol markets in coming years, without a mandate. In short, given the relative scarcity of quality gasoline blend stocks, ethanol has a bright future without any need to resort to the outrageous expedient of a national ethanol mandate.

Ethanol already enjoys a generous subsidy in the form of a 52 cent exemption from the gasoline excise tax; this subsidy costs the Highway Trust Fund in excess of $1.2 billion annually. A federal tariff offsets the benefit of the gasoline tax exemption for most imports, making them uncompetitive with domestic ethanol production. Ethanol also receives tax incentives in 17 states.

The 5 billion gallon ethanol mandate included in last year's Senate ethanol bill was the product of private discussions among a limited group of stakeholders. It was never considered by the Committee of jurisdiction in the Senate. NPRA opposes that provision. We urge the subcommittee to make a clean break with the market intervention theory typified by both the existing 2% requirement and calls for a cumbersome, expensive and unnecessary ethanol mandate.

The Senate-approved language goes so far as to include language intended to require widespread usage of ethanol even in the summer months, when ozone concerns are most severe. This despite the fact that the increased volatility of ethanol blends requires additional investment and extraordinary measures to allow ethanol use in gasoline during these periods. Extra pollution caused for the local environment, supply problems for fuel suppliers or cost problems for consumers apparently are of less importance than the desire of the ethanol industry for consistent demand.

Few proposals on any subject unite the editorial pages of the *Wall Street Journal, New York Times* and *Washington Post.* But the ethanol mandate is one of them. All three papers have denounced the ethanol mandate proposal in no uncertain terms. NPRA agrees with this unusual consensus, and hopes that the House will put principle above political considerations and reject the mandate proposal.

Fourth: Extend product liability protection to MTBE and ethanol—When it passed the Clean Air Act Amendments of 1990 with the 2% RFG oxygenation requirement, Congress clearly understood that MTBE would be widely used to comply with that provision. In fact, the percentage of oxygen required by weight was selected to allow MTBE and perhaps other ethers to be used for that purpose. It was so clear that MTBE usage would predominate, in fact, that the Clinton Administration came forward with a rule that would have required some of the oxygen content to be met by "renewable" oxygenates, *i.e.* ethanol, to ensure usage of that product in the RFG pool. [That attempt, a clear end-run of the statute and subsequent reg-neg agreement, was overturned by the U.S. Court of Appeals for the District of Columbia in the case *API and NPRA v. EPA*, 52 F.3d 1113, 1119 (D.C. Cir. 1995). In the decision, the court also noted that U.S. EPA had "conceded that use of ethanol might possibly make air quality worse."

The amendment establishing the reformulated gasoline program was added to the Clean Air Act amendments in the Senate by Senator Daschle. When the 2% requirement became part of the final bill, the refining industry acted to comply. As foreseen, MTBE became the oxygenate of choice because of its good blending characteristics, the fact that, unlike ethanol, it could be shipped in pipelines, and the reality that the higher volatility of ethanol blends made their use in RFG during the summer ozone season problematic.

U.S. MTBE production increased from 146 thousand barrels per day in 1993 to roughly 230 thousand barrels per day in both 2001 and 2002. The air quality improvements made possible by RFG use in the cities where it has been required are well known. MTBE has contributed to those air quality improvements.

In recent years, product liability suits have been brought against refiners and petrochemical manufacturers due to MTBE contamination found in groundwater. Those suits seek to overlook the fact that the Clean Air Act amendments clearly required and contemplated widespread usage of MTBE in the RFG program. As discussed above, Congress was also aware that large quantities of MTBE would be needed in the RFG program.

No one should be penalized for obeying the law. Yet this is the position in which refiners and petrochemical producers find themselves because of these liability suits. Money spent to defend against these unfair suits could be better used to produce additional supplies of petroleum and petrochemical products for consumers and the nation's economic benefit.

During the energy bill conference last year, Chairmen Tauzin and Barton recognized the need for product liability language that would help fuel suppliers defend themselves against these unfair charges. This language was approved by the House conferees with bipartisan support. NPRA encourages the subcommittee and full committee to include the same or similar language in the House energy bill this year. It is only fair that any fuel producer who responds to a congressional mandate for use of a product be protected against legal action based solely upon production or use of the mandated product.

Fifth: Avoid unnecessary changes in fuel specifications—As discussed previously, the refining industry faces significant investment requirements in order to comply with regulations to improve the environmental performance of both gasoline and diesel fuel in coming years. Significant investments will also be required to respond to regulations affecting facilities. NPRA urges the subcommittee and committee to limit additional fuel specification changes while work is in progress to comply with these existing requirements. Although we do expect a proposed rule this year to reduce the sulfur level in off-road diesel over the period 2007-10, industry has been consulting with EPA in the hope of coordinating the off-road requirements with the existing highway diesel rule. We hope that this subcommittee will monitor developments on that regulation.

Particular care should be used in considering so-called "boutique fuel" gasoline programs. In many cases these programs represent a local area's attempt to address its own air quality needs in a more cost-effective way than with reformulated gasoline. NPRA welcomes further study of the "boutique fuels" phenomenon, but urges members of the committee to resist imposition of additional fuel specification changes in a vain attempt to curtail state and local experimentation.

NPRA is also concerned about provisions in last year's bill that facilitated certain opt-ins to the reformulated gasoline program. In creating the RFG program, Congress established requirements for RFG opt-ins that recognized the need to limit access to that program due to supply and investment considerations. If anything, the reasons underlying those concerns are stronger now than they were ten years ago. Therefore, NPRA urges that current Clean Air Act language regarding access to the RFG program be retained, rejecting any changes to current language that limits participation in the RFG program to those areas with a demonstrated need for that fuel.

Sixth: Take steps to increase natural gas production and supply—NPRA's members include many petrochemical producers who depend on natural gas supplies at a reasonable price for use as feedstock. Recent price spikes for this product threaten the continued competitiveness of the domestic petrochemical industry. We believe that quick action is necessary to increase the supply of natural gas through expanded domestic drilling opportunities.

NPRA also recommends that the subcommittee and committee explore additional ways to expand gas supply through expedited siting of LNG facilities and pipeline expansion, including the building of an appropriate pipeline to make Alaskan natural gas available at reasonable prices. We also encourage members to examine the overall economic impact on the U.S. of the rapid expansion of natural gas use as a utility and industrial process fuel in recent years. The impact on feedstock users of this additional demand should be taken into consideration, as should the ability of the available supply to meet this new demand. We do not believe that this analysis is occurring, to the detriment of traditional users of natural gas for feedstocks.

Seventh: Ensure the continued viability of combined heat and power systems in transitioning energy markets—Many refineries and petrochemical facilities have adopted combined heating and power (CHP) technology as a way to improve their energy efficiency and reduce air emissions. These systems provide the electricity and steam needed for their industrial operations. Today's state of the art systems can achieve efficiency ratings as high as 70%, which is more than twice as efficient as conventional utility generators, with half the emissions per BTU. NPRA urges the subcommittee and full committee to maintain PURPA provisions that help CHP plants survive in an electricity market that has not yet made the transition to full competition.

NPRA looks forward to working with the subcommittee and full committee to accomplish these and other objectives as part of a supply-driven national energy policy. I would be glad to answer any questions raised by our testimony today.

Mr. SHIMKUS. Thank you very much. Now we would like to have Mr. Bill Douglass, CEO, Douglass Distributing Company, and you are recognized for 5 minutes, sir.

STATEMENT OF BILL DOUGLASS

Mr. DOUGLASS. Thank you, Mr. Chairman, Congressman Boucher and members of the subcommittee. We appreciate the opportunity to testify today about the impact of national energy policy legislation on the Nation's petroleum marketers. As you heard, my name is Bill Douglass. I am CEO of Douglass Distributing Company, headquartered in Sherman, Texas. Our company operates 10 convenience stores and has a distributorship that sells gasoline and diesel fuel through 110 other retail outlets in the Dallas-Fort Worth market.

I appear today on behalf of the National Association of Convenience Stores, which we call NACS, and the Society of Independent Gasoline Marketers of America, which is known as SIGMA. Collectively, the members of these two associations sell approximately 80 percent of the gasoline consumed in the United States every year. Today, I intend to focus on the key priorities that NACS and SIGMA believe should be included in a national energy bill in order to promote one common objective: To enhance the supply of motor fuel for the American motorist.

Ensuring a sufficient supply of gasoline and diesel fuel will benefit individual consumers and the economy as a whole. It is with this objective that we present the following policy recommendations. First, Congress should repeal the oxygenate mandate of the Reformulated Gasoline Program. Second, Congress should provide for the orderly phase-out of MTBE in a manner that does not impact overall gasoline supplies negatively. Finally, Congress needs to address boutique motor fuels. Last year, the House included a provision in its energy bill requiring a Federal study into this boutique motor fuel issue. Unfortunately, the timing of such a study will not serve to assist this committee in developing a national energy policy this year.

To help your efforts this year, NACS has commissioned a study into this very subject that will be completed next month, April 2003. This study is taking an in-depth look into the current market conditions generated by today's overlapping Federal, State and local fuel regulations and is assessing the impact of potential changes to these regulations on overall fuel supplies, product fungibility, cost and environmental impact. NACS looks forward to sharing the results of this study with this subcommittee.

Renewable fuel standard. The debate in the last Congress seemed to focus on a different issue: The establishment of a renewable standard, RFS, also referred to an ethanol mandate. Last Congress, NACS and SIGMA strongly opposed this ethanol mandate. This opposition continues today. We simply cannot support a provision to replace one mandate, the oxygenate mandate, with another, an ethanol mandate. NACS and SIGMA recognize, however, that there is substantial political support in the House and the Senate for the adoption of an ethanol mandate. Therefore, if Congress decides to adopt an RFS in this year's energy bill, we urge the committee to adopt the following modifications, which will benefit overall gasoline supplies and environmental protection, reduce the number of boutique fuels, maintain the competitive position of independent marketers and ease the introduction of the RFS.

First, NACS and SIGMA urge the subcommittee to adopt a legislative provision to permit the commingling of divergent, compliance fuels. EPA regulations currently prohibit a marketer from blending compliance fuels if their mixture would result in a non-compliant product. This prohibition reduces the flexibility of the gasoline market to respond to supply disruptions while having little or no environmental benefit. Furthermore, it makes it considerably more difficult for a marketer to sell ethanol-blended gasoline.

By allowing us to blend or commingle the ethanol and non-ethanol fuels in our tanks, we will be better able to respond to the shortages of one fuel or another. This will reduce the price volatility and greatly ease the stress on the gasoline distribution system. The environmental impacts of this action will be minimal and will be far outweighed by the benefits to supply and price stability. Therefore, NACS and SIGMA urge this subcommittee to permit the commingling of compliant product in order to provide the extra flexibility necessary to avoid market disruptions and price spikes when these market conditions develop.

Second, the RFS considered last year required the use of ethanol throughout the year. This provision should be deleted. Use of ethanol during the summer months will require refiners to produce sub-RVP blend stocks, further reducing the overall supply of gasoline, creating spot shortages and promoting retail and wholesale gasoline price volatility.

Third, NACS and SIGMA are concerned deeply about the proposed RFS credit and trading system considered last year. Given the concentration and market power in the gasoline refining and ethanol production industries, there is cause for concern that some parties may attempt to hoard RFS credits in order to disadvantage their competitors. NACS and SIGMA urge this subcommittee to include a provision to assure——

Mr. SHIMKUS. You need to wrap it up real quick.

Mr. DOUGLASS. [continuing] a competitive and open market for RFS credits.

Finally, Congress should adopt a comprehensive Federal Leaking Underground Storage Tank Program reforms. Last year's House and Senate energy bills contained a modest provision on UST reform, but NACS and SIGMA urge that this subcommittee not to adopt half measures on this but they should enact comprehensive underground storage tank legislation similar to that being considered by this committee's Environment and Hazardous Materials Subcommittee.

Thank you for this opportunity to share in the NACS and SIGMA concerns and recommendations.

[The prepared statement of Bill Douglass follows:]

PREPARED STATEMENT OF BILL DOUGLASS, CHIEF EXECUTIVE OFFICER, DOUGLASS DISTRIBUTING COMPANY REPRESENTING THE NATIONAL ASSOCIATION OF CONVENIENCE STORES AND THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

I. INTRODUCTION

Good morning, Mr. Chairman and members of the Subcommittee. My name is Bill Douglass. I am Chief Executive Officer of Douglass Distributing Company, Inc., headquartered in Sherman, Texas. Our company operates 10 convenience stores and a distributorship that sells gasoline and diesel fuel in the Dallas-Fort Worth area.

I sincerely appreciate the invitation to present testimony before you this morning on the issue of national energy policy legislation and motor fuels. I appear this morning on behalf of the National Association of Convenience Stores ("NACS") and the Society of Independent Gasoline Marketers of America ("SIGMA").

II. THE ASSOCIATIONS

NACS is an international trade association comprised of more than 1,700 retail member companies operating more than 100,000 stores. The convenience store industry as a whole sold 124.4 billion gallons of motor fuel in 2001 and employs 1.4 million workers across the nation.

SIGMA is an association of more than 270 independent gasoline marketers operating in all 50 states. Last year, SIGMA members sold more than 48 billion gallons of motor fuel, representing more than 30 percent of all motor fuels sold in the United States in 2002. SIGMA members supply more than 28,000 retail outlets across the nation and employ more than 270,000 workers nationwide.

III. FOCUS ON MOTORISTS

My testimony this morning will focus on one simple message. As this Subcommittee, and this Congress, debates national motor fuel policy, NACS and SIGMA urge you to consider the impact this legislation will have on our members' customers—your constituents.

The average motorist does not know or care whether gasoline contains MTBE or ethanol; they simply want competitively-priced gasoline and diesel fuel to power their automobiles and trucks. In general, motorists favor environmentally-friendly fuels, and favor strong environmental protections to assure that the use of motor fuels does not harm air quality and does not pollute our nation's water supplies.

These motorists' interests are closely matched by the interest of independent motor fuel marketers, like myself. My company sells motor fuels, but we do not make either the gasoline or the diesel fuel we sell. Consequently, from a business perspective, I have little interest in what my refiner-supplier puts into these products, be it ethanol or MTBE. My primary concern is supply. My customers, and therefore my company, benefit from plentiful supplies of gasoline and diesel fuel from diverse sources, thereby assuring a competitive marketplace for motor fuel. Furthermore, like our customers, we also support the production of motor fuels that do not harm air quality and the strong and effective enforcement of regulations to prevent petroleum releases from underground storage tanks. We support these issues for the benefit of our communities as well as for the benefit of our business.

Therefore, as you consider a fuels title to national energy policy legislation this year, I strongly urge you to keep in mind the interests of your constituents, and our customers, the motoring public. NACS and SIGMA believe that this Subcommittee will have served its constituents well if it puts aside special interest pressures and instead develops energy policy legislation that focuses on expanding overall motor fuel supplies, easing the pressures on the motor fuel distribution system, and reducing motor fuel price volatility.

IV. KEY COMPONENTS OF FUELS LEGISLATION

For these reasons, NACS and SIGMA strongly support efforts in Congress to adopt national energy policy legislation in 2003. To accomplish these objectives, we urge this Subcommittee to include, at a minimum, the following core provisions in the motor fuels title of a 2003 energy bill.

First, we support the repeal of the reformulated gasoline ("RFG") program's oxygenate mandate contained in Section 211(k) of the Clean Air Act. Numerous studies have concluded that oxygenates, including MTBE and ethanol, are not necessary for the production of clean-burning gasoline. The oxygenate mandate is not environmental protection; rather, it is political protection for the MTBE and ethanol industries and should be repealed. Doing so will enhance the ability of America's refiners to efficiently produce gasoline for America's consumers.

Second, we support an orderly phase-out of MTBE as a gasoline additive in a manner that does not impact overall gasoline supplies negatively. The contamination of ground water supplies by MTBE has been documented widely. To address this problem, NACS and SIGMA support a nation-wide phase-out of MTBE over a period of years Doing this at the federal level will avoid the further segmentation of the market as individual states proceed with their own bans. A phase-out over several years will permit the orderly transition from MTBE to other fuel components and mitigate the impact on overall gasoline supplies. In addition, we also strongly support increased enforcement of federal petroleum underground storage

tank laws to help prevent any future petroleum releases. I will return to this subject later.

Third, we support the adoption of legislative provisions to slow, and ultimately reverse, the "balkanization" of the gasoline and diesel fuel markets into islands of "boutique" motor fuels. Twenty years ago, our nation had the most efficient fuel distribution system in the world. Today, with the proliferation of boutique fuels, the distribution system is under constant stress which has led to spot supply shortages, wholesale and retail price volatility, and consumer complaints. Congress must tackle this important issue in order to improve gasoline and diesel fuel supply and reduce price volatility. Any federal initiative that does not substantially restore fungibility to the motor fuel supply and distribution system will only contribute to the continued supply dislocation and price volatility witnessed over the past several years.

V. CONSIDERATION OF AN ETHANOL MANDATE

During the consideration of energy policy legislation last year, there was spirited debate over the proposed adoption of a mandate to include ethanol in much of the nation's gasoline. NACS and SIGMA strongly opposed, and continue to oppose, an ethanol mandate. We simply cannot support a provision to replace one mandate—the oxygenate mandate—with another—an ethanol mandate.

The details of this issue have been debated for several years as representatives of the ethanol industry and the MTBE industry have competed for federal market support. NACS and SIGMA are not concerned with the rivalry between these two industries, but we are very concerned about the impact the proposed resolution could have on consumers.

The ethanol mandate proposed last Congress places the motor fuels market in serious jeopardy. Our central concern is the delivery of product to all markets throughout the country in a cost-efficient manner. Because ethanol is predominantly a regionally produced product, it must be shipped from its Midwest-production facilities to all markets. The problem is that our pipeline system cannot transport the product. This forces the market to rely on rail and truck deliveries, a much more expensive method of liquid product transport. In addition, it adds yet another level of potential disruption to the system. These factors alone could lead to increased regional supply shortages and even greater price volatility.

NACS and SIGMA do not oppose increased market opportunities for ethanol; in fact, our members are the leading retailers of ethanol-blended gasoline. However, we believe it would be a mistake for the federal government to mandate its use on a national basis.

NACS and SIGMA recognize, however, that there is substantial political support in the House and Senate for the adoption of an ethanol mandate. Therefore, if Congress is intent on adopting a renewable fuels standard ("RFS") as part of an energy bill, we urge that the following modifications be made to the fuels title offered by the House to the Senate last fall. These suggested modifications will benefit overall gasoline supplies and environmental protection, reduce the number of boutique fuels, maintain the competitive position of independent marketers, and ease the introduction of the RFS.

VI. COMMINGLING OF DIVERGENT COMPLIANT FUELS

First, Congress should adopt a legislative provision to permit the commingling of divergent compliant fuels. Currently, EPA regulations specifically prohibit the blending of ethanol-additized RFG with MTBE-additized RFG during much of the year. In addition, the regulations generally prohibit the blending of any two compliant fuels if the resulting mixture would have a higher RVP (generated by the presence of ethanol) than allowed in a specific market. These prohibitions balkanize the gasoline markets and increase supply shortages during market disruptions, while having little or no environmental benefit. Furthermore, the requirements make it considerably more difficult for a marketer to proactively sell ethanol-blended gasoline. There are a couple of scenarios that last year's proposed fuels title would create that could be improved by allowing the commingling of compliant fuels.

If the oxygenate requirement is repealed, MTBE is banned, and an ethanol mandate is created, there will be at least two primary varieties of reformulated gasoline sold across the nation—oxygenated gasoline with ethanol and non-oxygenated gasoline. Existing regulations would permit the blending of these fuels in the tanks of motorists' cars, but not in the underground storage tanks ("USTs") of gasoline marketers. This limitation will impair the ability of marketers to efficiently sell RFG and will make it more difficult for marketers to offer ethanol-blended RFG to their customers.

Another complication raised by the implementation of the ethanol mandate is the loss of fungibility for conventional fuel. Currently, many states and localities impose volatility controls on gasoline to control for pollution. Ethanol-blended conventional gasoline is afforded a one-pound volatility waiver to accommodate for the increased volatility contributed by the ethanol. However, if marketers begin selling ethanol-blended conventional and non-ethanol blended conventional, the mixture of the two products will result in non-compliant product.

In both conventional and RFG markets, therefore, a marketer must drain his storage tank in order to sell ethanol-blended product. If that same mixture is not available at a later date, the marketer would again be forced to drain his tank in order to refill it with non-ethanol product. This places an undue burden on the marketer by hindering his ability to provide uninterrupted service to his customers and will cause temporary supply shortages at certain retail outlets. Permitting the blending, or commingling, of these fuels in marketers' USTs will increase marketer flexibility to respond to shortages of one fuel or another, will reduce price volatility caused by such shortages, and will reduce stresses on the gasoline distribution system.

Some may argue that allowing a marketer to commingle products will increase the environmental impact. I submit that any impact on the environment is likely to be minimal and will be far outweighed by the benefits to supply and price stability. Even today, divergent compliant fuels are being commingled in consumer's gasoline tanks throughout the country. It will be rare that a marketer will be forced to commingle product in his tank, certainly less frequently than a consumer will fill his or her vehicle with divergent product. In fact, most of America's gasoline retailers are branded marketers, locked into supply contracts, who will not be faced with this situation except in extreme supply situations. Unbranded marketers, which comprise approximately 30 percent of the market, are also unlikely to switch terminal suppliers except in tight market conditions. The provision NACS and SIGMA are advocating will simply provide extra flexibility to avoid unnecessary market disruptions and price spikes when these market conditions develop.

VII. UNDERGROUND STORAGE TANK REFORM

Second, Congress should adopt comprehensive federal leaking underground storage tank ("LUST") program reforms. Last year's House and Senate energy bills both contained modest provisions on UST reform. NACS and SIGMA urge that these provisions be expanded to accomplish comprehensive UST reform. The Senate Environment and Public Works Committee recently approved unanimously S. 195, Senator Chafee's UST reform bill. In addition, this Committee's Environment and Hazardous Materials Subcommittee is considering similar legislation.

This year's energy bill should not contain half-measures on UST reform. Whether the issue is full enforcement of existing UST rules, preventing future MTBE leaks, or providing States with more funding for their UST enforcement and remediation programs, comprehensive UST reform legislation should be an integral part of a 2003 energy bill and, at the very least, must not be compromised by the enactment of half-measures.

VIII. SEASONAL VARIATION PROTECTION FOR RFS

Third, the Senate's 2002 RFS proposal required the use of ethanol throughout the year. This provision should be deleted. Use of ethanol during the summer months will require refiners to produce sub-RVP blendstocks, further reducing the overall supply of gasoline, create spot shortages, and promote retail and wholesale gasoline price volatility. If Congress is intent on mandating the use of ethanol in gasoline, then Congress should permit industry to meet that goal in the most cost-effective manner that causes the least disruption to gasoline supplies. Mandating that a certain portion of the RFS be satisfied during the summer months runs counter to this goal.

IX. CREDIT AND TRADING SYSTEM

Fourth, NACS and SIGMA are concerned deeply about the proposed RFS credit and trading system contained in the 2002 Senate energy bill fuels title. Given the concentration of market power in the gasoline refining and ethanol production industries, there is cause for concern that some parties may attempt to "hoard" RFS credits in order to disadvantage their competitors. For example, if a Mid-West refiner with national marketing interests uses more ethanol than it needs for compliance and generates RFS credits, what incentive would that refiner have to sell these credits at a reasonable, competitive rate to an East or West Coast refiner that is a competitor? If that East or West Coast refiner cannot physically obtain ethanol or locate affordable RFS credits, it will be in violation of the RFS program.

NACS and SIGMA urge this Subcommittee to consider the adoption of a provision to incentivize refiners who are "long" on RFS credits to tender these credits to other refiners at a reasonable price. One solution might be to penalize refiners that are "long" on RFS credits in the same way refiners that are "short" on credits are to be penalized if there is unmet demand for RFS credits in the marketplace . Whatever solution Congress arrives at, assuring a competitive and open market for RFS credits must be examined.

X. OTHER ISSUES

Many other issues are under consideration with respect to a fuels title in an 2003 energy bill. NACS and SIGMA have adopted the following positions on several of these additional issues.

First, independent marketers support the adoption of a provision to shield MTBE users, manufacturers, and refiners from product liability claims that MTBE is a defective product. The 2002 Senate energy bill contained such protection for ethanol producers. Such protection should be afforded to MTBE, as provided in the House counter-offer. It must be noted that such liability protection will not shield marketers from potential liability for MTBE releases—which generally is governed by negligence law. Instead, this provision would simply move MTBE release claims out of the product liability area of law.

Second, NACS and SIGMA support strongly a federal solution to address the problems associated with the proliferation of boutique fuels. To date, virtually all stakeholders have criticized the balkanization of the motor fuels markets, but there have been no studies completed to provide policy recommendations to halt, or reserve, the introduction of boutique fuels. Last year, the House included a provision in its energy bill requiring a federal study into this issue. We continue to support a federal assessment of the problem. However, the timing of such a study will not serve to assist this Committee in developing a national energy policy.

Therefore, I am pleased to inform the Committee that one of the associations I am representing today, the National Association of Convenience Stores, has commissioned a study into this very subject that will be completed next month, in April 2003. This study is taking an in-depth look into the current market conditions generated by today's overlapping federal, state and local fuel regulations and is assessing the impact of potential changes to these regulations on overall fuel supplies, product fungibility, cost and environmental impact. NACS looks forward to sharing the results of this study with this Subcommittee as soon as it is available and we hope that it will prove a useful tool as you work to complete an energy bill this Congress.

XI. CONCLUSION

Mr. Chairman, members of the Subcommittee, thank you for this opportunity to comment on America's national energy policy. NACS and SIGMA appreciate the chance to share our concerns and recommendations with you as you prepare a new energy bill. I hope to have provided some insight into the impact certain policies will have on the petroleum marketplace and some provisions that could help mitigate those impacts. We look forward to working with the members of this Subcommittee to craft energy policy legislation that meets the goals outlined in this testimony.

I would be pleased to answer any questions that my testimony may have raised.

Mr. SHIMKUS. Thank you, sir. I want to move us forward. There are going to be votes relatively soon, so if we can move rapidly, then we can get to questions after we get back. Mr. Early, environmental consultant for the American Lung Association. You have 5 minutes, sir.

STATEMENT OF A. BLAKEMAN EARLY

Mr. EARLY. Good afternoon, Mr. Chairman. Thank you for inviting me. My name is Blakeman Early. I am here on behalf of the American Lung Association, and I am also presenting the views of the NESCAUM, the Northeast States for Coordinated Air Use Management, and I thank NESCAUM for allowing me to appear, and they chose not to take a seat at the table.

I am appearing and presenting both their views because both ALA and NESCAUM were on the Blue Ribbon Panel for Oxygenation in Gasoline, convened under the last administration, that studied very intensively the problems of oxygenates in fuels. Both these organizations endorsed the recommendations of the Blue Ribbon Panel, and both have been advocating legislation based on those recommendations ever since.

Three important elements of those recommendations have long been, we think, critical to the legislation that we think we need. First is that MTBE be eliminated from all gasoline, not just reformulated gasoline. Second is that the mandatory oxygen requirement for reformulated gasoline be eliminated. And, third, that Congress adopt an anti-backsliding provision that ensures that when oxygen and MTBE are removed from reformulated gasoline, the air toxics reduction potential of that, the actual toxics that are reduced, is at least as effective as the gasoline that is produced with oxygen and MTBE in it. These were the three foundation blocks for legislation that both ALA and NESCAUM have endorsed.

But in the spirit of compromise, the Lung Association and NESCAUM have also endorsed legislation that included a renewable fuel standard. We endorsed it in the 106th Congress as well as in the 107th. The Blue Ribbon Panel recommended other things, including the reform of the Underground Storage Tank Program, augmenting EPA's authority to control fuel additives that cause water pollution. And these elements were included in a Senate-compromised bill that was passed overwhelmingly by the Senate last year.

When that bill was being considered and we had been negotiating with our friends in the oil industry and the ethanol industry, the ethanol and the oil industry came together and came up with their list of priorities for legislation and for the first time introduced a new concept they said was a necessary element in the legislation, which is this safe harbor that shields industries from defective product liability under Federal and State law. This was a new concept that was introduced late in the negotiations. It is a concept that both the Lung Association and NESCAUM oppose. We both opposed it but notwithstanding the fact that the Senate adopted a liability shield or a safe harbor that applied only to renewable fuels, NESCAUM endorsed the Senate bill without reservation. The American Lung Association endorsed the bill except for that title of the bill, and I will explain why in a minute.

We think it is very important to get rid of MTBE because, as Mr. Olson will explain in great detail in his testimony, there is widespread contamination of groundwater and drinking water from MTBE. It is estimated that over 18 million people are served by drinking water contaminated by MTBE. We also understand that the continued use of MTBE is significantly eroding the public support for the Reformulated Gasoline Program, in general, a program that has been shown to actually work to reduce air pollution. We think there is a broad consensus throughout the country in support of getting rid of MTBE all together. In addition, many States have adopted these boutique fuel requirements specifically instead of adopting the Reformulated Gasoline Program because of their fear of MTBE contamination in their groundwater.

During the energy bill conference last year, the House made an offer on reformulated gasoline even though there was not a reformulated gasoline title in the House bill. This bill essentially eliminated major provisions of the Senate-compromised bill, which the Lung Association, NESCAUM and many others think is the heart of solving this problem and getting compromised legislation through the Congress. The House fuels offer eliminated the ban of MTBE in gasoline. It struck the language in the Senate bill that required that MTBE be eliminated from all fuels within 4 years. The House fuel offers——

Mr. BARTON. How much more do you have, Mr. Early? We have got a vote in 10 minutes, and I want to let Mr. Olson get his oral testimony. Could you take a minute more and wrap it up?

Mr. EARLY. Yes. I am sorry, I am taking too long.

Mr. BARTON. No, no. Just if you can——

Mr. EARLY. Well, let me say that the House offer, in our estimation, for areas suffering from MTBE contamination was the worst of both worlds, because it failed to—it removed the provisions of the Senate bill that eliminated MTBE from the fuel supply and assisted in cleaning up MTBE contamination while imposing a renewable fuel standard that rose to 5 billion gallons a year in 2012. It is the worst of both worlds, particularly for areas in the Northeast. We urge the House to return to the Senate compromise, which we think is the basis of a sound compromise, the Senate bill without the safe harbor for either renewable fuels or MTBE. Thank you, Mr. Chairman.

[The prepared statement of A. Blakeman Early follows:]

PREPARED STATEMENT OF A. BLAKEMAN EARLY ON BEHALF OF THE AMERICAN LUNG ASSOCIATION

Mr. Chairman, my name is A. Blakeman Early. I am pleased to appear today on behalf of the American Lung Association to discuss the use of MTBE in Reformulated Gasoline (RFG) and conventional gasoline. The American Lung Association has long been a supporter of the use of RFG as an important tool that many areas can and should use to reduce unhealthy levels of ozone. I am also here to share with you the views of the Northeast States for Coordinated Air Use Management (NESCAUM) with whom we have worked closely to craft essential changes to the RFG program.

Clean Fuels Help Reduce Smog

As has been demonstrated in California, "clean" gasoline can be an effective tool in reducing car and truck emissions that contribute to smog. Based on separate cost effectiveness analyses conducted by both the U.S. EPA and the State of California, when compared to all available control options, reformulated gasoline (RFG) is a cost-effective approach to reducing the pollutants that contribute to smog.[1] Compared to conventional gasoline, RFG has also been show to reduce toxic air emissions from vehicles by approximately 30 percent.[2]

Background of RFG Proposed Changes

Both the American Lung Association and the Northeast States for Coordinated Air Use Management (NESCAUM) were members of the Blue Ribbon Panel on Oxygenates in Gasoline. Both organizations endorsed the recommendations of the Panel in a report issued in 1999. And both organizations engaged in extensive negotiations with the oil industry, ethanol industry, corn growers and many other stakeholders regarding needed legislative change to the RFG program. Throughout these discussions we maintained that three recommendations of the Blue Ribbon Panel were preeminent and must be included in legislation that modified the RFG provi-

[1] U.S. Environmental Protection Agency, Regulatory Impact Analysis, 59 FR 7716, Docket No. A-92-12, 1993

[2] Report of the Blue Ribbon Panel on Oxygenates in Gasoline, September 1999, pp. 28-29

sions of the Clean Air Act. These were: 1) that MTBE must be eliminated from all gasoline, not just RFG 2) the mandatory oxygen requirement for RFG must be eliminated, and 3) "anti-backsliding" provisions must be added to the law to ensure that when refiners produced RFG without oxygen and without MTBE, the resulting fuel reduced toxic air emissions just as much as currently produced RFG. Both the American Lung Association and NESCAUM endorsed legislation in the 106th Congress that contained these critical elements plus a Renewable Fuel Standard (RFS) designed to compensate the ethanol industry for its loss of market associated with the elimination of the oxygen requirement in RFG.

As negotiations continued, a large numbers of stakeholders(except the MTBE industry) supported the elimination of MTBE over four years, and anti-backsliding provisions for air toxics. Other elements of the Blue Ribbon Panel recommendations gained wide acceptance including: expanding EPA's authority to address MTBE in groundwater under the Leaking Underground Storage Tank (LUST) program, and augmenting EPA's authority to test and regulate gasoline constituents based on threats to public health or the environment from water contamination. But further progress on compromise legislation was thwarted over a disagreement between the ethanol industry which wanted an Renewable Fuel Standard that "grew" the industry by increasing over time and the API which opposed mandatory use of ethanol in volumes above those needed for octane in RFG and conventional gasoline.

When the energy bill in the Senate gained momentum, the ethanol industry and the API announced an agreement that introduced a completely new element to the discussion. While agreeing on a level of mandatory ethanol use through an RFS that would grow the ethanol industry, the API and the ethanol industry announced that a necessary element of any compromise legislation must include a "safe harbor" that shielded both industries from defective product liability under federal or state law for the use of either MTBE or renewable fuels including ethanol. Both the American Lung Association and NESCAUM opposed this new concept. Ultimately, the Senate adopted many of the recommendations of the Blue Ribbon Panel as well as a "safe harbor" that applies only to renewable fuels.

In the spirit of compromise NESCAUM endorsed the provisions of the Senate compromise bill, while the American Lung Association endorsed the bill language while calling for the removal of the "safe harbor" provisions. The attached NESCAUM letter explains well the important concerns that motivated its support for the compromise.(See Attachment A)

The American Lung Association Supports the Phase Out of MTBE in All Gasoline

As a member of the Blue Ribbon Panel on Oxygenates in Gasoline, the American Lung Association learned of the significant threat that MTBE poses to the nation's water supplies. Subsequent data collected by the USGS and presented in Mr. Olson's testimony heightens the concern over MTBE contamination. It is estimated that over 18 million people are served by drinking water contaminated by MTBE. (See Attachment B) We also came to understand that the continued use of MTBE in RFG would contribute to the undermining of public support for the RFG program. Based on these two factors, we have supported the Blue Ribbon Panel recommendation that MTBE be phased out of all gasoline, not just RFG. We believe there is a broad consensus in support of the MTBE phase out. Clearly, any discussion of federal fuel changes must start with the elimination of MTBE. Fourteen states have already banned MTBE and five more Northeast states may also do so. In addition, EPA found in its boutique fuels study that the antipathy toward MTBE has lead many states to adopt "boutique fuels" in lieu of federal RFG in order to avoid high amounts of MTBE dictated by the mandatory oxygen requirement.[3]3 In short, removing MTBE from our nation's fuel supply is both a political and environmental imperative that must accompany any other fuel changes that Congress adopts. We believe the introduction of MTBE phase out authority in the Senate energy bill, along with "anti-backsliding" and other provisions that would implement recommendations of the Blue Ribbon Panel represents a unique opportunity to legislate constructive changes to RFG and conventional gasoline. These changes should not have unacceptable impacts on the price of gasoline especially if viewed in the context of maintaining the status quo.

While it is unclear to members of the public and most members of Congress exactly what happened during the House-Senate conference on the energy bill, the House made an offer based on the attached text. (See Appendix A) This offer essen-

[3] Study of Boutique Fuels & Issues Relating to Transition from Winter to Summer Gasoline, Office of Transportation and Air Quality, U.S. Environmental Protection Agency, October 24, 2001, p. 10.

tially eliminated major provisions of the Senate compromise and subsequent discussions were unable to resolve differences.

The House Fuels Offer Eliminates the Senate Ban of MTBE in Gasoline.

Under the Senate bill, the use of MTBE is to be phased out in no more than four years. (See Attachment C, p. 22 and Attachment D, p.2) This language is absent from the House offer. Therefore, the only potential restrictions on MTBE use in RFG or conventional gasoline would be through the use of state enacted restriction. However, in many states these restrictions are being challenged by the MTBE industry and the courts may ultimately rule that states are preempted by the Clean Air Act Amendments of 1990 from restricting the use of MTBE.

The continued legal use of MTBE in RFG and conventional fuel creates a nightmare of uncertainty regarding the future safety of water supplies and compliance responsibilities for refiners who have limited ability to prevent contamination of non-MTBE containing fuel by supplies that legally contain MTBE. This uncertainty will continue to discourage the use of RFG in areas that are newly designated non-attainment for smog because of fears of MTBE contamination.

The House Fuels Offer Preempts State Prohibition of MTBE After Enactment

The House language leaves intact Senate language that preserved state restrictions on MTBE in effect prior to enactment of these provisions but preempted state mesure that go into effect subsequent to enactment. (See Attachment C, p. 25 and Attachment D, p. 4) The refiners sought this provision to provide a rational, nationwide phase out of MTBE in fuel in lieu of multiple different state bans. Since the House offer does not ban MTBE, but does address its use, subsequent state bans would be preempted.

The House Fuels Offer Eliminates EPA Authority to Regulate Fuel Additives to Prevent Water Contamination.

EPA does not appear to have the authority under the existing law to regulated gasoline additives because of their adverse impact on water. The EPA has been exploring whether it has such authority under the Toxic Substances Control Act since 2000. To my knowledge, EPA is still exploring. This lack of authority is at the heart of the current controversy over MTBE use in fuel. Having removed the ban on MTBE, one might expect that a minimum response to the current MTBE crisis in the House offer might be to give EPA the authority to regulate MTBE in order to prevent water contamination. The House offer contains no such language. The House language simply strikes subsection 833(c) of the Senate compromise which contained carefully crafted language endorsed by the API authorizing EPA regulate fuel additives based on their capacity to threaten health or the environment via water pollution.(See Attachment C, p. 22 and Attachment D, p. 2)

The House Offer Shields Refiners From Defective Product Liability Lawsuits on MTBE Brought After Enactment.

The House language requires equivalent treatment for MTBE as is provided in the "safe harbor" in the Senate bill for renewable fuels. (See Attachment C, pp. 18-19, p. 24 and Attachment E, pp.6-7) This language would bar any future lawsuits brought under federal or state law on the basis of a MTBE being a defective product and refiners failing to warn consumers of its water contamination hazards. This prohibition would apply regardless of whether the contamination occurred prior to the enactment of the RFG provision in the Clean Air Act Amendments of 1990. The prohibition also applies regardless of whether the contamination occurred from the presence of MTBE in conventional gasoline that is not subject to an oxygen requirement and contains MTBE solely because a refiner chose to add it to the fuel.

To sum up, for many areas suffering from MTBE contamination the House offer was the worst of both worlds. It eliminated the most important tools in the Senate compromise bill to stem MTBE contamination and obtain cleanup assistance from refiners while still imposing the burden of a Renewable Fuel Standard nation-wide.

Without the Senate Compromise bill, Massive Amounts of Ethanol Must be Used in California and the Northeast

The Senate compromise bill represents a significant compromise that the American Lung Association believes provides the best basis for achieving modifications to RFG which meets the needs of the oil industry, the ethanol industry, state air regulators, and air quality. It is a compromise that should be able to be enacted and which clearly would avoid an impending "train wreck" if existing state bans of MTBE go into effect beginning with Connecticut in October of this year.

In a world where 14 to 19 states individually ban MTBE but oxygen requirement is maintained in federal RFG, large amounts of ethanol will be needed. The dif-

ference between this scenario and implementing the Senate compromise is that the ethanol demand is inflexibly centered on California and the Northeast where ethanol is not currently produced or used in any significant volumes. According to the API, if MTBE bans in California and the Northeast take effect with no change to federal RFG requirements, California would need 843 million gallons of ethanol and the Northeast would need 713 million gallons.(See Tab 2 and 3) We believe the cost and price spike impact of such a scenario would be much more significant than under the Senate compromise. This is because ethanol must be transported and stored separately from the base gasoline it is mixed with until it reaches consumer distribution.

Under the Senate compromise, the RFS credit and banking provisions allow some refiners to use ethanol in the most economically efficient manner, most likely where it is already made and used. These refiners can sell RFS credits to those who cannot use ethanol economically. We expect that octane for RFG used in the Northeast and California will be met substantially by the use of iso-octane and alkylates. Refiners supplying these regions would then be obligated to purchase RFS credits from refiners using ethanol in mid-west markets where it has been traditionally sold. Such an approach is far more practical than the "forced" ethanol use under the status quo scenario.

American Lung Association Opposes A Liability "Safe Harbor" for MTBE

Providing a defective product liability shield to MTBE, as provided in the House offer last year is truly unsupportable. As explained in detail in Mr. Olson's testimony, refiners and MTBE producers had extensive knowledge of MTBE's hazards as a contaminant in groundwater. They also knew that underground storage tanks of gasoline were leaking literally across the nation. This knowledge was extensive in the mid to late 80's. Nevertheless, the industry used MTBE extensively before the RFG program was enacted in 1990 and also failed to inform Congress of the dangers of adopting a clean fuels program that they knew would vastly increase MTBE use. Given the complicity of the industry in the creation of the MTBE contamination problem, we see absolutely no justification for the removal a legal tool that should be available to MTBE contamination victims to help address the clean up of widespread MTBE contamination.

The American Lung Association Opposes a Liability "Safe Harbor" for Renewable Fuels

One frustrating aspect of this debate is that, essentially, history is repeating itself. Refiners chose to use MTBE in gasoline in part to replace tetra-ethyl lead in gasoline after Congress banned it. You may recall that as a result of the lead refiners placed in gasoline and paint manufacturers placed in paint, 88 percent of children aged one to five had blood lead levels above the threshold believed to have the potential to impair cognitive development in the late 1970's. It took ten years to get lead out of gasoline. Hopefully Congress can get rid of MTBE in gasoline more quickly. The Congress must not adopt the "safe harbor" provisions that were adopted in the Senate compromise that reduce the incentives to avoid renewable fuel additives to gasoline that replicate in any way the problems of lead or MTBE. Unfortunately, Section 819(e) of the Senate compromise bill provides that no renewable fuel can be deemed to be defective in design or manufacture "by virtue of the fact that it is, or contains such a renewable fuel". The liability shield in this provision reduces the incentive renewable fuel producers and purveyors have to be vigilant and provide a safe renewable fuel product. Therefore, the provision increases the likelihood of another MTBE situation developing rather than decreasing it. Indeed, we fear that the provision could be expanded to shield ETBE from defective product liability. ETBE is a cousin to MTBE containing ethanol instead of methanol. According to the Blue Ribbon Panel it exhibits many of the same water contamination characteristics.[4] Clearly this product, and others in the same family of "ethers" as MTBE should not receive any sort of liability shield. More importantly, neither should other renewable fuels that may be used in the future, some of which may not have yet been invented.

Since the oil refining industry is insisting on the "safe harbor" a question is clearly raised. What do they know about the dangers of renewable fuels that we do not? Are there dangers that they know about, as they did with MTBE in the 1980's that they are not telling Congress as it contemplates mandating the use of renewable fuels? Why does the ethanol industry support the "safe harbor" for renewable fuels? Are there adverse consequences from ethanol use that they know about that prompt their support for the "safe harbor"?

---

[4] Report of the Blue Ribbon Panel on Oxygenates, September 1999, p. 86, 88.

Congress Must Adopt Needed Fuel Changes As soon As Possible

The Congress has been deadlocked over legislation to eliminate MTBE and improve federal requirements for RFG and conventional gasoline for years. With the exception of the liability safe harbor, the provisions in the Senate compromise bill adopted last year represent a compromise that addresses widely varying concerns in a reasonable fashion. We urge you to grasp this opportunity and support this compromise.

Mr. BARTON. Thank you. We are going to hear now from Mr. Olson, and then we are going to recess. We have got two votes on the floor. When we come back, we will hear from Mr. Dinneen and Mr. Segal and then we will have questions. So, Mr. Olson, if you could try to summarize in approximately 5 minutes your testimony.

STATEMENT OF ERIK D. OLSON

Mr. OLSON. I will definitely do my best and try to beat that. Thank you for inviting me to testify this afternoon. I am here on behalf of NRDC as well as the Environmental Working Group. We would endorse what Mr. Early just suggested, that both NESCAUM and ALA urged, which is basically that the Blue Ribbon Panel's recommendations, the three foundation recommendations, that there be a phase-out of MTBE, an elimination of the 2 percent oxygen requirement and anti-backsliding provision to maintain air quality benefits.

Two other important components of any legislation are that there should be no waiver or preemption of liability or responsibility, no safe harbor provision, in other words, and also that there be authority to regulate fuel additives or fuels based on water quality impacts. The air quality benefits of the reformulated gas provisions have been clear, but there are also clear downside water quality problems that I go into in detail in the testimony, including some new U.S. Geological Survey data.

The data are showing that in the neighborhood of 3 to 5 percent of the source waters in the United States contain MTBE, which is a shocking number if you realize how short MTBE has been widely in our fuel supplies. It also shows that in high MTBE use areas as much as 14 to 15 percent of the water supplies are contaminated with MTBE. While much of that is below the EPA advisory level, which is based on foul taste and smell, there are also cancer and other possible concerns with MTBE. We have provided a map that is on page 9 of our testimony which shows the widespread nature of MTBE contamination across the country essentially in all States where intensive monitoring has been done.

In addition, we highlight what the industry knew and when they knew it about MTBE. Interestingly, the industry—some members of the industry used to call MTBE, "Most Things Biodegrade Easier," or, "Major Threat to Better Earnings." What is going on is that the industry has known for some time, certainly before the 1990 Clean Air Act amendments, that MTBE was highly soluble, is highly persistent and hard to biodegrade, is coming out of leaking tanks it was widely being found outside of leaking tanks and spills prior to the 1990 Clean Air Act amendments, and that the contamination was already spreading at that point. In jury in 2002, just last year in California, looked at this evidence and literally tens of thousands of pages of internal industry documents, some of which I have attached to my testimony, that show that industry, according

to the jury, acted, "with malice," in failing to warn and in failing to act on the MTBE problem before they did.

We are concerned that other additives waiting in the wings, such as ETBE, TAME and DIPE, all ethers that are all highly soluble, as is discussed in the testimony, will be the next MTBE if they come into widespread use. Therefore, we urge strongly that there be no safe harbor preemption of State law or Federal law and no waiver of liability for MTBE or for other fuels or fuel additives. We believe that it is necessary to create the incentives to carefully handle and to use and manufacture these fuels and fuel additives in a way that is responsible, as between the companies that are manufacturing the fuel that fully know what the properties are and consumers or water utilities. It is clear that the industry ought to be responsible for the contamination problems.

Finally, briefly in my testimony I highlight another issue that is likely to come up in this committee, in this legislation, which is the injection of MTBE and diesel and other contaminants through hydraulic fracturing in some areas. We strongly opposed any rollback in EPA's authority, which was recently decided by a Court of Appeals decision to be under the Safe Drinking Water Act and the National Drinking Water Advisory Council has actually urge that EPA can maintain its authority contrary to some of the legislation that was being considered last year. So I have beaten my 5-minute timeframe, and I will be happy to answer questions.

[The prepared statement of Erik D. Olson follows:]

PREPARED STATEMENT OF ERIK D. OLSON, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL ON BEHALF OF NRDC AND THE ENVIRONMENTAL WORKING GROUP

INTRODUCTION

Good Morning Mr. Chairman and Members of the Subcommittee, I am Erik D. Olson, a Senior Attorney at the Natural Resources Defense Council (NRDC), a national non-profit organization with over 500,000 members dedicated to the protection of public health and the environment. I also serve as chair of the Campaign for Safe and Affordable Drinking Water, an alliance of over 300 public health, medical, consumer, environmental, and other organizations seeking to assure safe drinking water at a reasonable price to all Americans, though today I do not appear on behalf of the Campaign. Part 1 of this testimony focuses primarily on MTBE. Part 2 briefly notes another important water issue likely to be addressed in the energy legislation, the use of hydraulic fracturing in oil and gas activities, which may harm water supplies. Part 3 highlights what the oil industry knew about MTBE problems, and when they knew about them, and was written by the Environmental Working Group, which authored the report summarized in that section, and joins in this testimony.

We appreciate the opportunity to testify today. We have found it difficult, however, to testify on legislation whose full text we have not seen. In this testimony, with respect to certain issues we are essentially "reading the tea leaves" from last year's introduced and passed bills, the House offer to the Senate conferees, and frankly we are guessing as to what the House energy bill may say. We therefore respectfully request that we be provided an opportunity to testify again when the bill has been introduced.

PART 1. MTBE: WATER QUALITY CONCERNS, AND THE NEED FOR FEDERAL LEGISLATION

Why MTBE?

Because of serious air pollution triggering smog alerts in many "non-attainment" areas around the nation, EPA began investigating changes in fuel supplies that could result in air quality improvements. For many years EPA was investigating the possible widespread use of methanol (a chemical cousin of ethanol) as a fuel. The petroleum industry, on the other hand, had another idea: reformulated gasoline that was produced from a byproduct fraction of petroleum cracking that for years had

little market, called methyl tert-butyl ether (MTBE). MTBE could be used as an "oxygenate," elements of the petroleum industry argued, and would reduce carbon monoxide emissions and ozone levels in the atmosphere, leading to air quality benefits.

1990 Clean Air Act Amendments

In enacting the Clean Air Act Amendments (CAA) of 1990, Congress required the use of oxygenates in gas, in order to improve air quality. The use of oxygenates makes gas burn cleaner. The oxygenate requirement also was enacted in part because Congress hoped to give a big boost to the ethanol industry, which can use distilled "biomass" to make this alcohol. Instead of switching mostly to ethanol, the petroleum industry chose to use MTBE as the oxygenate of choice. MTBE use skyrocketed (see figure 1). By 1998, MTBE became "the second most-produced organic chemical in the U.S.," with about 10 million gallons used per day. [1]

EPA Blue Ribbon Panel on MTBE

EPA's Blue Ribbon Panel on MTBE concluded that the Reformulated Gasoline Program (RFG) established in the Clean Air Act Amendments of 1990 "has provided substantial reductions in the emissions of a number of air pollutants from motor vehicles . . ." The reductions were greater, in fact, than legally required. The panel also noted that "there is disagreement about the precise role of oxygenates [such as MTBE] in attaining the RFG air quality benefits," though oxygenated fuels did, the panel concluded, probably reduce emissions. But in large because of the water quality problems caused by MTBE, the panel recommended:

- "Action . . . to reduce the use of MTBE substantially (with some members supporting its complete phase-out), and action by Congress to clarify federal and state authority to regulate and/or eliminate the use of gasoline additives that threaten drinking water supplies;
- "Action by Congress to remove the current 2 percent oxygen requirement to ensure that adequate fuel supplies can be blended in a cost-effective manner while quickly reducing usage of MTBE; and
- "Action by EPA to ensure that there is no loss of current air quality benefits."

Serious Concerns about Water Quality

While MTBE may have contributed to improved air quality in some communities, the bad news is that MTBE is extremely soluble in water, far more soluble than hydrocarbon components such as benzene, toluene, and xylene (see Figure 2).

Industry Knew Long Before 1990 CAA Amendments MTBE Was a Problem

As discussed at length in Part 3 in this testimony, internal oil industry documents that were only released in litigation show that the oil industry well aware of MTBE's water-contaminating properties before the 1990 Clean Air Act Amendments. These documents also show that the industry was aware that spills or leaks containing MTBE spread very fast, and were extremely difficult and expensive to clean up. Indeed, by 1981, a Shell scientist wrote an internal report on an MTBE contamination problem and the difficulties of cleanup. The joke inside Shell was that MTBE really stood for "Most Things Biodegrade Easier;" later, other versions of the joke circulated, including "Menace Threatening Our Bountiful Environment," or "Major Threat to Better Earnings." (Attachment 5)

These and many other facts, documents, and testimony were considered by the jury that found that there was "clear and convincing evidence" in the South Tahoe case that Shell Oil and Lyondell Chemical Company (ARCO chemical Company) acted "with malice" in selling gasoline containing MTBE both because it was "defective in design" because the risks of harm outweighed its benefits, and because of their failure to disclose the threats posed by MTBE.[2] Several other oil company defendants opted to settle the case before these findings were rendered.

Other MTBE Chemical Cousins May Also Present Problems

Other ethers being considered as gasoline additives, such as ethyl-tert-butyl ether (ETBE), *tert*-amyl methyl ether (TAME), and di-isoproyl ether (DIPE) also are extremely soluble, like MTBE. (Figure 2). The high solubility of MTBE has lead to widespread contamination of groundwater and surface waters across the nation.

Widespread MTBE Contamination of Water

According to estimates from U.S. Geological Survey (USGS) experts, there may be 250,000 leaking underground storage tank (LUST) releases of MTBE.[3] Pipeline releases, gas spills, and other sources also contaminate groundwater and surface water with MTBE. USGS estimates that about 35% of community water system wells are located within 1 km of a LUST (9000 wells).[4] USGS data indicates that about 3% of groundwater wells in the U.S. contain MTBE, and about 5% of surface

waters contain MTBE (FIGURE 3).[5] Testing also indicates that MTBE is often found in tap water—about 9% of water supplies tested.[6] According to USGS testing, about 15% of drinking water in the Northeast contained MTBE.[7] Most is found at relatively low levels; about 1% exceed the low end of EPA's advisory level (20 ppb), with1% over the low end of EPA's advisory level.[8]

Health Concerns With MTBE

MTBE contamination of drinking water poses health concerns, but as is usually true with chemical contaminants, there remains some uncertainty as to how serious these risks are. EPA has found that MTBE may be a carcinogen, but has not reached a final verdict on the issue. There have been reports of acute human-health effects of MTBE such as nausea, dizziness, and headaches by people exposed to MTBE-containing fuel vapors in air, though some argue that these symptoms have not been clearly linked to MTBE exposure.[9] The human-health effects of long-term inhalation or oral exposures to MTBE are unknown.[10] However, there is some evidence of possible reproductive and developmental effects.[11]

There are no published studies evaluating MTBE and cancer in humans, but MTBE has been shown to cause cancer in rats and mice exposed by inhalation or orally.[12] Federal agency reports indicate that MTBE should be regarded as posing a potential cancer risk to people based on animal cancer data.[13] Although EPA has concluded that "MTBE poses a potential for human carcinogenicity at high doses" based on animal data, EPA says that these animal data "do not support confident, quantitative estimation of risk at low exposure"[14] EPA has based its Drinking Water Advisory upon taste and odor thresholds (20 to 40 µg/L) in humans, and has not yet established any enforceable health standard for MTBE.[15] Consumer rejection due to taste and odor of MTBE often has been a factor in water utility decisions to stop using or to treat water sources contaminated with MTBE.

State Actions Banning or Restricting MTBE

In response to widespread concerns about MTBE contamination, at least 17 States have adopted bans or serious restrictions on MTBE usage, and two have required intensive studies of MTBE contamination (Attachment 1).

Need for federal Legislation

There is an urgent need for federal legislation that would:

- *Ban MTBE, while maintaining air quality.* Congress needs to step in and enact a clear MTBE ban, but should accompany this with a requirement that air quality benefits of reformulated gas not be reduced. While there have been huge pollution reductions in smog and cancer-causing air toxics from the switch to reformulated gasoline, Congress can no longer ignore the harm being done by gasoline and MTBE leaking into drinking water supplies. Oil refiners have the ability to produce gasoline that achieves just as much air pollution reduction without oxygenates such as MTBE, but the law currently mandates their use. Congress should act immediately to repeal the mandate. It makes no sense to have a patchwork approach to this problem with 15 to 20 states banning MTBE; if Congress doesn't act and state bans go into effect, this could create needless confusion and burdens for consumers.
- *Prohibit oil companies from producing a fuel that is less effective at reducing smog and toxic air pollutants than the RFG sold today* when they remove oxygenates. We do not need to take a step backward in combating air pollution in order to protect groundwater.
- *Eliminate the 2% oxygen mandate.* We agree with numerous state officials, health groups, and API that Congress must lift the oxygenate requirement (and ban MTBE) while maintaining air quality benefits.
- *Give EPA clear authority to regulate fuel additives based upon air and water quality impacts* (the Senate energy bill last Congress would embody this authority; the House counter-offer last year did not).
- *No ethanol mandate.* The legislation should set standards for gasoline performance, rather than mandate a particular solution to the problem.
- *Encourage use of clean, renewable biofuels made from biomass,* which reduces global warming while improving air quality and reducing water risks. This should not be styled to effectively mandate ethanol use, however.

No Waiver or Preemption of State or Other Liability for Fuel Contamination

Our most overwhelming concern is that the legislation should not include any waiver or preemption of state or other liability for renewable fuels or MTBE. Introduced legislation (Rep. Peterson's H.R. 837 and Sen. Daschle's S. 385) include a so-called "safe harbor" provision that would preempt state law and effectively remove tools available to states and municipalities to remedy tap water contamination prob-

lems from fuel containing "renewable fuels." The provision would block lawsuits alleging that gasoline is a defective in design or manufacture because it contains such renewable fuels. A similar Senate measure last year was answered by a House conferees' offer that would have expanded this waiver of liability and preemption to MTBE.

Such a waiver of liability and preemption of State law is an unacceptable overreach that will hurt the public, local governments, the environment, and will encourage irresponsible corporate behavior. As the South Tahoe jury found after an extensive trial and review of an enormous number of industry documents and witnesses, many in the oil industry knew of the risks of MTBE, and irresponsibly failed to act or to warn the public or their customers.

Well before Congress enacted the 1990 CAA, the oil industry was aware of the risks posed by MTBE to water supplies, of the difficulty of cleaning up spills and leaks, of the persistence of MTBE, and of the fact that many oil storage tanks were leaking. Elements of the oil industry knew of problems a long time ago, and according to the California jury, acted "with malice" in failing to disclose these risks. (Attachment 4). As between this highly culpable oil industry that knew about the problem, failed to remedy it, and profited from the sale of their defective product, and the public water supplies that had nothing to do with creating the problem, and would have to bill their customers to remedy it, who should pay for the cleanup? Clearly, the oil industry should not be let off the hook for this liability. Why deny an important tool to local government and water utilities to address this important drinking water quality and potential health problem?

A liability waiver and preemption also would create unacceptable incentives for manufacturers to introduce defective products. What will be the next MTBE? TAME? DIPE? ETBE? Why do the renewable fuels manufacturers need such liability protection? Do they know of problems with their products that they are not telling Congress or us about, much like the oil industry was not very forthcoming about the problems with MTBE before it came into such widespread use?

The petroleum industry is clearly in best position to know about and to take action to avoid another MTBE. Industry must have the incentive to minimize the impacts of new fuel additives or new fuels.

Last year, there was a strong alliance behind a sensible solution to the MTBE and oxygenate problem, which included API. The liability waiver and preemption was added after that deal was cut, and is a deal breaker. We oppose the safe harbor provision in the bill offered by Senator Daschle (S. 385) and others this year in the Senate, and we would oppose any legislation that contains the provision as part of the energy bill.

PART 2 THE NEED TO REGULATE HYDRAULIC FRACTURING TO PROTECT UNDERGROUND SOURCES OF DRINKING WATER

There is another threat to drinking water and ground water by chemicals also used in gasoline and diesel fuel that is worthy of discussion and protective action by Congress. Hydraulic fracturing is a well development process that is designed to increase the yield of natural gas from underground rock formations, including coal. Fluid is injected down a well and into a rock formation at very high pressure in order to break up the rock formation and enable more gas to flow toward the well after all the groundwater has been removed.

Hydraulic fracturing fluid commonly contains many toxic chemicals that pose a significant threat to underground sources of drinking water. The carcinogen benzene, and MTBE, diesel fuel, and many other chemicals are known to be used in hydraulic fracturing fluids. It is well known that very small volumes of potent chemicals like benzene and MTBE can contaminate millions of liters of ground water. In recent years, that has been painfully obvious as MTBE contaminated ground water and surface water across the country. Just 28 tablespoons of MTBE could contaminate millions of liters of ground water at concentrations that would render it unusable.[16] It is important to note that the large number of coal bed methane wells planned in the US are of particular concern because their depths are relatively shallow and 10 of the 11 coal basins in the US are likely to lie, at least in part within existing underground sources of drinking water.[17]

A draft report by EPA reveals that many of the estimated concentrations of chemicals used in hydraulic fracturing fluids at the edge of the fracturing zone exceed the drinking water maximum contaminant levels (MCL)—even with an estimated dilution effect of 30.[18] The EPA report reveals that the estimated concentration of the carcinogen benzene is twice the drinking water MCL. The estimated concentrations of other chemicals exceed their MCLs by much greater factors—431 times the MCL in the case of methanol.[19]

There are a very limited number of empirical scientific studies that have evaluated the behavior of these chemicals in the subsurface and their effects on groundwater quality. The toxic chemicals used in fracturing fluid can be continuous sources of ground water contamination since, as the EPA report reveals, as much as 39-75% of fracturing fluids remain in the ground.[20]

After briefing some staff from this committee last September, it was discovered that EPA's calculations for estimated subsurface concentrations of chemicals of concern were based on values that were not consistent with data in their report that resulted in estimated concentrations 10 times lower.[21 22] A January 2003 article in Environmental Science & Technology includes the suggestion by a USGS hydrologist that EPA's dilution factor of 30 is not justified and that even if "only 20-30% of the fracturing fluids remain in the formation and the fluids include diesel fuel, the aquifer would be destroyed because the diesel will remain as a contaminant for generations."[23]

The near-impossibility of cleaning up underground sources of drinking water once they have become contaminated is precisely why Congress acted with precaution to protect existing and future sources of drinking water in the Underground Injection Control provisions of the Safe Drinking Water Act. Preventing widespread contamination of drinking water is far less expensive than attempting to clean it up later.

EPA's Congressionally-chartered National Drinking Water Advisory Council, comprised of representatives of the water industry, state and local governments, public health experts, consumers, environmental groups, and others, unanimously adopted a resolution December 12, 2002 urging the Administrator "to work through voluntary and/or regulatory means as appropriate in order to eliminate the use of diesel fuel and related additives in fracturing fluids that are emplaced in geologic formations containing sources of drinking water." (Attachment 2). Furthermore, the National Drinking Water Advisory Council urged the Administrator "to defend as necessary the US EPA's existing authority and discretion to implement the Underground Injection Control Program in a manner that advances the protection of our ground water resources from contamination." Support for oversight of state Underground Injection Control programs by EPA is growing in many states as they face serious budget shortages.[24]

We are very concerned about Section 2201 of the legislation filed by Congressman Barton that addresses hydraulic fracturing. EPA should not finalize its report entitled "Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs" until meaningful field investigation has been accomplished that includes collection and analysis of groundwater samples and installation of monitoring wells. In addition, EPA must retain its authority to oversee state regulation of hydraulic fracturing through the Underground Injection Control program to prevent contamination of underground sources of drinking water—consistent with Congress' intentional precautionary action via the Safe Drinking Water Act.

PART 3: MTBE: WHAT THE OIL COMPANIES KNEW AND WHEN THEY KNEW IT

Internal Industry Documents Are Rewriting The MTBE Pollution Story

In 2002, the Environmental Working Group released a report summarizing a series of internal oil industry documents that highlight the true story about MTBE. That report, available in full at www.ewg.org, is excerpted in this section of the testimony (web links to electronic versions of the industry documents cited in this testimony are included for readers of the electronic version of the testimony; copies of some of the key documents are attached to the hard copy version of the testimony).

Congress is considering legislation to strictly limit oil company liability for contaminating groundwater in at least 35 states with MTBE. The industry says it's only fair to shield MTBE makers from lawsuits, since, they claim, it was the government that mandated oil companies to reformulate gas with MTBE in the first place, to clean the air.

But a different story has emerged from internal industry documents and depositions, made public in recent successful lawsuits brought by cities and Communities for a Better Environment that want oil companies to pay to clean up water made undrinkable and unhealthy by MTBE. The documents, provided to EWG by CBE's lawyers Scott Summy and Celeste Evangelisti, show that the oil industry itself lobbied hard for the MTBE mandate because they made the additive and stood to profit. A top ARCO executive admitted under oath, "The EPA did not initiate reformulated gasoline . . ." He clarified that "the oil industry . . . brought this [MTBE] forward as an alternative to what the EPA had initially proposed." (Attachment 3)

By 1986, the oil industry was adding 54,000 barrels of MTBE to gasoline each day. By 1991, one year before the EPA requirements went into effect, the industry

was using more than 100,000 barrels of MTBE per day in reformulated gasoline. Yet secret oil company studies, conducted at least as early as 1980, showed the industry knew that MTBE contaminated ground water in numerous locations where it was used.

Oil companies are pressing Congress for liability protection because hundreds of communities have serious MTBE contamination problems, and company documents are coming back to haunt them in the courtroom. In April 2002, the documents convinced a California jury to find Shell, Texaco, Tosco, Lyondell Chemical (ARCO Chemical), and Equilon Enterprises liable for selling a defective product (gasoline with MTBE) while failing to warn of its pollution hazard, forcing a $60 million settlement with the water district for South Tahoe. (Attachment 4)

"The Government Made Us Do It"

As noted earlier in this testimony, MTBE is an "oxygenate" that makes gasoline burn cleaner and more efficiently. Unfortunately, it is also a foul-tasting, nasty-smelling, potential carcinogen that spreads rapidly when gasoline escapes from leaky underground storage tanks, contaminating sources of groundwater and drinking water from New York to California. Once in soil or water, MTBE breaks down very slowly while it accelerates the spread of other contaminants in gasoline, such as benzene, a known carcinogen.

Some communities, including Santa Monica and South Lake Tahoe, Calif., face tens or hundreds of millions of dollars in costs of cleaning up MTBE or replacing contaminated water supplies. At least 17 states already have passed measures to ban or significantly limit the use of MTBE in gasoline; two more have required intensive studies. We believe that a federal ban is more a question of when than if.

Pressure is building to follow the lead of many states and ban MTBE nationally by the year 2006. Members of Congress from corn-producing states support the phase out in part because ethanol made from corn is the primary MTBE substitute. Other members sympathetic to oil industry concerns, in turn, are demanding that any ban on MTBE shield its makers from product-defect liability. The proposal apparently would not preclude suits against parties responsible for allowing MTBE to leak from storage tanks, but would provide immunity from suits claiming that MTBE itself was a defective product—precisely the charge that won a $60 million settlement for the South Tahoe Water District this year. The jury in that case found five oil and chemical companies liable for selling a defective product—MTBE "while failing to warn of its pollution risks. (Attachment 4)

The MTBE Papers

The paper trail, dating at least to 1980, tells a different story: How the oil companies took a byproduct fraction of gasoline refining that had little profitable use and created a profitable market. Beginning in the mid-1980s, well in advance of the 1992 federal mandate to reformulate gasoline to meet the standards of the Clean Air Act, elements of the petrochemical industry promoted MTBE to U.S. and state regulators as the additive of choice.

Thousands of pages of internal documents and sworn depositions from the producers at Shell, Exxon, Mobil, ARCO, Chevron, Unocal, Texaco and Tosco (now Valero) have come to light through a lawsuit by Communities for a Better Environment, a California public interest group. Many of the same documents were used in a suit by the South Lake Tahoe Water District against four oil companies and Lyondell Chemical Co. of Houston (ARCO Chemical Company), the nation's largest MTBE producer. In the CBE suit, several of the companies settled by agreeing to clean up MTBE spills at more than 1,300 California gas stations; the others continue to contest the case.

In 2002, a jury in the Tahoe case found Lyondell, Shell, Texaco, Equilon, and Tosco guilty of irresponsibly manufacturing and distributing a product they knew would contaminate water. In addition, the jury found by "clear and convincing evidence" that both Shell Oil Company and Lyondell Chemical Company acted with "malice" by failing to warn customers of the almost certain environmental dangers of MTBE water contamination. (Attachment 4)

In an interview with The Sacramento Bee, the jury foreman said he found the MTBE papers, which demonstrated the industry's early knowledge that MTBE would threaten water supplies "among the most compelling evidence he recorded in 635 pages of handwritten notes." The foreman stated that "[t]here were lessons to be learned, but (Shell) didn't (learn them) because it saw money to be made in selling the product." After the jury verdict establishing liability, but before the jury could assess monetary damages, the companies settled the case for $60 million.

Oil Companies Knew MTBE Was a Threat to Water Supplies

Even though MTBE was not classified as a potential cause of cancer in humans until 1995, refiners knew much earlier that its powerfully foul taste and smell meant that small concentrations could render water undrinkable, and that once it got into water supplies it was all but impossible to clean up. A Shell hydrogeologist testified in the South Lake Tahoe case that he first dealt with an MTBE spill in 1980 in Rockaway, N.J., where seven MTBE plumes were leaking from underground storage tanks. By 1981, when the Shell scientist wrote an internal report on the Rockaway plumes, the joke inside Shell was that MTBE really stood for "Most Things Biodegrade Easier." Later, other versions of the joke circulated, including "Menace Threatening Our Bountiful Environment," or apropos to the present attempt to limit liability, "Major Threat to Better Earnings." (Attachment 5)

In 1983, Shell was one of at least nine companies surveyed by a task force of the American Petroleum Institute on "the environmental fate and health effects" of MTBE and other oxygenates. Shell's Environmental Affairs department replied to the trade association: "In our spill situation the MTBE was detectable (by drinking) in 7 to 15 parts per billion *so even if it were not a factor to health*, it still had to be removed to below the detectable amount in order to use the water." (emphasis added). The survey, the results of which were later distributed to all API members, asked for information about the number and extent of spills, chemical analysis of the spill and the contaminated water, and health effects to people in the community.

Clearly, Shell was not the only company that knew about MTBE problems. An environmental engineer for ExxonMobil (the companies merged in 1999) testified that he learned of MTBE contamination from Exxon gasoline in 1980, when a tank leak in Jacksonville, Maryland, fouled wells for a planned subdivision. The ExxonMobil engineer said it was learned MTBE had also leaked into the subdivision's wells from a Gulf and an Amoco station.

Storage Tanks Were Known to be Leaking in the 1970s and 1980s

Refiners also knew that underground gasoline storage tanks were susceptible to leaks, a fact that would amplify the problem with MTBE. In 1973, an Exxon report on the problem said: "The subject of underground leaks at service stations is one of growing concern to gasoline marketers. Large sums of money, time, and effort are exhausted on a continuing basis in the location and detection of leaking tanks and lines."

In 1981, an ARCO memo said leaking tanks were "a major problem . . . The issue is essentially a health/safety and environmental one. Escaping vapors can seep into basements, sewers and conduits, creating not only a nuisance but the danger of explosion and/or fire. Escaping gasoline also enters and pollutes the water table. (Groundwater is a major source of the U.S. water supply.) Certain chemicals in gasoline (namely the aromatics like benzene) may be carcinogenic or toxic in certain quantities."

By 1980, Exxon had an annual testing program for tanks and found that 27 percent were leaking; two years later the failure rate was up to 38 percent. In 1981, Shell and ARCO, the first refiners to add MTBE, estimated that 20 percent of all U.S. underground storage tanks were leaking. Five years later, in 1986, the EPA concurred. Prior knowledge of the extent of leaking gasoline storage tanks was a major part of South Lake Tahoe's case: Fully aware that tanks were leaking, the petrochemical industry nonetheless introduced an additive known to rapidly percolate down to groundwater from gasoline distribution systems with known leaks. Efforts were ongoing to upgrade storage tank systems, but when industry learned quickly that the new tanks were still leaking, it continued to expand the use of MTBE anyway.

The Industry, not the EPA, Promoted MTBE as an Oxygenate

Recently disclosed court documents clearly show that the oil companies, not state or federal regulators, were the boosters of MTBE. The industry developed and promoted the concept of using reformulated gasoline to reduce air emissions, assuring the EPA that reformulated gasoline would be better than other options being considered. ARCO Chemical Co.'s Manager of Business Development from 1987 to 1998 testified: "What I recall is the EPA actually promoting using methanol blends . . . and the refining industry said here's another option . . . we can reformulate gasoline to reduce the emissions . . . that would be equal to or better than you would get by substituting or mandating the use of methanol vehicles . . . [T]he oil industry . . . brought this forward as an alternative to what the EPA had initially proposed." He continued, "The EPA did not initiate reformulated gasoline." (Attachment 3)

Well before EPA mandated reformulated gasoline in 1992, the oil industry was aggressively promoting MTBE. According to the American Petroleum Institute, re-

finers were adding an average of 74,000 barrels of MTBE to gasoline per day from 1986 through 1991, roughly one third of the peak amount added to gasoline in 1998.

In 1987, a representative of ARCO Chemical (later absorbed by Lyondell), which was rapidly expanding its MTBE production, testified before the Colorado Air Quality Control Commission that the additive would reduce emissions and improve gas mileage, that supply and price were no barrier, and that consumers didn't need to be warned about the presence of MTBE in gasoline. Nothing was said about the leak and contamination problems that ARCO and the rest of the industry had known about for at least seven years. ARCO's representative testified that in the 1980s he played a similar role in "assisting" the states of Arizona and Nevada in the development of oxygenate programs—programs that resulted in those states adopting MTBE.

The Industry Attacked Safety Studies and Withheld Information From Regulators

In 1986, the Maine Department of Environmental Protection published a report documenting extensive MTBE groundwater contamination in the state. The authors identified MTBE as a "rapidly spreading groundwater contaminant" and discussed the option that "MTBE could be abandoned as an additive in gasoline stored underground" or that gas with MTBE "be stored only in double-contained facilities." The Maine Paper was perhaps the earliest warning from government health officials about the dangers of MTBE. To the oil companies, it was a call to arms. Documents show that even as they were internally disseminating this study and treating its findings seriously, the oil companies joined forces to attack the study's authors and the article's "damage" in an effort to discredit their findings and downplay the risks of MTBE.

The industry disinformation effort began even before publication of the paper. A 1987 ARCO memo details the continued attack on the authors and their research:

> "We initially became involved with the Maine DEP prior to the presentation of their first version of this paper at the National Well Water Conference on November 13, 1986... Since the paper was presented last November, we have been working with API, the newly formed MTBE Committee [of the Oxygenated Fuels Association], and on our view to assess the potential impact of this paper on state policymakers [and] to contain the potential 'damage' from this paper..."

The memo goes on to explain how the Maine Petroleum Council, the state affiliate of the API, was preparing a paper claiming that MTBE didn't speed up the spread of benzene in water, that MTBE "only spreads slightly further" than benzene and other contaminants, and that MTBE could be easily removed from water with existing technology—none of which is true. Internally, however, the industry admitted the Maine paper was a scientifically credible threat. A 1987 letter from an ARCO refining executive to his Unocal counterpart admits the MTBE task force didn't "have any data to refute comments made in the paper that MTBE may spread further in a plume or may be more difficult to remove/clean up than other gasoline constituents."

In 1987, at the same time that ARCO and API were leading the attack on the Maine Paper, EPA issued a request to the industry for "more information on the presence and persistence of MTBE in groundwater." As reported in 2001 by the *San Francisco Chronicle* and *The Sacramento Bee,* ARCO responded: "Where gasoline containing MTBE is stored at refineries, terminals or service stations, there is little information on MTBE in groundwater. We feel that there are no unique handling problems when gasoline containing MTBE is compared to hydrocarbon-only gasoline."

Internal Memos Warning Against MTBE Were Ignored

There were voices within the industry that warned against the use of MTBE, on grounds both of public health and cleanup costs from the inevitable leaks. A document dated April 3, 1984 from an Exxon employee said:

> "[W]e have ethical and environmental concerns that are not too well defined at this point; e.g., (1) possible leakage of [storage] tanks into underground water systems of a gasoline component that is soluble in water to a much greater extent [than other chemicals], (2) potential necessity of treating water bottoms as a "hazardous waste," [and] (3) delivery of a fuel to our customers that potentially provides *poorer* fuel economy... (Emphasis added.)

That same year, an Exxon engineer wrote the first in a series of memos outlining "reasons MTBE could add to ground water incident costs and adverse public exposure:"

> "Based on higher mobility and taste/odor characteristics of MTBE, Exxon's experiences with contaminations in Maryland and our knowledge of Shell's experi-

ence with MTBE contamination incidents, the number of well contamination incidents is estimated to increase three times following the widespread introduction of MTBE into Exxon gasoline . . ." Later, the document notes: "Any increase in potential groundwater contamination will also increase risk exposure to major incidents."

An Exxon memo from 1985 discusses MTBE's "much higher aqueous solubility" than benzene and other gasoline components:

"This can be a factor in instances where underground storage tanks develop a leak which ultimately may find its way to the underground aquifer. When these compounds dissolve in ground water and migrate through the soil matrix they separate into distinct plumes. MTBE creates the most mobile of the common gasoline plumes. MTBE is not a known carcinogen like Benzene however we can be required by public health agencies to remove it based on its taste and odor characteristics."

Thus, it is clear that the oil industry was not only well aware of the fact the MTBE is extremely soluble, mobile, and persistent, but that leaks could and had seriously contaminated water sources, well before the Clean Air Act Amendments of 1990.

[Additional material submitted is retained in subcommittee files.]

ENDNOTES

[1] Personal Communication with John Zogorski, USGS, March 11, 2003; Johnson, Pankow, Bender, Price, and Zogorski, USGS, "MTBE: To What Extent Will Past Releases Contaminate Community Water Supply Wells?" *Environmental Science & Technology* at 2A (May 1, 2000).

[2] South Tahoe Public Utility District v. ARCO, No. 999128 (Superior Court, S.F., March 4, 2002), SPECIAL VERDICT PHASE 1 (Attachment 4).

[3] Johnson, Pankow, Bender, Price, and Zogorski, USGS, "MTBE: To What Extent Will Past Releases Contaminate Community Water Supply Wells?" *Environmental Science & Technology* at 2A (May 1, 2000).

[4] Ibid.

[5] Personal Communication with John Zogorski, USGS, March 11, 2003

[6] Ibid.

[7] Ibid.

[8] Ibid.

[9] Toccalino, P., "Human Health Effects of MTBE: A Literature Summary," USGS, available on the web at http://sd.water.usgs.gov/nawqa/vocns/mtbe—hh—summary.html; citing inter alia Agency for Toxic Substances and Disease Registry, 1996, Toxicological profile for methyl t-butyl ether (MTBE): Atlanta, GA, U.S. Department of Health and Human Services, Public Health Service, August 1996, 268 p., http://atsdr1.atsdr.cdc.gov/toxprofiles/tp91.html; Health Effects Institute, 1996, The potential health effects of oxygenates added to gasoline. A review of the current literature. A special report of the Institute's oxygenates evaluation committee: Cambridge, MA, Health Effects Institute, April 1996, http://www.healtheffects.org/Pubs/oxysum.htm; National Institute of Environmental Health Sciences, 2002, MTBE (in gasoline): National Institute of Environmental Health Sciences, March 13, 2002, http://www.niehs.nih.gov/external/faq/gas.htm; National Research Council, 1996, Toxicological and performance aspects of oxygenated motor vehicle fuels: Washington, D.C., National Academy Press, 160 p.; National Science and Technology Council, 1996, Interagency assessment of potential health risks associated with oxygenated gasoline: Washington, DC, National Science and Technology Council, Committee on Environment and Natural Resources, February 1996, http://www.ostp.gov/NSTC/html/MTBE/mtbe-top.html; Office of Science and Technology Policy, 1997, Interagency assessment of oxygenated fuels: Washington, DC, Office of Science and Technology Policy, National Science and Technology Council, Executive Office of the President of the United States, June 1997, 264 p., www.epa.gov/oms/regs/fuels/ostpfin.pdf .

[10] Toccalino, supra; citing *inter alia* National Institute of Environmental Health Sciences, 2002, MTBE (in gasoline): National Institute of Environmental Health Sciences, March 13, 2002, http://www.niehs.nih.gov/external/faq/gas.htm; U. S. Environmental Protection Agency, 1995, Proceedings of the conference on MTBE and other oxygenates: a research update. Conference summary session seven: Research Triangle Park, NC, U.S. Environmental Protection Agency, National Center for Environmental Assessment, EPA/600/R-95/134, August 1995, 274 p., www.epa.gov/ncea/pdfs/mtbe/0850-A.pdf; National Research Council, 1996, Toxicological and performance aspects of oxygenated motor vehicle fuels: Washington, D.C., National Academy Press, 160 p.; National Science and Technology Council, 1996, Interagency assessment of potential health risks associated with oxygenated gasoline: Washington, DC, National Science and Technology Council, Committee on Environment and Natural Resources, February 1996, http://www.ostp.gov/NSTC/html/MTBE/mtbe-top.html' Office of Science and Technology Policy, 1997, Interagency assessment of oxygenated fuels: Washington, DC, Office of Science and Technology Policy, National Science and Technology Council, Executive Office of the President of the United States, June 1997, 264 p., http://www.epa.gov/oms/regs/fuels/ostpfin.pdf.

[11] Hartley, W.R., A.J. Englande, Jr., and D.J. Harrington. 1999. "Health risk assessment of groundwater contaminated with methyl tertiary butyl ether." Water Science & Technology 39, no. 11: 305-310.

[12] Toccalino, *supra*; Health Effects Institute, 1996, The potential health effects of oxygenates added to gasoline. A review of the current literature. A special report of the Institute's oxygenates evaluation committee: Cambridge, MA, Health Effects Institute, April 1996, http://www.healtheffects.org/Pubs/oxysum.htm; National Institute of Environmental Health Sciences,

2002, MTBE (in gasoline): National Institute of Environmental Health Sciences, March 13, 2002, http://www.niehs.nih.gov/external/faq/gas.htm;

[13] Toccalino, *supra* citing *inter alia*; National Science and Technology Council, 1996, Interagency assessment of potential health risks associated with oxygenated gasoline: Washington, DC, National Science and Technology Council, Committee on Environment and Natural Resources, February 1996, http://www.ostp.gov/NSTC/html/MTBE/mtbe-top.html; Office of Science and Technology Policy, 1997, Interagency assessment of oxygenated fuels: Washington, DC, Office of Science and Technology Policy, National Science and Technology Council, Executive Office of the President of the United States, June 1997, 264 p., http://www.epa.gov/oms/regs/fuels/ostpfin.pdf; U. S. Environmental Protection Agency, 1997, Drinking water advisory: Consumer acceptability advice and health effects analysis on methyl tertiary-butyl ether (MTBE): Washington, DC, U. S. Environmental Protection Agency, Office of Water, EPA-822-F-97-009, December 1997, 48 p., http://www.epa.gov/waterscience/drinking/mtbe.pdf.; California Department of Health Services, 2001, Proposed Regulations, California Code of Regulations, Title 22, Chapter 15, Section 64468.2. health effects language—volatile organic chemicals: Sacramento, CA, California Department of Health Services, R-16-01, April 12, 2001, 26 p., http://www.dhs.cahwnet.gov/ps/ddwem/publications/Regulations/R-16-01-RegTxt.pdf.

[14] U.S. Environmental Protection Agency, 1997, Drinking water advisory: Consumer acceptability advice and health effects analysis on methyl tertiary-butyl ether (MTBE): Washington, DC, U. S. Environmental Protection Agency, Office of Water, EPA-822-F-97-009, December 1997, 48 p., http://www.epa.gov/waterscience/drinking/mtbe.pdf

[15] Ibid.

[16] Johnson, R., et al., "MTBE: To What Extent Will Past Releases Contaminate Community Water Supply Wells?", Environ. Sci. Technol. 2000, 34 (9), 210 A-217.

[17] US EPA, 2002, *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*, p. ES-11, 5-14, and 7-2.

[18] Ibid., p. 4-4.

[19] Ibid., p. 4-4.

[20] Ibid., p. 3-10.

[21] Gurney, S., 2002, Comments submitted by the Natural Resources Defense Council about US EPA draft report *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs.*, US EPA Water Docket ID No. W-01-09-11

[22] First letter to EPA Administrator Christine Todd Whitman from Congressman Henry Waxman, October 1, 2002. Available at http://www.house.gov/waxman/news—letters.htm.

[23] "Does Hydraulic Fracturing Harm Groundwater?," Environ. Sci. Technol. 2003, 37 (1), 11A-12A.

[24] News from the Ground Water Protection Council found at http://www.gwpc.org/News-2003/states-weigh.htm .

Mr. BARTON. We thank you. We are going to recess. We will reconvene at approximately between 3:20 and 3:25 to hear our last two witnesses and then take questions. So we are in recess for approximately 20 minutes.

[Brief recess.]

STATEMENT OF SCOTT H. SEGAL

Mr. SEGAL. continuing] of the MCL for MTBE. This committee itself has recently considered material improvements in the Underground Storage Tank Program, and OFA looks forward to working with you on such legislation. Frankly, UST implementation, enforcement and recently introduced legislation are the most direct and appropriate ways to deal with instances of gasoline components and water.

Further, we urge the subcommittee to support appropriate liability protection for clean fuel additives. First, it is important to recognize that MTBE usage in RFG derives from compliance in a Federal mandate. Tom Daschle, the author of the floor amendment that established the 2 percent oxygen standard, stated during debate, "MTBE and ETBE are expected to be major components of any clean octane program." Under certain forms of the then debated oxygenate mandate, Senator Daschle went as far as to note that EPA predicts that the amendment will be met almost exclusively by MTBE, a methanol derivative.

I want to take a word for a little bit of what we have seen in the NRDC comments, in particular. Siting documents from a lawsuit supported in part by MTBE competitors, Mr. Olson implies

that the Federal Government had no knowledge of potential MTBE characteristics in water prior to the regulatory developments associated with the 2 percent standard. In 1986, the EPA stated in the Federal Register that MTBE may indeed persist for long periods, that it was not likely to be readily biodegraded or otherwise transformed in groundwater. This is the precise observation that Mr. Olson thinks was new and different in 1998, but EPA was well aware of it 13 years earlier. In addition, we would be willing to submit, and in fact we intend to submit, a memorandum on this issue for the record.

Mr. Olson does not give the full context of the documents he sites. For example, he leaves out the actual methodological assessment of the main Department of Environmental Protection. The next line from the document cited states, "The authors, Garrett, et. al., don't represent the views of the Department of Environmental Protection Policymakers. Given MTBE's low toxicity, DEP doesn't consider MTBE to be especially hazardous." The main report that is cited also publicly thanks the ARCO Chemical Company for its assistance in providing documents related to the characteristics of MTBE, voluntarily given to Garrett and his co-authors.

In addition, the contention is made that MTBE producers have the temerity to lobby on behalf of their product, but most participants opposed bans on MTBE. In fact, the record will show that in 1997 the California Air Resources Board, a State agency, convened a meeting with oil industry interests and NRDC to pool resources to defeat a ban on MTBE. Mr. Chairman, I have a copy of a Los Angeles Times article to this effect, which makes very interesting reading, and I would be happy to submit it for the record. After that meeting, an NRDC senior attorney that attended was interviewed. She said, "This is a unique situation. It is the first time the oil industry saw their interests as coinciding with the NRDC's." The LA Times even referred to NRDC as, "part of the oil industry's coalition." Last, we are highly suspect of the conclusions that have been reached here. Because of allegations that have been discussed, somehow this has been transformed into an argument that we ought to maintain full products liability. First, no one has suggested relief for negligent theories of liability. If a defendant has negligently mishandled gasoline containing MTBE, tort relief would still be available even under your construction of last year. In fact, the California attorney general, along with other local counsels, has obtained millions of dollars in relief by simply undertaking underground storage tank enforcement actions well outside of the tort system all together. And as the Council of Economic Advisors found only last year, only 20 cents on the dollar is returned in actual damages in the tort system. Surely we can come up with something better than 20 cents on the dollar.

I see my time has expired, so I just want to say that on a going-forward basis we have big problems. We will continue to have problems with fuel price and supply and with clean air. One thing we can do is to adopt responsible liability protections. The other thing we can do is to make sure that any difficulties associated with splash-blended ethanol are addressed by allowing us to incorporate ethanol into other ethers, for example, ETBE. And, in fact, the

Lyondell Chemical Company, I understand, has a statement they have prepared for the record that I would like to submit.

Mr. BARTON. Without objection.

Mr. SEGAL. Thank you very much for the time and we look forward to working with you on the legislation.

[The prepared statement of Scott H. Segal follows:]

PREPARED STATEMENT OF SCOTT H. SEGAL, COUNSEL, OXYGENATED FUELS ASSOCIATION

Chairman Barton, Congressman Boucher and Members of the Subcommittee, thank you for this opportunity to testify regarding comprehensive national energy policy as it relates to national motor fuels policy and the Clean Air Act. My name is Scott Segal, and I am a partner at the law firm of Bracewell & Patterson. In that capacity, I have represented clients here in Washington on environmental policy matters for thirteen years. Today, I am here in my capacity as counsel to the Oxygenated Fuels Association. In addition, I serve on the adjunct faculty of the University of Maryland (University College) in the area of Science and Technology Management.

Founded in 1983, the Oxygenated Fuels Association (OFA) is an international trade association established to advance the use of oxygenated fuel additives to improve the combustion performance of gasoline, thereby significantly reducing automotive tailpipe pollution.

As the leading voice of the industry, OFA gathers, develops and analyzes technical information on the blending, performance, handling, health benefits and environmental properties of oxygenates used in gasoline. OFA works with federal, state and local governments, national health organizations, environmental groups and major allied industries, such as automotive manufacturers, oil companies, and gasoline marketers and other interested parties. OFA sponsors numerous technical analyses and health science studies showing the automotive performance and health benefits of oxygenated fuels.

1. GENERAL CONSIDERATIONS FOR U.S. MOTOR FUELS POLICY

Mr. Chairman, the decision to examine the impact of energy policy on U.S. motor fuels issues could not be more timely. As today's hearing is underway, disturbing trends are emerging regarding the security, supply and price of motor fuels. Despite the fact that the spring driving season is not yet upon us, gasoline prices at the pump are already elevated. While much of the blame for gas prices rests squarely on crude oil prices stimulated by current international uncertainties in the Middle East and Venezuela, other self-imposed policy decisions are also playing a role.

Last week, one analyst at the Oil Price Information Service described current prices this way, "It's Ash Wednesday, and we're going to be asked to give up disposable income for Lent." The analyst noted that "high fuel prices rob consumers of money to pay for computers, cars, home improvements and other economy-boosting goods and services." ("No Stopping Gas Prices," USA Today, March 5, 2003, citing Tom Kloza). The article in which he was cited went on to assess complicating factors. And one of these was:

> Conversion to ethanol instead of potential pollutant MTBE as an ingredient in summer-season gas. The change is cumbersome, and states such as California rely on distant states for corn-based ethanol. "Not a lot of folks can help them out if they get into trouble" with ethanol supplies, says Joanne Shore, senior analyst at DOE's Energy Information Administration. (*Id.*)

In particular, problems in California are complicated by conversion from MTBE to ethanol fuels. The noted oil analyst Trilby Lundberg put the California situation in a national context, stating in part that, "The increase of just over a nickel in the U.S. average is nearly entirely due to California refineries switching over to corn-based additives . . . Some refineries are changing over to a more expensive blend of gasoline and ethanol, which temporarily cut the state's gasoline supply by 10 percent." (*Gas Prices Up to Near-Record Level*, Associated Press, March 10, 2003). Californians familiar with the State's energy situation question whether moving away from MTBE makes sense right now, particularly in light of the international situation. The *Daily Bulletin* of California's Inland Valley reported:

> Rising prices now are not due to a true shortage . . . but simply to uncertainty. "We've been living the good life for 22 years. We've had some of the cheapest gas in the world," said Bob van der Valk, bulk fuels manager for Cosby Oil in Santa Fe Springs. Market factors like the major oil companies' decision to start

> blending their summer gas a different way are playing a role as well, van der Valk said. Gas blended for summer usage has always required more refining than the winter variety, he said. But starting Monday, the major companies will mix their summer gas with ethanol additives instead of MTBE (methyl tertiary butyl-ether) for the first time—an added cost, and complication, at a time when a potential war in Iraq throws the reliability of Middle Eastern crude oil into question. "The last Persian Gulf War when hostilities broke out, we had an interruption in crude oil supply, and there was an instant spike in the price of gas on the street 25 to 30 cents. That hasn't even happened," van der Valk said. "That time we didn't have the MTBE-to-ethanol switch. Last time it was just strictly crude oil." ("*Gas prices keep pumping up: No end in sight as a gallon climbs to $1.97*," March 3, 2003).

A consensus of studies confirms the price-supply impact of switching from MTBE to ethanol. Noted petroleum economist Phil Verleger puts it this way: removal of MTBE from the California market could push the retail price of gasoline to levels previously unseen across the United States. Research on price elasticity of gasoline—confirmed in over 300 studies—means that high prices in California will pull gasoline from the rest of the country, leaving everyone short of supply. Verleger is a principal at PKVerleger LLC and BP Senior Fellow at the Council on Foreign Relations.

As OFA has noted many times, the impact of MTBE on the national motor fuels pool is extraordinarily significant. Today, many of America's drivers use cleaner-burning gasoline designed to cost-effectively reduce harmful motor fuel emissions and improve the air we breathe. Introduced in 1995, Reformulated Gasoline (RFG) is used today in the most polluted urban areas in 17 states and the District of Columbia. RFG usage accounts for about 34 percent of the total U.S. gasoline market (*i.e.*, 2.5 million barrels/day or 100 million gallons/day).

While the undeniable environmental benefits of RFG will be discussed later in this statement, I want to keep our eyes on the impact of MTBE volumes on fuel supply. DOE Under Secretary Bob Card testified before the U.S. Senate in 2001 that,

> MTBE's contribution to gasoline supplies nationally is equivalent to about 400,000 barrels a day of gasoline production capacity or the gasoline output of four to five large refineries. Additionally, a loss of ability to use MTBE may also affect the ability of the US gasoline market to draw gasoline supplies from Europe, the major source of our price-sensitive gasoline imports, since those refiners widely use MTBE, albeit typically at lower concentrations than in the U.S. (*Statement before the Senate Energy and Natural Resources Committee*, June 21, 2001).

Not only do policies designed to hasten MTBE's exit from the marketplace, therefore, complicate the existing picture for gasoline price and supply; they also undermine our clear and present needs for national security. It is no secret that as these hearings are occurring, hundreds of thousands of U.S. men and women are being mobilized in the Middle East. What few recognize is that a robust supply of motor fuels is an essential prerequisite for a safe and effective mobilization. The National Defense Council Foundation (NDCF) noted that five different Presidents—Eisenhower, Kennedy, Nixon, Ford and Carter—recognized that maintaining a healthy refining sector was essential to national security. (National Defense Council Foundation, *The Growing Refining Gap, A Threat to National Security* vi—Apr. 29, 1994).

As mobilization continues, one would be hard pressed to think of a worse time to remove ten percent of the capacity of motors fuels capacity in the nation's most populous cities. The amount of refined products required to supply a modern military far exceeds the amount required in the past. For example, during the peak of Operation Desert Storm, the half million U.S. military personnel involved consumed more than 450,000 barrels of light refined products per day, nearly four times the amount used in World War II by the two million strong Allied Expeditionary Force that liberated Europe.

While ethanol currently has a significant and growing share of the fuel pool, some have suggested that mandating its further use could answer price and supply questions. We believe that an ethanol mandate does not provide an acceptable answer to U.S. energy security needs, given ethanol's heavy dependence on fossil fuel inputs and its net negative energy yield. Data from the Argonne National Laboratory, for example, proves the point that an ethanol mandate "is more likely to increasenot reduceforeign oil imports, fossil energy use, and global greenhouse gas emissions." (as cited in Sierra Club Statement Before the Senate Committee on Environment and Public Works, at Cong. Rec., Aug. 3, 1994, at S10472). David Pimental of Cornell University further noted that, "Numerous studies have concluded that ethanol production does not enhance energy security, is not a renewable energy source, is

not an economical fuel, and does not insure clean air. Further its production uses land suitable for crop production and causes environmental degradation.'' (*The Limits of Biomass Utilization,* August 16, 2001 at 9).

2. THE ROLE OF RFG IN ENVIRONMENTAL PROTECTION

By every measure, clean-burning RFG blended with MTBE has exceeded all pollution reduction goals and substantially and cost-effectively improved the nation's air quality. RFG has cut smog-forming pollutant emissions by over 17 percent, the equivalent of removing 64,000 tons of harmful pollution from the air we breathe or taking 10 million vehicles off our roads. RFG has reduced emissions of benzene, a known human carcinogen, by some 43 percent, while reducing total toxic air emissions by about 22 percent. Cleaner-burning MTBE accounts for a large part of the overall emission reductions from RFG. In 1998, the Northeast States for Coordinated Air Use Management found that RFG with MTBE substantially reduced ''the relative cancer risk associated with gasoline vapors and automobile exhaust compared to conventional gasoline,'' concluding that today's RFG reduces cancer risk by 20 percent over conventional gasoline. More recently, the California Bay Area Air Quality Management District (BAAQMD) concluded that a substantial reduction in cancer risk in the region is directly attributable to MTBE.

OFA has consistently taken the position that an essential prerequisite for substantive revision of the Clean Air Act is that the actual reductions in air emissions that result from use of oxygenated RFG be preserved in any subsequent formulation of fuel.

3. ISSUES RELATED TO WATER QUALITY

Opponents of the continued use of MTBE point to allegations regarding MTBE in certain water sources. Is this fair commentary? The answer is—no—providing gasoline is properly contained and accidental spills and leaks promptly cleaned up. In 1996, MTBE was discovered at low levels in groundwater sources in California. MTBE has also been detected at low concentrations in other parts of the country. MTBE has since received an inordinate amount of attention from US public officials who have attempted to ban MTBE in their jurisdictions.

Initially, the US problem resulted almost entirely from a serious lapse in the regulation of underground gasoline storage tanks (UGSTs), which resulted in thousands of leaking UGSTs by the late 1980's. So widespread was the problem that the EPA established a program in 1988, the Leaking Underground Storage Tank (LUST) Trust Fund, to provide financial assistance to close down or bring these tanks up to standards. Yet by 1999, over ten years later, only 80% of leaking tanks had been closed down or repaired. By 1999, EPA also estimated that almost 400,000 releases from regulated USTs had been identified. In spite of these sobering statistics, however, US public debate has focused only on MTBE detected at some of these leak sites, and not on larger problems associated with gasoline.

Claims have been made that MTBE is more water-soluble than other gasoline components. What has been completely overlooked, or ignored is that MTBE can only be introduced into the environment mixed with much larger quantities of the gasoline in which it is blended, usually through gasoline leaks or spills. The much larger problem in fact, is that where you find MTBE, which is not toxic or hazardous to health and the environment, you also find gasoline, containing compounds that are. More information on toxicity is attached as an addendum to this statement.

This Committee itself has recently considered material improvements in the UST program, and OFA looks forward to working with you on such legislation. Frankly, UST implementation, enforcement and recently-introduced legislation are the most direct and appropriate ways to deal with instances of gasoline components appearing in water.

Objective analysis points to MTBE having become a convenient scapegoat as the one entity to which blame for a collective failure to protect US groundwater resources can be conveniently transferred. An Australian fuels expert recently characterized this phenomenon as ''shooting the messenger'', a reference to the fact that some countries, such as Canada, actually use MTBE detections in water as an ''early warning'' of potentially significant gasoline leaks into the ground that need to be cleaned up as quickly as possible.

Citizens in the Americas are well aware that gasoline and water do not mix. Many countries around the world have safely and securely used MTBE extensively as an octane enhancer since the early 1970's, and ethanol enriched gasoline—another water soluble, but toxic oxygenate—since the 1980's. Where strict compliance with and strong enforcement of gasoline storage and handling regulations is ob-

served, MTBE and other water-soluble additives have a statistically insignificant likelihood of ever contaminating water supplies.

4. PRODUCT BANS SET DANGEROUS PRECEDENTS

Mr. Chairman, it is our understanding that you do not support product bans, as a general rule, and that the case for a ban of MTBE is unacceptably weak. Yet there are some who would urge the adoption of a ban as a matter of political expediency. We urge the Subcommittee in the strongest terms not to ban MTBE.

While Congress has acted to ban certain toxic chemicals, it has never done so without an extensive scientific record of confirmed risks and, in some cases, with an opportunity for the appropriate administrative agency to revisit the prohibition based on additional factual information. Congress has enacted only one statutory prohibition on a toxic chemical, a ban on PCBs in the Toxic Substances Control Act, enacted in 1976. Even this prohibition allowed EPA to permit the use of PCBs where it could be shown that there was no unreasonable risk. Furthermore, while EPA has taken regulatory action before to take chemicals out of commerce or limit their use, such as asbestos, lead, and a few major pesticides, EPA only exercised its authority after substantial scientific analysis and an opportunity for public review and comment. None of the product bans thus far proposed allows EPA to make additional findings concerning the actual risk to human health nor allows EPA to exercise its regulatory expertise to provide for exceptions or changes based on changed circumstances. In fact, the data cited in the addendum below disproves toxicity claims. In this respect, a ban of MTBE is both arbitrary and unprecedented.

A ban of MTBE is also objectionable because of the typically short phase-in periods for such actions (some to be implemented in four years or less). In o1ther parts of the Clean Air Act, Congress has taken action to prohibit the sale of certain chemicals or change the design of certain products, but never according to such an abrupt schedule. In Title VI of the 1990 Clean Air Act Amendments, for example, Congress mandated a phase out of Class I chlorofluorocarbons (CFCs) over a ten-year period, and a phase out of Class II CFCs over a 30-year period. Likewise, in Title IV of the 1990 Clean Air Act Amendments, Congress ordered a reduction in emissions of sulfur dioxide over a ten-year period. Title II of the 1990 Clean Air Act Amendments provides for a tightening of standards for automobile emissions that extends in a two-step process over eleven years. Indeed, the investments required to make the Clean Air Act RFG work were substantial enough to warrant a five-year planning and implementation period alone.

Restrictions on MTBE not only harm MTBE manufacturers, but they also set a dangerous precedent that could inhibit the success of federally mandated environmental programs in the future. To encourage the development of environmentally protective products and processes in the future, Congress must ensure that the rules for participating in markets are clear and fair, and that the participant has a reasonable expectation to earn a return on an investment. Proposed bans on MTBE in four years or less send a disquieting message that Congress can arbitrarily change the rules at any time, with potentially ruinous consequences for those who have taken risks and made good faith investments.

5. LIABILITY ISSUES

Mr. Chairman, as you know, instances of alleged contamination of water sources by gasoline containing MTBE have recently been the source of a number of lawsuits. These suits are now ongoing, and I am not in a position to comment on any particular lawsuit or settlement discussions. However, I would like to address some of the underlying issues relevant to public policy on litigation.

By way of review, I would note that last year's Senate energy proposal contained a safe-harbor provision applicable only to ethanol fuels. That provision stood for the proposition that because the government would be mandating renewable fuels, no plaintiff's attorney should be able to sustain the legal argument that merely complying with the law—that is, making gasoline that satisfies the requirement—could be the basis for strict products liability. If the government tells you to make a particular fuel, it makes little sense to regard such a product as "unreasonably dangerous." If the purpose of products liability is to deter unwanted behavior, such liability cannot do so when the government mandates the product.

When the House entered into conference discussions with the Senate last year, House negotiators correctly realized that the same argument, as a matter of law, fairness and policy, was clearly applicable to MTBE and other ethers.

First, it is important to recognize that MTBE usage in RFG derives from compliance with a federal mandate—the requirement that RFG contain two percent (by weight) oxygen in order to achieve the goals of the Act to clean the air. An honest

assessment of the conditions surrounding the adoption of the two-percent oxygen standard leaves little doubt but that Congress intended substantial use of MTBE. For example, Senator Tom Daschle, the author of the floor amendment that established the two-percent standard, stated during debate, "The ethers, especially MTBE and ETBE, are expected to be major components of meeting a clean octane program." (*Clean Air Act Amendments of 1989,* Cong. Rec., March 29, 1990 at S3511). Under certain forms of an oxygenate mandate, Senator Daschle went as far as to note that, "EPA predicts that the amendment will be met almost exclusively by MTBE , a methanol derivative." (*RFG: Whose Recipe Is It Anyway, and Will It Work?,* Cong. Rec., May 16, 1990 at S6383).

Senator Daschle recognized what we all know: there are substantial benefits to using MTBE as far as environmental protection is concerned. In the floor debate on the two percent standard, Senator Daschle cited evidence that, "NO_x, hydrocarbons, and carbon monoxide are dramatically reduced by adding the oxygenate MTBE to gasoline." (*Id.*).

Even opponents of MTBE concede that the federal mandate lies at the heart of MTBE use. California Governor Gray Davis wrote to EPA, "The only reason such MTBE-free gasoline is not being made available today is U.S. EPA's enforcement of the 2.0 percent oxygen requirements." (Letter from Hon. Gray Davis, Governor of the State of California, to Hon. Carol M. Browner, Administrator of U.S. EPA, April 12, 1999).

Some argue that because the text of Clean Air Act is silent as to which oxygenate should be used, that somehow there was no intention to use MTBE. However, the overwhelming consensus of those supporting the two-percent standard was that the provision was intended to be satisfied in a cost-effective manner that would not cause unacceptable price and supply disruptions. Given the dynamics of ethanol price and supply, it is inconceivable that the two-percent standard was intended to be a de facto ethanol mandate. In fact, farm-state proponents of the two-percent standard vigorously denied such an intention throughout the debates on the standard.

Given that the action of the Congress clearly underscored the requirement for MTBE use, it makes little sense to allow for the propagation of a legal theory that complying with Congress' wishes is sufficient for products liability. Of course, if gasoline containing MTBE is negligently spilled, liability may still be an issue. Last year's debate on liability did not extend to negligence theories, and every MTBE case thus filed contains in whole or in part such negligence theories. The safe harbor provision in question here is narrowly tailored and does not interfere with the ability of plaintiffs to obtain relief for truly negligent behavior that results in diminished value of resources.

There are many examples of the Congress adopting such narrowly-tailored provisions dealing with liability in specific contexts. We have included a short list of such examples as an addendum to this statement. Perhaps the closest fact-pattern deals with a flame retardant, TRIS. The Federal Government required its use in children's sleepwear, only to learn that the retardant was carcinogenic, whereupon it was banned. The Federal Government not only limited liability, but it set up a settlement fund to deal with claims made by companies that manufactured TRIS.

Some have argued that imposition of strict product liability is a prerequisite for appropriate remedial actions. We respectfully disagree. First, negligence theories more than suffice to address remedial questions. Second, the use and improvement of the UST program, as discussed above, provides a far fairer and efficient mechanism to address the problems of alleged contamination. Third, one can hardly think of a less efficient mechanism for addressing water quality concerns than imposition of inflexible strict liability theories. A recent report from the Council of Economic Advisors found that using the tort system in this way "is extremely inefficient, returning only 20 cents of the tort cost dollar for that purpose." (Council of Economic Advisors, *Who Pays for Tort Liability Claims? An Economic Analysis of the U.S. Tort Liability System*, April 2002, at 9). Surely we can construct a policy that addresses UST leaks such that greater than 20 cents out of every dollar spent goes to actual clean up!

6. A LOOK TO THE FUTURE

The problems of tightness in supply and refining capacity are likely to be with us for the time being. The need to maximize energy security will continue as well. As new fuel choices present themselves, we should adopt public policies that do their best to minimize external costs associated with new fuels and fuel additives. We must maintain a robust and competitive market in fuel additives, and not allow one particular approach to dominate.

One thing we can do is adopt responsible liability protections when fuel choices are or have been mandated. Failure to do so undermines the introduction of new fuel additives that will be essential for a competitive marketplace. The Council of Economic Advisors is clear on this point: "At higher levels of expected liability costs, however, firms will choose to forgo innovation or to withhold a product from market, resulting in a net negative effect of expected liability costs on innovation." (*Id.* at 6). Given the current dynamics of the fuel market, we can ill afford less alternatives.

Another approach to consider is support for transition assistance for additive manufacturers. In the event that policies are adopted that make continued use of MTBE less likely, Congress should make clear that it will make adequate resources available on a timely basis to transition current additive manufacturers to new and different products capable of meeting America's energy needs.

If Congress should choose to adopt some form of ethanol mandate, then policies must be put in place that facilitate such mandates on the most acceptable terms. For example, mere splash blending of ethanol is likely to prove to be unacceptable on a number of fronts. The volatility of splash-blended ethanol will cause unacceptable environmental and performance complications, particularly in certain regions of the country not currently using the product. In addition, ethanol's requirement for segregated pipeline transportation poses high hurdles to efficient movement and allocation of product to distant markets. As both coasts are enforced to embrace ethanol, this problem will only get worse.

One way to address the problems with splash-blended ethanol is to incorporate ethanol into an ether, ETBE. An ether with less affinity for water than MTBE, ETBE addresses both the volatility and pipeline transportation issues. However, in order to facilitate greater ETBE use, ETBE must be placed on equal-footing with splash-blended ethanol. This means that ETBE must be treated fairly in tax and regulatory contexts. For more information, please see a separate statement submitted for the record in this hearing by the Lyondell Chemical Company.

Mr. Chairman, Congressman Boucher, and other Members of the Subcommittee, thank you for your careful attention to these matters. OFA and its members look forward to working with you on a fair and effective national fuels policy—one that protects consumers, human health and the environment.

Mr. BARTON. Appreciate your testimony. We are going to now begin our questions. We are going to recognize Mr. Boucher of Virginia for 5 minutes.

Mr. BOUCHER. Well, thank you, Mr. Chairman, and thanks to all the witnesses for informing us about the matter of ethanol use today. We are the wiser by virtue of your presentations. I just have two basic questions, and I am going to be brief about both of these.

Here is the first question, here is the thesis, that it actually takes more energy to produce ethanol than the energy value of the petroleum that is saved when ethanol is consumed, and that most of the energy that is used in ethanol production actually comes from petroleum in growing and processing corn. And so by using ethanol we actually have a net petroleum loss. That is the thesis. I would like to hear from those who would either support it or would like to rebut it. And who wants to go first?

Mr. DINNEEN. Congressman, if you don't mind, I think I will jump into this first, and I would ask maybe to submit for the record the most recent comprehensive study conducted by the Department of Energy's Argonne National Lab, which looked at all of the energy balance studies that have been done over the past 10 and 15 years and concluded that without question ethanol has a positive energy balance.

Mr. BARTON. Without objection.

Mr. DINNEEN. The ethanol industry is growing significantly, as I indicated in my statement. Every new ethanol plant is using the most efficient technologies today, so we are just growing more and more energy efficient. There are a few studies that have been out

there for quite some time that my good friend to my left likes to cite all the time from one professor at Cornell University who uses a number of outdated inputs. The United States Department of Agriculture has looked at his data——

Mr. BOUCHER. Now, these are the studies that can conclude that there is some sort of net deficit.

Mr. DINNEEN. That is correct.

Mr. BOUCHER. Yes. Okay.

Mr. DINNEEN. But USDA has looked at his studies as well and found them to be extremely lacking, and I would like to submit USDA's analysis of the Cornell papers as well.

Mr. BOUCHER. Okay. We will be happy to look at that.

Anybody else want to comment on this subject? Yes, Mr. Slaughter?

Mr. SLAUGHTER. Mr. Boucher, I think there is a law of physics that says for every ethanol study there is an equal and opposite study. It has been true now for about 20 years whatever study comes out there is a counter study with exactly the opposite finding that hits the streets quite shortly. I have watched that go back and forth for a number of years. I think the only answer you can take away from it is that there is negligible impact either way. It is either negligibly minus or it is negligibly plus, but I think the operative word is, "negligibly."

Mr. BOUCHER. All right. Other comment on that question?

Mr. MURPHY. Mr. Boucher?

Mr. BOUCHER. Mr. Murphy.

Mr. MURPHY. Yes, Mr. Boucher. We think that the renewable fuels standard, a renewable fuels standard, would serve to reduce imports. We don't make the case that it would dramatically reduce imports. And, of course, one thing to keep in mind is this is not an ethanol mandate, this is a renewable fuels mandate. And some of what is going to into that are things like biodiesel and things that we don't even understand and appreciate at this time. And that is why it is so important that we have the EPA approve any additive that is used under this before it is added to gasoline. So I think we perhaps put too much focus, as you pointed out, on ethanol, because ethanol may be today's answer, but I don't know if it is the answer 5 years from now.

Mr. BOUCHER. Okay. Other comments on this very briefly? Mr. Early?

Mr. EARLY. We have looked at this issue, Mr. Boucher, and there isn't any question that the efficiencies that have occurred in the ethanol industry have resulted in the production of, I think, a net benefit from an energy perspective, although I caution that it is a modest benefit. Because when you are using ethanol and gasoline at only 10 percent, and the studies show you get somewhere around a 20 or 30 percent net benefit, 10 percent of 20 percent is only 2 percent, so it is a very modest benefit. But I believe it is positive.

Mr. BOUCHER. Okay. Let me move to my——

Mr. SEGAL. Mr. Boucher? Mr. Boucher?

Mr. BOUCHER. All right. Very quickly, Mr. Segal.

Mr. SEGAL. Very quick comment.

Mr. BOUCHER. My time is almost up.

Mr. SEGAL. I am not even going to enter the fray on the efficiency argument except to say this: There is one problem in the whole discussion you have heard so far. If ethanol has indeed made major efficiency gains, and I have copied down what Bob said, "most efficient technologies all being in place and therefore now has a positive energy yield," one does have to question why ethanol—that is not the argument ethanol makes in advancing the tax incentive where they say that, "We just need a little bit more tax incentive until we make certain efficiency breakthroughs and then we won't need it anymore." But in answering this question, they have always come up with the most efficient technologies. A little bit of an inconsistency is all I am saying.

Mr. BOUCHER. Okay. Thank you. The second question I have is this, and, again, this is for anyone who wants to respond. Tell me about the general condition of the ethanol industry in the United States today. Is there adequate capacity to meet the potential that the provision we all think is coming in the energy legislation would create? Is it a competitive industry or is it so concentrated that just a few producers could effectively control the price to the detriment of consumers? Who wants to comment?

Mr. DINNEEN. Congressman, again, I am sorry you missed my opening statement in which I talked about the growing ethanol industry today. We opened 12 plants last year, there are 11 more under construction. We will open 70 ethanol plants in operation as of this Saturday. It is a very competitive industry today. We are producing 2.8 billion gallons on an annualized basis at the current time. We will process more than a billion bushels of grain this year producing that ethanol. We will have more than 3 billion gallons of ethanol production capacity. Our industry is growing quickly in order to satisfy the increased demand that is occurring as a result of State and Federal laws, and we are going to be there for our customers.

Mr. BOUCHER. Anyone want to comment beyond—Mr. Slaughter?

Mr. SLAUGHTER. I will just say, Congressman Boucher, that last year's—one of last year's rationales for the renewable fuels mandate was that we needed the mandate to pull demand. I am glad to hear that evidently it is no longer necessary to increase demand in the ethanol industry. And I just would go along with what Mr. Segal has said about two different stories being told at two different times.

Mr. BOUCHER. Well, I think it is interesting that we are having this dramatic growth in the industry without the mandate, and I wonder, Mr. Dinneen, why the mandate might be necessary.

Mr. DINNEEN. Well, our customers are suggesting that current law is too restrictive. They want a more flexible program, and indeed we are building because States are phasing out the use of MTBE, which under current law with the Clean Air Act oxygen requirements would require a tremendous amount of ethanol being used in the Northeast and other areas where refiners want to have additional flexibility. At the end of the day, the refiners, the marketers, they are our customers. We want to make sure that the use of our product makes sense for them. And so more than a year ago we began negotiations with the American Petroleum Institute and others to come up with a new program that would give the refiners

the flexibility that they have sought in order to meet demand in those clean air areas while still meeting clean air standards, while still giving us the assurance that if we are going to repeal the oxygen standard that is driving ethanol growth today, that we would replace it with something that would provide an equivalent amount of demand. And that is what this is about, it is trying to give refiners the flexibility that they have sought.

Mr. BOUCHER. Okay. Let me say thank you. We appreciate very much your contribution to this debate. Thank you, Mr. Chairman.

Mr. BARTON. Thank you. The Chair recognize himself for 5 minutes. I am reminded of the late Mr. Rogers' Neighborhood. We started every show with, "It is a nice day in the neighborhood," you know, "and all of you are special to me."

I wish Mr. Markey were here to hear that. Somebody last night asked me to say some poetry, so—but I think it is a little tacky for my MTBE friends and my new ethanol friends to get into these little tacky, tacky, nitpicky arguments, because we are all friends here and we are going to be friends.

Mr. BOUCHER. Doesn't matter what the other people say.

Mr. BARTON. It has been a long day.

I want to go to Mr. Segal on this issue of liability protection for MTBE. In the bill that was in conference with the Senate last year and in our draft—I don't think it is in the draft, but at some point in time we will put out an amendment, probably at full committee, that addresses liability. What we were talking about in the last Congress and what we are actively considering in this Congress is not liability protection for negligence or something that gets into the water table and is defective. We are simply saying that there should be liability protection for a legal product that was authorized by Federal law and at least, if not directly, indirectly mandated by the oxygenate fuel requirement under the Clean Air Act. So could you be a little more specific on what liability protection MTBE would like to see in any type of Federal bill that goes forward?

Mr. SEGAL. Yes, Mr. Barton. First, it is important to make a distinction between products liability and negligence theories for liability. What we are talking about here is it makes little sense to have a liability theory which essentially says if you make a product that is in compliance with Federal law, that is certified by a Federal agency, that it is exactly to specifications that are mandated by the Clean Air Act, that the mere fact that you have produced either such an additive or such a product could be used ipso facto to prove that it is an unreasonably dangerous product. That doesn't make any sense. The reason we have products liability theories, quite honestly, is to deter folks. Now, wait a minute. If the Federal Clean Air Act says thou shall make this product, it is a little difficult to believe that we are sending a clear message of deterrence by applying products liability.

Now, by contrast, negligence theories, which say if I have MTBE-containing gasoline or ethanol-containing gasoline, for that matter, and I spill that material through my own negligence and if a plaintiff's attorney can prove up a negligence case, then relief can be had that will be targeted directly toward cleanup. I will also say there are legal actions that are independent of the tort system. The

State of California has successfully prosecuted violations of the Underground Storage Tank Program and recovered millions of dollars that have gone, again, to cleanup. But these settlement agreements that some of these discussions that Mr. Olson referred to, you know, there is not even a statement in those settlement agreements that the money has to be spent on cleanup. So it really is not an efficient way to target remedial assets to the actual problem, and that is what we are about.

Mr. BARTON. But what was under consideration in the last Congress, and will be under consideration at some point in this Congress, is a very limited protection to simply indemnify a legal product against being considered to be liable in a lawsuit because it is that product.

Mr. SEGAL. That is exactly right, sir. The protection, it just extends to the defective product theory under products liability, not to negligence theories, not to recoveries under the underground storage laws.

Mr. BARTON. All right. Now, Mr. Dinneen, I thought you gave a fairly incoherent answer to Mr. Boucher's question about the need for a continued mandate for ethanol.

Mr. DINNEEN. I apologize.

Mr. BARTON. That is all right.

Mr. DINNEEN. Mr. Segal accused me of that too.

Mr. BARTON. You are not the first witness to give an incoherent answer, and it is probably my hearing, not your answer. But my assumption is that your trade group continues to support a Federal—an increase in the Federal mandate for ethanol use to 5 billion gallons per year at some date in the future; is that correct?

Mr. DINNEEN. That is correct.

Mr. BARTON. Okay. I just wanted to get that on the record. Now, Mr. Murphy, my good friends at API, I am a little bit confused by your position on this issue. My understanding is that API does support an MTBE ban; is that——

Mr. MURPHY. We do support a phasedown of MTBE consistent with——

Mr. BARTON. A phasedown, so you have changed the terminology.

Mr. MURPHY. Well, at some point——

Mr. BARTON. You would argue that is not a ban.

Mr. MURPHY. Well, we do support a phasedown which would give us adequate time to make the necessary refinery investments.

Mr. BARTON. Is it API's positions that the States under current law don't have the right to ban MTBE themselves?

Mr. MURPHY. We are concerned if the States do ban MTBE, that they are likely to do that in an uncoordinated, inconsistent fashion.

Mr. BARTON. So you do——

Mr. MURPHY. So we end up with boutique fuels and we end up with——

Mr. BARTON. All right. But you are not answering my question.

Mr. MURPHY. Excuse me.

Mr. BARTON. That is all right. It has been a long day. Does API believe that a State that wishes to ban MTBE can or cannot under the existing Clean Air Act, specifically Section 211(c)(4)?

Mr. MURPHY. Well, I am not an attorney, but I do believe that there has been no adverse court finding that they cannot do that.

Mr. BARTON. So you would think that—API's official position would be that a State that wishes to ban MTBE could; is that correct?

Mr. MURPHY. That is correct, sir.

Mr. BARTON. Okay. My time has expired, and let us see, recognize Mr. Allen for 5 minutes.

Mr. ALLEN. Thank you, Mr. Chairman. I want to continue this discussion about liability waivers, and I guess I will begin with you, Mr. Segal, and I think I would like Mr. Douglass to comment on this. If a liability waiver, products liability waiver, granted exclusively for the manufacturers of MTBE and/or ethanol, who is left to pick up the cost of contamination? I heard your comment about a negligence case, but in the kinds of underground contamination cases we have had in Maine, you can forget negligence for all practical purposes. And I am wondering whether there is going to be an expectation that somehow gasoline stations and owners are supposed to pay for the cleanup? I just don't quite understand how this is likely to operate. And if I could just add—well, let us start there, begin with you.

Mr. SEGAL. Okay. Please. First of all, what I think we all can agree on, in terms of a common goal, is to make sure that resources get to the place where they can actually impact on remediation. Whether that comes through the tort system or whether it comes through another system the most efficient mechanism to do it ought to be the one that I think we would all agree we should put first.

Our point of view is this: If you use the tort system as that mechanism, first of all, only 20 cents on the dollar is delivered out of the tort system. Surely we can do better than that. Our argument is the Underground Storage Tank System, that is the Leaking Underground Storage Tank funds and remember we are considering legislation to expand and make easier the use of those funds for remedial activities, that is a much more efficient way, a much more efficient approach. It also avoids the downside consequence of discouraging new additive, new and innovative additive manufactures from getting into the business.

I think Dr. Murphy made a good point, which is that it is not a renewable fuel standard, it is a renewable fuel standard, not an ethanol mandate, which to my mind means that you want other new additives that might be available as time goes on. The problem with using the tort system is if you say, hey, you met the requirements of the Clean Air Act but you are still going to get liability, that is going to weigh on companies in introducing new additives, which I think are going to be essential for the energy security and environmental protection of the country on a going-forward basis.

So Underground Storage Tank Fund is one place the money comes from, negligence theories applicable to those who actually mishandled or spilled the gasoline is indeed another place, and successful enforcements under State underground storage tank laws. And there a good record of victories on those.

Mr. ALLEN. I understand the argument, but what I hear you saying, the other side of that coin is that the injury falls where the injury falls in most cases; that is, the person with the contaminate well has the contaminated well and barring proof of negligence of

something else, they are the one who suffers the loss. The current system at least spreads that——

Mr. SEGAL. The LUST System, the Leaking Underground Storage Tank System spreads the risk even better than the tort system.

Mr. ALLEN. I hear you.

Mr. SEGAL. Okay.

Mr. ALLEN. If I could have a quick comment from Mr. Douglass, and then I would be interested in Mr. Olson's comments as well, particularly if I could, with respect to Mr. Olson, I would like you to address again the question of what manufacturers may know or not know before the product enters the market and whether that bears on the liability waiver as written. Mr. Douglass?

Mr. DOUGLASS. Yes. Thank you, Congressman Allen. My personal net worth is wrapped up, for the most part, in properties that sell gasoline, and therefore we are very attuned to this whole MTBE issue. And we have concluded that the gradual phaseout would be in our best interest for MTBE, because the liability doesn't—just doesn't go away apparently under the existing conditions. So we are concerned that if we don't get a gradual phaseout and/or an upgrade in the underground tank inspection and enforcement system, our properties are going to be liabilities and not assets.

Mr. ALLEN. Thank you. Mr. Olson?

Mr. OLSON. I would just point out three points. One is that the approach of exempting basically the MTBE folks in the oil industry from liability here would be to stick it to the gas station owners, and I think that is really sort of part of what is going on here. I wanted to read just one sentence out of the—there has only been one decision that I am aware of that has addressed this MTBE issue. It is the Lake Tahoe case, and after an extensive jury investigations, thousands of pages of documents, the jury was asked, "Do you find by clear and convincing evidence that the Defendant Shell Oil and the Defendant Lyondell Chemical Company, ARCO, acted with malice in selling gasoline containing MTBE that is defective in design because of a failure to warn?" They failed to warn, according to this jury, their customers, they failed to warn the public, et cetera, among other problems that were found by the jury.

I think what is going on is clearly there was—this ought to be left up to the juries and to the courts to determine whether these kinds of defective and design type problems existed, and it is the companies that had all this information. We want to create the incentives for companies that are developing new additives or the ones that introduced old additives to try to make those products in a way that aren't going to contaminate water supplies. We have got widespread contamination in Maine, as you mentioned, widespread contamination in many other places. We need to create the incentives to avoid that. That is what the tort works for.

Mr. ALLEN. Thank you. Thank you, Mr. Chairman.

Mr. BARTON. Mr. Olson, before we recognize Mr. Shimkus, what was defective, according to that jury?

Mr. OLSON. Well, there were two things that were defective, according to the jury. One was that the companies failed to warn. That was——

Mr. BARTON. No, what was defective about the product?

Mr. OLSON. It was that it was so persistent that it was known to contaminate water supplies, that it——

Mr. BARTON. What did it contaminate? What was the harm in the contamination?

Mr. OLSON. The harm in the contamination was it was contaminating the water supplies to the point they couldn't be used.

Mr. BARTON. Did people drink the water and they died?

Mr. OLSON. You couldn't use the water because, basically——

Mr. BARTON. Because why?

Mr. OLSON. Well, if I took——

Mr. BARTON. Because it smelled bad.

Mr. OLSON. If I took this glass of water and gave it to you——

Mr. BARTON. Isn't that the harm, it smells bad?

Mr. OLSON. It is undrinkable.

Mr. BARTON. It smells bad.

Mr. OLSON. It is undrinkable.

Mr. BARTON. Is there any case anywhere where it has been proven to be harm to public health because of MTBE? I don't doubt there are cases where MTBE has gotten into the water supply. There haven't been many of them lately, because we are doing a better job of stopping the leaks from the underground storage tanks. But isn't it true that the contamination and the harm is that it smells bad?

Mr. OLSON. Well, Mr. Chairman, there are a couple of problems. One is that it smells so bad and it tastes so bad that consumers simply won't drink the water. If you had a glass of water in front of you, sir, that had serious MTBE contamination, you wouldn't drink it.

Mr. BARTON. But that is not a health problem. That may be aesthetic problems.

Mr. OLSON. No, I am saying that. So that is one problem. The second problem is that there are health issues. There are several studies that suggest that it may be a carcinogen.

Mr. BARTON. No, not suggest, that prove.

Mr. OLSON. Well——

Mr. BARTON. If I drink enough diet Dr. Pepper, there is a suggestion that it is a carcinogen, okay, but there is no proof that if I am a normal imbiber of diet Dr. Pepper that that is a carcinogenic. I can go out in the hall and pass gas and that odor is harmful, in a sense, to the people that are around me at the time, but I have not been identified as EPA yet because of that as a mobile source polluter.

Mr. GREEN. Mr. Chairman, I won't touch that with a 10-foot pole.

Mr. BARTON. I apologize for being a little exercised. I am not personally offended by you, Mr. Olson. I know you represent a large group, and you have got an issue that you want to present before us, and we are going to try to reach a compromise that satisfies everybody.

Mr. OLSON. May I finish responding. I guess I do think it is important to note, first of all, that water supplies are rendered unusable and millions and millions of dollars are spent on many of these water supplies because consumers simply won't drink the water. So that is a real injury. The second point is that there really are significant public health questions and this stuff is contami-

nating people's water. If you talk to consumers that are drinking water from one of these supplies about whether they think it is a good idea that they have——

Mr. BARTON. I am all for stopping any leaks from the source, I am with you in that regard. Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. Let me go to Mr. Segal real quick first. You say that the whole reason that fuel prices are higher in California are higher because of ethanol. Yet right now ethanol is cheaper than gasoline. And the CARB and the refiners are telling us that ethanol-blended gasoline is selling for less than MTBE-blended gasoline. Can you explain why that is the case currently?

Mr. SEGAL. Sure.

Mr. SHIMKUS. So it is the case. So it is the case. You said, "Sure."

Mr. SEGAL. I just said, "sure, I can explain."

Mr. SHIMKUS. Okay.

Mr. SEGAL. All right.

Mr. SHIMKUS. Well, come on. I don't have a lot of time.

Mr. SEGAL. Okay. I hear you, I hear you. I will keep it quick. It is more expensive to utilize ethanol. In other words, the cost of blend stocks increases even if the market price of the ethanol itself isn't as relevant as the cost of what it takes to——

Mr. SHIMKUS. True or false, the gasoline price at the pump currently between ethanol-blended gasoline versus MTBE-blended gasoline currently is cheaper with the ethanol in California?

Mr. SEGAL. I guess I would have to say false, and we do cite in our testimony——

Mr. SHIMKUS. So you disagree with CARB. Okay.

Mr. SEGAL. I agree——

Mr. SHIMKUS. That is fine. Let me go to Mr. Slaughter. Mr. Slaughter, how many refineries were there 20 years ago?

Mr. SLAUGHTER. Twenty years ago, there would have been maybe 200.

Mr. SHIMKUS. Ten years ago?

Mr. SLAUGHTER. Two hundred or more.

Mr. SHIMKUS. Ten years ago?

Mr. SLAUGHTER. Something between 200 and the current 149.

Mr. SHIMKUS. And so currently we have 149.

Mr. SLAUGHTER. One hundred forty-nine.

Mr. SHIMKUS. And so you have increased efficiency quite a bit to meet the demand; is that correct?

Mr. SLAUGHTER. Well, we aren't quite meeting demand, Congressman Shimkus. Demand is for 20 million barrels a day, and we have about 16.8 million barrels a day of refining capacity.

Mr. SHIMKUS. So where does the additional refined product come from?

Mr. SLAUGHTER. It is imported.

Mr. SHIMKUS. Okay. So we are importing refined product. Okay. Now, 20 years ago, how many—what was our percentage of imported petroleum products to this country that you were refining?

Mr. SLAUGHTER. Well, I am most familiar with the gasoline statistics. We are currently refining about 95 percent, as I remember, and it would have been more than that.

Mr. SHIMKUS. Is it safe to say that we have increased our reliance on foreign oil in the past 20 years?

Mr. SLAUGHTER. Definitely.

Mr. SHIMKUS. We have increased it.

Mr. SLAUGHTER. Yes.

Mr. SHIMKUS. Even after the 1991 Gulf War. All right. So my friends and colleagues on the panel who have been asking about this issue, let me—so nothing that you have done has decreased the reliance on foreign oil.

Mr. SLAUGHTER. Well, I would say the industry does a lot to try to reduce the reliance on it——

Mr. SHIMKUS. But you haven't. Really, we have increased our demand.

Mr. SLAUGHTER. Well, you can certainly say that we could increase access to some producing areas in the U.S.——

Mr. SHIMKUS. Okay. Let me just jump this so I don't run out of my time.

Mr. SLAUGHTER. Go ahead.

Mr. SHIMKUS. Mr. Dinneen, what is one of the—what has been the only way that I know of that we have deceased our reliance on foreign oil domestically in the past 10 years?

Mr. DOUGLASS. Well, clearly, the 70 ethanol facilities that have been built over the last 20 years are adding absolutely to domestic gasoline supplies.

Mr. SHIMKUS. And I would also add, and I know my colleague in the chair, the ability for natural gas vehicles has probably helped decrease some of the reliance on gasoline products. But we have done nothing in this country to decrease our reliance on foreign oil. In fact, we actually have increased our need for imported gasoline products over the past 10 years. That is safe to say, correct? So what we have done over the past 7 years, since I have been here, we have kind of changed the debate on the whole oxygen issue.

Now, there are many provisions of this bill that many of you guys want, and there is one provision that you don't, and i would suggest that you get on board to keep the ones you want or you may end up losing everything. The reality is this: We have changed the debate from the oxygen issues because of arguments by California that they have new technology, and we have addressed the true fact that we have a demand for fuel in this country, and it is being met by imported oil and imported refined products. So now this 5 billion gallon renewable requirement is there for one issue. Why the mandate? The mandate is here for national security. The mandate is here to make sure that we have an ability to have refined products that we can use to keep this Nation going.

Now, it is not going to meet all our demands. We are going to be relying on foreign oil even after we get through with whatever occurs in the Middle East. But we have to start doing something to decrease our reliance on foreign oil, and one of the ways we are doing it is through ethanol. And thanks for answering my questions, my 5 minutes went quickly, but to answer the question, why the mandate, national security. I yield back the balance of my time.

Mr. BARTON. Mr. Hall is recognized for 5 minutes.

Mr. HALL. Thank you, Mr. Chairman.

Mr. BARTON. Knowing that he and I are on the same plane that leaves at 5:09.

Mr. HALL. He says Mr. Hall is recognized for 5 minutes. Four minutes are already gone, right? I would ask Mr. Douglass a question that we have talked about before. I am not sure I totally understand, but you have indicated that Congress ought to adopt a legislative provision to permit the commingling of the divergent and compliant fuels. And as you know and as you have pointed out, the EPA regulations specifically prohibit that blending——

Mr. DOUGLASS. Correct.

Mr. HALL. [continuing] of ethanol atotized RFT with MTBE—atotized RFG. The two can't mix of any two compliance fuels if the resultant mixture would have a certain RVP probably higher than allowed in some specific markets. How does that affect you?

Mr. DOUGLASS. Well, the serious problem for us is that, as you know, we are not in a corn growing area, and so we currently do not have the supplies of ethanol that would be available, say, in the Midwest. But if we got the ethanol into our market and we were supplied by ethanol, we would have to clean our tanks and prepare for that because, as you know, ethanol is water-sensitive and you can't commingle, if you will, with gasoline unless the gasoline is completely dry and the tanks are completely dry. So we have to empty our tanks technically whenever we switch from gasoline RFG or non-RFG to ethanol-blended fuel. If we lost the supply of ethanol because of a supply interruption, we would have to empty our tanks again to put the RFG or the non-reformulated fuel back in. It is a very difficult thing to do.

Mr. HALL. As Douglass Distributing Company, you can sell each to anyone and they can mix it, can't they?

Mr. DOUGLASS. Correct. Any customer can mix it any day. We are just not permitted under the law to commingle it.

Mr. HALL. Why aren't you?

Mr. DOUGLASS. That is the current EPA regulation.

Mr. HALL. And what is the effect of the person you pass it on to making such a mixture?

Mr. DOUGLASS. Well, when they add it to their tank it is negligible. All the studies that we have read and read from California that it has an negligible effect on the environmental air.

Mr. HALL. I think that is about the easiest one I can lob to you right now. Let me see if I can find another one. There is something else I wanted to ask you about.

Mr. BARTON. Who is the best congressman from Rockwell, Texas?

Mr. DOUGLASS. Congressman Hall.

Mr. BARTON. There you go. That is pretty easy, isn't it.

Mr. HALL. Don't fool with him. He is one of those 25,000 or 30,000 Republicans that look for my name there and they have to look for it, believe me, the way you Republicans hide it on those ballots down there.

Mr. BARTON. Well, they find it pretty regularly.

Mr. HALL. Well, I will yield back the balance of my time, because I want to be on that airplane.

Mr. BARTON. We recognize the gentleman from California, Mr. Radanovich, for 5 minutes.

Mr. RADANOVICH. Thanks, Mr. Chairman. I won't take the full five but do want to ask a couple of questions. Thank you, panel, for being here. Mr. Murphy, I do have a question. You had mentioned that in Connecticut and my State of California and New York, once these bans on—all these bans MTBEs take effect, that they would result in an ethanol demand in those States of about 1.1 billion gallons. Mr. Dinneen testifies that there is plenty of capacity. Do you agree with that, and if not, can you give me an idea of why that might not be the case for these States?

Mr. MURPHY. I do agree that there should be more than adequate ethanol capacity. I think in fact the Department of Energy has recently come out with some studies that confirm that. Our concern is not with the adequacy of the ethanol supplies, our concern is with the logistical and gasoline production problems that result when the application of an inflexible mandate to use ethanol in each and every gallon of gasoline regardless of whether or not that makes economic sense to use it. We are wiling to use ethanol, willing to use renewable fuels where they make economical and environmental sense. That is likely to be primarily in the Midwest but perhaps not entirely, but it should be market driven not driven by mandates.

Mr. RADANOVICH. Very good. Thank you for clarifying that for me. Mr. Douglass, welcome to the committee. I want to ask something to clarify in your statement, which addresses a provision in the Senate bill that requires the use of ethanol throughout the year. You have advocate deleting this provision, and I am wondering if you can be more specific as to the benefits and detriments requiring year-round ethanol usage?

Mr. DOUGLASS. Well, under the current regulation, they control the revapor pressure, if you will, the volatility of the fuel. And the problem in the summer if we have to put ethanol in in the summertime, it pushes it above the current controlled revapor pressure. So the refiners would have to go back and reformulate and make an even lower grade, a costly process, and we are just very concerned that it is another boutique fuel that will end up with shortages and price spikes.

Mr. RADANOVICH. Very good. Thank you for clarifying that for me. And those are the extent of my questions. I yield back.

Mr. BOUCHER [presiding]. The gentleman yields back, and the Chair now recognizes the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman, and I would like to thank both you and the chairman for allowing me to waive on the committee because this is so important, obviously to our country, but also to Texas. Mr. Early, didn't the Blue Ribbon Panel call for a reduction in MTBE and not the elimination of it?

Mr. EARLY. All members of the Panel supported getting rid of MTBE except for, of course, the MTBE panelist itself. So——

Mr. GREEN. But what did the report say?

Mr. EARLY. The report said a phasedown or a possible phase-out, I believe is the——

Mr. GREEN. Okay. Not a reduction then.

Mr. EARLY. I think the—as Mr. Murphy has been using the term, "phasedown," that was clearly in the report, but the report also ac-

knowledged that phaseout was supported by most of the members of the panel.

Mr. GREEN. Okay. Maybe we are just into semantics. Because I had the impression that it was only—it called for a reduction in the use but not complete elimination of it. Is that correct, the mic wasn't on?

Mr. SEGAL. Mr. Congressman, my recollection is that the—what was called for was phasedown to historical use levels which was——

Mr. GREEN. Okay. Well, we will get a copy of it. Mr. Dinneen, let me ask you a little bit, because obviously you can tell where I come from from my accent. The——

Mr. DINNEEN. There is a 5:09 plane, Congressman.

Mr. GREEN. Oh, I am going to Houston, not Dallas at 7:12, so we have a lot of time here.

Mr. DOUGLASS. All right. I just didn't want you to miss your plane, that is all.

Mr. GREEN. It wouldn't be the first time if I did. I understand there is a substantial amount of Federal tax and tariff and quota subsidies under ethanol. Are you aware of any other agriculture or consumer products that receive similar treatment?

Mr. DOUGLASS. I wouldn't be an expert in anything other than ethanol. I can tell you that indeed your premise is correct, the U.S. Congress has seen fit to provide significant incentives to the increased production and use of fuel ethanol, and they have proven to be successful.

Mr. GREEN. I know that a few years ago it was at least about 50 cents a gallon? Is that generally correct?

Mr. DOUGLASS. The tax incentive that goes to refiners and gasoline marketers is 5.2 cents less than 18.4 cent tax on gasoline for a 10 percent ethanol blend. So that has the equivalent value of 52 cents per gallon of ethanol, yes.

Mr. GREEN. Okay. Mr. Murphy, one of the concerns I have had, and I have a lot of questions, I guess, because of the concern about MTBE, and I have said it many times, whatever makes my car run I don't want to drink. And just because I can taste MTBE there be something else that may be in there that I can't taste that are known carcinogens. What is the refining industry doing to continue efforts to improve the Underground Gasoline Storage Tank Program? And it seems to me no reason why gasoline containing either ethanol or MTBE should ever leak from storage facilities.

Mr. MURPHY. Well, we certainly are doing all we can to ensure that the tanks do not leak. I think the latest data, though, is even under the standards that were first passed in 1988, I believe only about 86 percent of the tanks have been inspected, and there is a lot of suspicion that the tanks that have not been inspected could in fact be leaking. And, of course, leaking tanks is not the only way that MTBE enters the groundwater.

Mr. GREEN. That is true. There can be spills, there can be——

Mr. MURPHY. Two-cycle gasoline—two-cycle engines.

Mr. GREEN. In fact, I think testimony last year was that that was the situation in Lake Tahoe, the two-cycle engines. Mr. Dinneen, does ethanol evaporate faster than other gasoline components?

Mr. DOUGLASS. When blended with gasoline it does. ethanol's volatility itself is actually much lower than that of gasoline, but when blended with gasoline, ethanol does have higher evaporation, yes.

Mr. GREEN. Mr. Olson, how does that relate to the National Resource Defense Council? Seems like that would be higher overall harmful emissions if you have ethanol evaporating. Granted, I don't want to drink MTBE but I don't also want to smell whatever is evaporating. Has the council looked at that issue?

Mr. OLSON. Yes, we have. Basically, what we have said we are in favor of is a performance-based renewable standard that would take a look at the whole cycle energy savings as well as look at the air impacts.

Mr. GREEN. Okay. I understood and I read your testimony about the failure to warn in your conversation with the chairman. Other than MTBE, should we also hold manufacturers responsible for whatever else may be in gasoline, whether it is ethanol that may be evaporating or whatever other elements of gasoline if they are not warned what may be in the water or in the air?

Mr. OLSON. Well, I guess I would respond, first of all, that I don't see why it is important for Congress to step in. There has been a single case. Why should Congress be stepping in and preempting States from adopting their own laws, which is what is suggested here?

Second, if a company acts, ''with malice,'' in failing to warn their consumers, including the gas stations and others, about a product and that results in harm, sure, that is what the tort system is for. And, obviously, if you don't have them responsible, the refiners and so on and the MTBE manufactures, who ends up paying for that cleanup? In many of these case, it is going to be the little——

Mr. GREEN. I am almost through with my time, but let me ask one final question. I have a district in Houston and we have used RFG, and it has been successful in our air quality problems, but I have been told because of the nature of our humidity and that during the summer, which in Houston starts in early May and lasts until early October, that ethanol is not appropriate. Can any panelists talk about that during the summer in some of the parts of southern United States?

Mr. DINNEEN. Not appropriate. I guess I would say how? I mean, certainly, technically, the fuel could certainly be used and would perform quite well in your vehicle. If you are suggesting that not appropriate because of increased evaporative emissions, the Clean Air Act currently does not allow ethanol-blended fuels to have an increased volatility when sold in the marketplace. Refiners have to accommodate for ethanol's additional volatility in the manufacture of the fuel. So from an air quality standpoint, there would be no emissions impact, and from a performance standpoint, there would be no negatives either.

Mr. MURPHY. Mr. Congressman, I can just add to that. I think the problem is that of course—and Bob is certainly correct in the case of—Mr. Dinneen is correct in the case of the RFG. You have to meet the evaporative emission standards regardless of whether or not you had ethanol. So you have to produce a different and slightly more expensive blend stock if you intend to use ethanol with that. We have done extensive studies and there was mention

made of the seasonal component of an RFS. Those studies indicate that renewables are likely to be used throughout the year, because renewables and ethanol do have other advantages that in many cases make them worthwhile to use because of the volume effect, the octane effect, reduction in toxics and so on. So we do believe that we are going to use ethanol and renewables throughout the year in an environmentally acceptable way, meeting and in fact exceeding existing environmental standards.

Mr. GREEN. Okay. And one last thing: I understand for a number of years that ethanol is difficult to transport. Is it only available in tanker trucks or is it available—can you pipeline it? Has all the research been done that we can actually pipeline it?

Mr. MURPHY. Well, again, it is not presently pipelined. Is has an affinity for water, and so it cannot be shipped through common pipelines. Ethanol is shipped in tanks trucks and on railroads. Again, there was a recent Department of Energy study which suggested that the—concluded that the infrastructure was adequate to supply it. The problem with the existing service is that the only way in which, for instance, we could supply ethanol-blended gasoline to Long Island is to bring ethanol through New York City—ethanol tank trucks through New York City out to Long Island. We are willing to use the ethanol, we are willing to use the renewable fuels, but we would like to use those where it makes good economic and environment sense to do it.

Mr. GREEN. And, obviously, with the tax credits that you already have for that, it is still not to the level that it is economically viable.

Mr. MURPHY. Well, of course, the problem at the moment is unless the law is changed we are going to be looking at an effective ethanol mandate the next several years that is in fact much larger than the volumes that we have been considering heretofore.

Mr. GREEN. I guess that is subject to Congress. Thank you, Mr. Chairman.

Mr. BOUCHER. Yes. The gentleman's time has expired. Chairman Barton has asked me to make two announcements. First of all, that a bill will be made available by the committee on Monday, and this will be comprehensive energy legislation. And so members should look for the legislation on Monday. They can then begin considering amendments they would like to draft to this measure. And the markup of the legislation will commence in this subcommittee on Wednesday and probably go for about a month.

And we will all be looking forward to that event. I would like to say thank you to this panel for a very interesting presentation today. I want to say thank you to all of the witnesses, all 19 of them, who have graced us with their appearance during the course of the day. It has been a long but informative day for us. And there being no further business to come before this subcommittee, we stand adjourned.

[Whereupon, at 4:12 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

PREPARED STATEMENT OF BOB DINNEEN, PRESIDENT AND CEO, RENEWABLE FUELS ASSOCIATION

Mr. Chairman and Members of the Committee, I would like to thank you for the opportunity to provide comments on national energy policy. Today's hearing is very

timely. Crude oil prices are rising, driven by concerns over possible conflict in Iraq and continued political unrest in Venezuela. At the same time, gasoline output is down, in part, because refiners have responded to increased demand for heating oil. Consequently, the need for an energy policy that reduces our nation's dependence on foreign sources of energy by increasing the production and use of domestic fuels such as ethanol and biodiesel has never been greater. I commend the Chairman and the Committee for convening today's hearing.

The Renewable Fuels Association is the national trade association for the domestic ethanol industry. Our membership includes ethanol producers and suppliers, gasoline marketers, agricultural organizations and state agencies dedicated to the expanded production and use of fuel ethanol. The U.S. ethanol industry consists of 69 production facilities located in 20 states with an annual production capacity of 2.75 billion gallons. Production capacity continues to expand, particularly among farmer owned cooperatives, the fastest growing segment of our industry. Thus, the U.S. ethanol industry and farmers across the country stand ready to contribute more meaningfully to our growing energy needs.

THE NEED FOR A COMPREHENSIVE ENERGY POLICY

Continued unrest and the threat of war in Iraq coupled with political upheaval in Venezuela have focused renewed attention on the need for a comprehensive national energy policy that ensures a reliable fuel supply. As you know, the U.S. currently imports more than 57% of our oil, and our imports are predicted to grow to 68% by 2025. At the same time, we rely increasingly on our energy supplies from unstable regions of the world, including Iraq. In fact, last year we imported 450,000 barrels of oil per day from Iraq! In addition, the war on terrorism has renewed interest in reducing energy imports and diversifying the energy sector.

In testimony before Congress, R. James Woolsey, former Director, Central Intelligence, said, "We have to realize that our fuel distribution . . . systems are almost certainly going to come under attack in some way. Their high degree of centralization and their fragility to terrorist attack is a serious matter. One thing we have to be looking at is how to decentralize and how to make more flexible and less fragile our energy distribution networks. It means local production of renewable fuels . . . rather than relying on imports and central fuel stations."

President George Bush has recognized the contribution American agriculture can make to provide a more reliable fuel supply through the production of domestic liquid fuels such as ethanol and biodiesel. In calling for the Congress to pass an energy bill last fall, President Bush said, "We need an energy bill in America. An energy bill that enhances renewables like ethanol. An energy bill that makes us less dependent on foreign sources of crude oil."

Deputy Secretary of Energy Kyle McSlarrow echoed the Administration's support for expanded use of ethanol in the U.S. fuel supply last week in testimony before this Committee. Among the eight goals the Administration feels should guide the energy debate, McSlarrow stated, "the Administration strongly supports a renewable fuels standard that will increase the use of clean, domestically produced renewable fuels, especially ethanol, which will improve the Nation's energy security, farm economy, and environment."

The increased use of renewable fuels will expand U.S. fuel supplies. Ethanol and biodiesel are blended with gasoline and diesel after the refining process. Thus, the increased use of these fuels adds directly to domestic fuel supplies. Blending ten percent ethanol in a gallon of gasoline provides an additional ten percent volume to the transportation fuel market.

2002 RECORD YEAR FOR U.S. ETHANOL INDUSTRY

The U.S. ethanol industry has been a responsible partner in the fuels marketplace, increasing production capacity to meet the growing demand for ethanol created by state and federal law. In 2002, the U.S. ethanol industry set records in production, production capacity, and number of new facilities. Twelve new state-of-the-art production facilities were completed in 2002; and with expansions at existing plants completed, the industry produced more ethanol in 2002 than at any time in its history—2.13 billion gallons.

Last year's record production represents a 20-percent increase over 2001 and a 45-percent increase since 1999. This record-breaking production is continuing this year. In January, the industry set an all-time monthly production record of 177,000 barrels per day, representing a 31-percent increase over last January's production.

But the industry is not done yet. There are another eleven ethanol production facilities totaling more than 500 million gallons of capacity currently under construction, which will increase ethanol production capacity to more than 3 billion gallons

by the end of this year. At current production rates, the industry will produce a record 2.8 billion gallons of ethanol in 2003.

Ethanol is the third largest and fastest growing market for U.S. corn. In 2002, over 800 million bushels of corn were processed into ethanol and valuable feed co-products, boosting corn prices by 30-40 cents per bushel nationally. The U.S. Department of Agriculture estimates that the ethanol industry will process as much as one billion bushels of corn this year, approximately 10 percent of the national crop. Additionally, ethanol is the second-largest user of grain sorghum. More than 45 million bushels of grain sorghum were used in ethanol production in 2002.

The recent growth in ethanol plant construction has been led by farmers seeking to capture new value-added markets for the commodities they grow. Since 1999, farmer-owned ethanol facilities have increased their percentage of total production capacity to more than 30%. Today, farmers own 29 of the 69 plants in operation. Eight of the 11 plants under construction are farmer-owned. With this new production, taken together farmer-owned ethanol plants will be the single largest ethanol producer in the country.

Ethanol production facilities represent local economic engines throughout rural America, creating jobs, investment opportunities, value-added markets for farmers, and increased local tax revenue. A recent study[1] found that an average 40 million gallon facility would have the following positive economic impact on the local community in which it is located:

- Provide a one-time boost of $142 million to the local economy during construction;
- Expand the local economic base of the community by $110.2 million each year through the direct spending of $56 million;
- Create 41 full-time jobs at the plant and a total of 694 jobs throughout the entire economy;
- Increase the local price of corn by an average of 5-10 cents per bushel, adding significantly to farm income in the general area surrounding the plant;
- Increase household income for the community by $19.6 million annually; and,
- Boost state and local sales tax receipts by an average of $1.2 million (varies depending on local rates).

RISING ETHANOL DEMAND

The tremendous growth in ethanol demand over the last several years is a direct response to state efforts to reduce the use of MTBE. To date, sixteen states have acted to phase out the use of MTBE, and the ethanol industry has acted responsibly to build additional capacity so that refiners could continue to supply consumers with competitive fuels that meet federal Clean Air Act requirements. Without commenting on whether such state actions are justified, between 3.5 and 4.5 billion gallons of ethanol would be needed to replace MTBE, depending on how new EPA regulations implementing the 8-hour ozone standard impact state decisions to opt into the RFG program.

The U.S. ethanol industry has proven it can supply such demand, if necessary.

In California, most major refiners have voluntarily switched to ethanol one year ahead of schedule. With the transition two-thirds complete, the results can only be described as seamless. There have been no ethanol shortages, transportation delays or logistical problems associated with the increased use of ethanol in the state. Today, approximately 65% of all California gasoline is blended with ethanol, and it is estimated that 80% of the fuel will contain ethanol by this summer. As a result, while there was only about 100 million gallons of ethanol being used in the state last year, California refiners will use between 600-700 million gallons of ethanol in 2003.

Concerns about ethanol supply, transportation and logistics have been successfully answered. Pat Perez, manager of the California Energy Commission's (CEC) Transportation Fuel Supply and Demand Office, said recently the transition to ethanol is "progressing without significant problems." Furthermore, CEC spokesman Rob Schlichting told the San Jose Mercury News in a February 27 article that the substitution of ethanol for MTBE in California has not added to recent retail price increases "because ethanol is more plentiful than previously expected and cheaper than gas."

With the transition to ethanol in California nearly complete, the focus turns to the Northeast. Connecticut is currently scheduled to phase out MTBE use by October 1, 2003, followed by the state of New York beginning January 1, 2004. As in

[1] "Ethanol and the Local Community," John Urbanchuk, AUS Consultants and Jeff Kapell, SJH & Company, June 2002.

California, the U.S. ethanol industry is committed to supplying customers there, if necessary, also.

The use of ethanol is not new to Connecticut or New York and ethanol is indeed currently being blended in both states. At our National Ethanol Conference in Scottsdale, Arizona, February 19, Paul Stendardi of Getty Petroleum Marketing spoke of the ethanol blending that is currently occurring in the Northeast. Specifically, Stendardi said, "We've been blending with ethanol longer than 12 years. Right now we blend in Providence, Rhode Island, New Haven, Connecticut, Albany, New York, Newark, New Jersey and Paulsboro, New Jersey. We take the ethanol into Providence by rail. We truck it down to New Haven. And we take the ethanol into Paulsboro and Newark by water. And it's railed into Albany, New York." Blending ethanol is common practice throughout the country and logistics for converting terminals is very straightforward.

In addition to the ethanol blending currently occurring in the Northeast, California's successful transition to ethanol should give East Coast policymakers confidence that ethanol can be used to satisfy the Clean Air Act oxygenate requirement in a smooth and orderly fashion. In fact, the Northeast is even better equipped for the transition to ethanol than California as the Northeast draws from a wider variety of fuel supply sources including the Gulf, Mid Atlantic and off-shore refineries. This diversity of fuel supply options will help keep a competitive and steady supply of fuel components coming into the region.

FUELS SECURITY ACT OF 2003

The U.S. ethanol industry has clearly demonstrated it can continue to provide refiners with adequate supplies to meet current Clean Air Act requirements, even as states take action limiting the use of MTBE. But we have heard the requests of our customers for greater flexibility in meeting those standards, i.e., eliminating the federal RFG oxygen content requirement. Consequently, we have worked for more than a year to develop a consensus proposal that addresses the concerns of a number of stakeholders, including environmental and water quality officials apprehensive about MTBE, petroleum companies appealing for greater flexibility, and ethanol producers expanding to meet the increased demand created by current federal and state laws.

The result of this collaborative effort was legislation overwhelmingly approved by the United States Senate during consideration of the energy bill last year, and recently reintroduced as the Fuels Security Act of 2003 in the Senate, S. 385, and introduced in the House of Representatives by Congressmen Collin Peterson (D-MN) and Tom Osborne (R-NE), H.R. 837. The Renewable Fuels Association continues to support this legislation.

The Fuels Security Act of 2003 provides a federal resolution to persistent concerns related to MTBE, avoiding a patchwork of state actions that complicate the fuel distribution system. It maintains the existing clean air benefits of federal RFG with strong anti-backsliding provisions. It provides refiners with the flexibility they have sought in meeting Clean Air Act requirements by eliminating the federal RFG oxygen standard. And it provides some marketplace certainty to farmers and ethanol producers that have acted responsibly to meet the demand created by current law.

Renewable, domestically produced fuels can and should play a larger role in meeting our nation's energy needs. Creating a Renewable Fuels Standard (RFS) in which a small percentage of our nation's fuel supply is provided by renewable, domestic fuels such as ethanol and biodiesel provides a positive roadmap for reducing consumer fuel prices, increasing energy security, and stimulating rural economies by harnessing America's renewable energy potential.

The RFS included in the Fuels Security Act of 2003 boosts the demand for renewable fuels such as ethanol and biodiesel to 5 billion gallons by 2012. A recent analysis by the U.S. Department of Energy, "*Infrastructure Requirements for an Expanded Fuel Ethanol Industry*," concludes, "no major infrastructure barriers exist" to expanding the U.S. ethanol industry to 5 billion gallons per year. This is because credit banking and trading provisions included in the bill maximize refiner flexibility. The bill does not require that *any* renewable fuels be used in any particular area, allowing refiners to use these fuels in those areas where it is most cost-effective. Moreover, there are several provisions allowing the requirement to be adjusted or eliminated if price or supply problems occur. Small refiners are exempted from the RFS for several years, allowing those companies an easier transition to the program. Finally, recognizing that MTBE producers made investments in reliance upon a federal mandate, the bill provides significant transition assistance to MTBE producers.

The Fuels Security Act of 2003 is a comprehensive approach to a myriad of fuels issues that has generated broad support from several previously competing interests. It protects the environment, provides refiner flexibility and marketplace certainty to farmers. I encourage you to give it careful consideration as you craft comprehensive energy legislation over the next several months.

CONCLUSION

Mr. Chairman and members of the Subcommittee, the issues before you are extremely complex and finding a fair resolution will be difficult. But the need for a comprehensive energy policy that ensures a reliable fuel supply for our nation has never been greater. America's economic prosperity and national security depend on the availability of reliable, affordable energy. Therefore, increasing the production of domestic fuels and diversifying our energy infrastructure are critical components of energy policy legislation. Providing for an expanded role for domestic, renewable fuels such as ethanol in the U.S. fuels marketplace is vital if we are to reduce our dangerous dependence on imported energy.

Media reports of your discussion draft suggest it will include a renewable fuels standard, and we commend you for your support of the expanded use of biofuels to meet our nation's energy needs. The U.S. ethanol industry stands ready to work with you and the Committee to develop comprehensive energy legislation that addresses the concerns of all stakeholders.

Thank you.

SUPPLEMENTAL COMMENTS OF THE ELECTRICITY CONSUMERS RESOURCE COUNCIL AND THE ELECTRIC POWER SUPPLY ASSOCIATION

The Barton discussion draft contains in Section 7031 what is commonly referred to as the "consensus reliability" language. Though we recognize that many disparate stakeholders have endorsed this section, we do not believe that it is a true consensus document and we do not believe that it will, in fact, enhance reliability.

By way of background, the Electricity Consumers Resource Council (ELCON) and the Electric Power Supply Association (EPSA) were part of the process that developed, and endorsed, the original "consensus reliability" language roughly seven years ago. That language was unfortunately the result of a Christmas tree effort, as every stakeholder representative (including us) tried to add language to advantage their own particular group. Since then, when we have looked at that end product and subsequent revisions, we see that they all have similar flaws.

We recognize that this is an issue in which few Members have an interest. All Members—and all industry stakeholders—support increased reliability. Certainly we do. But we do not believe that this language will serve that purpose.

What Does It Actually Do and How Does It Do It?

Section 7031 does not enhance reliability—rather it establishes a regulatory process which is designed to authorize on organization to set standards that are supposed to increase reliability. Although promoters of this language purport to model it on the securities industry, that model fails under scrutiny. For example, violators of rules promulgated by the National Association of Securities Dealers can be denied the ability to trade. It is unclear how violations and violators would be sanctioned or punished in the electricity industry. Clearly, removal from market activities would be difficult if not impossible when dealing with owners of interstate transmission lines. And, since electricity functions in "real time," violations of reliability rules would cause real, possible irremediable, damage before any action could be taken in response.

It Could Lead to Balkanization of the Grid

The language in Section 7031 grants deference to regional groups founded on an interconnection-wide basis. This is in response to demands from western officials that "the West is different." This may be, and in fact reliability rules recognizing these regional differences can be developed without granting deference in the standard-setting process to any regional group. If the facts support a regional standard, that regional standard should be adopted. But by granting deference to one group, this language opens the door for deference to be granted to other groups (perhaps to one organized on an RTO-wide basis, perhaps to consumers who actually pay the bills). This will encourage the development of regional, rather than national, standards, and make it more difficult for power to move from one region to another.

It Does Not Account for Commercial Impact

For those truly interested in making wholesale markets more competitive, reliability should not be considered in a vacuum. The issues of reliability and commercial impact are inextricably intertwined. Reliability standards should not be developed without an examination of their impact on commercial practices. Ideally this would be done by the same organization. The current bifurcation of duties between the North American Electric Reliability Council (NERC) and the North American Energy Standards Board (NAESB) has a number of problems. For consumers and new entrants to the market, participation in NERC and NAESB standard-setting processes entails a considerable outlay of often unavailable staff resources. Moreover, the fact that reliability and commercial decisions will be made by two different organizations will lead to all sorts of complications. We continue to believe that one organization, tasked with both standard-setting responsibilities, should consider both reliability and commercial impacts.

In conclusion, we hope that the reliability language (Section 7031) is not approved simply because no one has taken the time to examine it and its potential impact. Everyone wants reliability, and it is worth time to develop the legislative language that will truly achieve it.

PREPARED STATEMENT OF LYONDELL CHEMICAL COMPANY

Lyondell Chemical Company appreciates the opportunity to comment on the development of energy policy as it pertains to the use of oxygenates in "clean" transportation fuels. Lyondell, along with its predecessor companies, has been commercially producing fuel oxygenates since 1969 and fuel ethers since 1979. Currently, as the world's largest producer of fuel oxygenates, Lyondell is well positioned to comment on the oxygenate issues. We support the Oxygenated Fuels Association statement on methyl tertiary butyl ether (MTBE) and will focus this statement on ethyl tertiary butyl ether (ETBE).

We believe that if Congress is going to enact a Renewable Fuels Standard, ETBE, ethanol's ether, should be allowed to play a significant role. France and other European countries have used ETBE successfully for several years. Lyondell has participated in that market since 1992.

In summary, ETBE will expand the gasoline pool, protect air quality and water resources, allow ethanol distribution through existing infrastructure, and minimize ethanol's impact on the Highway Trust Fund. However, in order for these benefits to be realized, some adjustments must be made to the current law. First of all, the ethanol used in ETBE must be treated equally to direct blended ethanol in the tax structure. In addition, it must receive comparable product liability protection to ethanol and ethanol blends in fuels.

ETBE BENEFITS

ETBE is made by chemically combining fuel ethanol with butanes, which are derived from U.S. natural gas production. This combination forms an ethanol ether that can be easily blended in the refinery with many advantages as compared to the direct blending of ethanol into gasoline at the terminal. The advantages of ETBE can be summarized as follows:

ETBE Expands Gasoline Supplies and Reduces our Dependence on Foreign Imports

On an energy basis, ETBE delivers three times more non-petroleum alternative energy for expanding gasoline supplies than direct ethanol blending. On a volume basis, every gallon of ethanol generates 2.3 gallons of ETBE with the addition of the butanes. If all the U.S. MTBE capacity switches to ETBE, it will consume 1.7 billion gallons per year (BGY) of ethanol and make 3.9 BGY of ETBE. This volume of ETBE would provide more than 5 BGY of gasoline using ETBE's premium gasoline quality characteristics in the refinery to blend in more subquality gasoline components that normally could not be utilized in gasoline. This additional gasoline possible with ETBE is equivalent in volume to the gasoline refined from imported Iraqi crude oil, to the development of ANWR, or to the Venezuelan gasoline imports. Accelerating ETBE production can immediately replace the gasoline shortfall from any MTBE reductions within the next two to four years while direct ethanol blending under RFS still comes up very short on expanding gasoline supply even at 5 B Gal/yr after 2012.

Unlike Ethanol, ETBE Expands Summertime Gasoline Supplies

Without its pollutionincreasing RVP waiver, blending 10% ethanol into the "low RVP" summer gasoline used in the high pollution market areas will actually shrink

gasoline supplies by 0.2 to 2.8% (energy basis) according to the Energy Information Administration (September 2002). The "low RVP" gasoline is the key smogfighting control program that is widely used in 50% of the gasoline markets today. The use of this pollution control program by the states is expected to greatly spread to other markets in order to meet the EPA's new, more restrictive ozone standard.

On the other hand, blending 10% ETBE, with its favorable low RVP property, will actually expand the supply of "low RVP" gasoline by more than 10%. An example of supply reductions with ethanol is currently being experienced with California's switch from MTBE to ethanol. The supply reductions are now resulting in severe price increases.

ETBE Substantially Increases the Economic Efficiency of Ethanol

Unlike ethanol, the very low water solubility of ETBE permits it to be blended into gasoline at the refinery where the ETBE blend can then be costeffectively distributed via pipeline and barge to all gasoline terminals. Since it can be freely mixed with all other gasolines, it also eliminates the gasoline segregation barriers that contribute to "boutique fuel" shortages and other higher cost associated with ethanol blending. Since ETBE can be efficiently blended at the refinery, it eliminates the need for any new infrastructure investment for the refiner blending ethanol in the gasoline marketplace.

ETBE Protects Water Resources

ETBE is 75% less water soluble than MTBE and 99% less than ethanol which is 100% soluble. This means substantially reduced risks to groundwater resources from leaking underground gasoline storage tanks. Not only is ETBE much less soluble in water, it has other physical properties which shortens its migration distances and makes it much easier to remove from water with existing lowcost cleanup technologies. In addition, ETBE's high octane replaces more toxic aromatics during the refinery blending process which, therefore, reduces the risk of aromatics leaking into the groundwater.

ETBE Provides the Greatest Air Pollutant Reductions

ETBE reduces exhaust emissions of VOC's, NO_x, Toxics, and CO by nearly three times more than that of ethanol blended by itself. ETBE also eliminates all of the large evaporative VOC increases associated with ethanol. In addition, because of its high displacement of aromatics in gasoline, ETBE provides 20% more CO_2 reduction than using straight ethanol. The net result is that ETBE is one of the most effective motor fuel compounds for reducing overall emissions from the vehicles.

ETBE Lessens the Burden on the Highway Trust Funds

Maximizing the use of ETBE could free-up nearly $800 million dollars per year from the Highway Trust Fund for incremental road and highway projects (that would otherwise be lost under conventional ethanol blending).

Since ETBE blenders will be able to use the Alcohol Tax Income Credit rather than the Gasohol Excise Tax Exemption (used for conventional ethanol blending at the terminal), the amount of ethanol subsidy diverted from the Highway Trust Fund will be greatly minimized. Of the 3 billion gallons per year of new ethanol demand created under a RFS, 1.5 billion gallons are expected to be subsidized from General Revenues instead of the Highway Trust Fund if ETBE use were maximized.

REALIZING ETBE BENEFITS

Though ETBE is an excellent and proven product and delivers the above benefits to "clean" gasoline, it cannot carry the higher burden of unequal risk or tax treatment under the law as compared to the direct blending of ethanol in gasoline. In that regard, the following additions or changes in the Energy Bill are necessary to correct these regulatory inequalities.

Requires Equal Access to Ethanol's Tax Subsidy

Without full and encumbered access to the tax subsidy used for ethanol blends, ETBE economics will be uncertain for the refiner particularly when the refiner will need the certainty of ethanol blending to meet a possible (RFS) requirement. Since ethanol in ETBE utilizes the Alcohol Blenders Income Tax Credit instead of the Gasoline Excise Tax Exemption (used by terminal blenders of ethanol), access to the ethanol tax subsidy by the refiner is highly dependent on his income tax status and not on the value of the ETBE product. Since future AMT constraints and taxable profitability are unpredictable and can eliminate the value of the income tax credit used for ETBE blending, the refiner cannot depend on ETBE's future economics being competitive with those of direct ethanol blending. As a result of this economic

uncertainty under the current tax code, the refiner will have no choice but to commit to direct ethanol blending to meet a possible RFS.

To provide equal footing with the tax treatment for ethanol utilizing the Gasoline Excise Tax Exemption, the uncertainty of the income tax credit needs to be corrected by modifying the tax codes to give the refiner access to alternative tax liabilities.

The Senate energy bill from the last Congress included provisions that would make the necessary correction. The Joint Committee on Taxation, in a letter dated February 7, 2002, determined that the score for this adjustment would be negligible. We encourage the 108th Congress to make the same correction.

Comparable Product Liability Protection to Ethanol and Ethanol Blends

The Senate energy bill from last Congress provided product liability protection for ethanol and ethanol blending in gasoline. ETBE viability will depend on equal liability protection as that afforded to ethanol. We urge Congress to assure the equal treatment by removing the ether exemptions included in last year's Senate bill.

Independent Health and Environmental Fate Review

Though industry has provided the required health and environmental fate studies required to safely commercialize ETBE both in the US and Europe, further studies may be required to improve the acceptance of ETBE as a fuel additive. An independent third party health and environmental fate study of ETBE, similar to that done for ethanol blends, may be necessary.

Transition Cost Assistance for MTBE producers switching to ETBE production

Though much of the MTBE capacity (approximately 30%) in the US already has the flexibility to produce ETBE, the economic hurdles and risk for the remaining MTBE capacity may still be too great a risk to obtain the necessary capital from the finance community. Therefore, any transition cost assistance program for the MTBE industry should be extended to include those willing to convert their MTBE process units over to ETBE.

Without these changes or additions, the uncertainty and added risk for potential ETBE users will be too great. As a result, it would be very unlikely that the market for this beneficial product would be realized.

Mr. Chairman, Lyondell believes that ETBE can make an important contribution to increased gasoline supplies and cleaner air without negatively impacting groundwater. We ask your support for the necessary legislative provisions that would allow the benefits of ETBE to become a reality.

CALPINE CORPORATION
25 March 2003

The Honorable JOE BARTON
Chairman, Subcommittee on Energy & Air Quality
House Energy and Commerce Committee
Washington, DC 20515-6115

DEAR CHAIRMAN BARTON: I very much appreciated the opportunity to testify before the Subcommittee on March 13th, and I thank you for your keen interest in our industry.

Attached, please find my reply to your subsequent question of March 14th. Please do not hesitate to contact me for any further information or clarification.

Sincerely,

RON WALTER
Executive Vice President

Question: "Mr. Walter, I understand that Calpine is an independent generator, thus you build power plants in a variety of states and try to sell power on the electrical grid. How does your ability to sell power differ from states that are open to competition to those that are closed?"

Answer: Calpine builds and operates power plants throughout the United States and sells electric energy at wholesale. Some of Calpine's plants are located in regions where transmission and reliability functions are managed by an Independent System Operator (ISO), which also administers markets for energy and capacity. Calpine also operates in regions where the transmission grid remains under the direct control of vertically integrated monopoly utilities. Calpine sells power under long term contracts wherever and whenever possible and also bids into spot and day-ahead markets where these exist.

In regions where ISOs/RTOs are fully operational and markets are independently administered, Calpine, like all market participants, can be assured of fair and objective treatment in terms of interconnection to the grid, access to the grid and scheduling of transmission service. In these regions, we also find an order of dispatch that adheres strictly to economic merit (with due regard to security constraints), energy prices that are the result of competitive behavior, independently verifiable prices for congestion, and predictable market rules. In these regions, wholesale customers have the ability to access the most efficient generator at the most competitive price. Also in these regions, price discovery and operational behavior is made transparent by real time posting of results on publicly accessible Oasis or other internet-based platforms.

In regions where the transmission grid remains under the control of monopolies and markets are neither independently administered nor organized, Calpine, like all market participants, typically experiences costly transmission interconnection, one-party, non verifiable calculation of available transmission capacity (ATC), and access to the grid under terms and conditions that are not equally imposed by the transmission owner on itself and its affiliates and on all other market participants. We also experience unpredictable scheduling of transmission service and no market-based value for congestion. In these regions, there is no publicly posted daily order of dispatch and therefore no independently verifiable economic merit for the dispatch. There is also an absence of spot and day ahead and forward markets for generation capacity and energy, absence of market signals for construction of new generation and transmission, an unequal playing field in regard to rate and non-rate treatment of investment and fuel costs, and indefinitely postponed retirement of older, inefficient, high emission generating plants.

Procurement of wholesale power differs widely from state to state. In Calpine's experience, States that have restructured to allow for competition have concurrently leveled the playing field, thereby assuring equal access to the market for both native utilities and independent power producers. In pro-competition states, it is typical for state regulatory commissions to affirmatively oversee the procurement process in order to ensure that it is conducted openly and fairly and that the results are independently verifiable. By contrast, in states with protected markets, procurement of supplies at the wholesale level by the native utility is generally carried out under somewhat opaque rules that frequently result in the award of contracts to the utility itself or to its affiliates. Recent examples of such procurement practices can be found in Missouri, Wisconsin and Louisiana, among others.

Question: Mr. Walter: How would the Federal Energy Regulatory Commission's (FERC) commitment to open access help or hurt your company and what would the impact be on consumers?

Answer: Open access, and related independently managed dispatch and market functions, are conditions precedent to a competitive marketplace. Without non-discriminatory open access to the grid, Calpine is unable to reach potential customers and remains therefore entirely captive of the native utility to which its plants are connected. In the South and West, where competitive markets are either limited or nonexistent, and where transmission access is not independently administered by ISOs/RTOs, Calpine faces continuing difficulties in obtaining transmission service from the local, vertically integrated utilities. In sum, only an independent third party such as an ISO/RTO can guarantee access to the grid, for all market participants, on equal, non-discriminatory terms and conditions.

Consumers and ratepayers benefit from open access and related competitive markets in several important ways:

1. The evidence is incontrovertible that competitive power markets exert downward pressure on prices. As stated in my testimony, this has directly contributed to the more than 30% reduction in residential rates in the last fifteen years. This is true, notwithstanding the short but aberrant experience with the flawed California "market."
2. In Texas, over 6,000 MW of outdated generation capacity is scheduled for retirement because it is no longer economically competitive. Ratepayers will consequently no longer carry the burden of the cost of this inefficient capacity.
3. In Louisiana, a competitive market based on true economic dispatch would likely result in the retirement of up to 15,000 MW of outdated gas/oil fired generation. The difference between the existing, outdated capacity and the state-of-the-art capacity that is available to replace it would be:
   - A near 40% decrease in fuel use (whose costs are currently directly assigned to ratepayers),
   - Elimination from the rate base of the un-amortized plant investment
   - A 93% reduction in NO_X emissions
   - A 47% reduction in CO_2 emissions.

INSERT OFFSET FOLIOS 54 TO 57 HERE