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Executive Director

June 28, 2007

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:
Thank you for seeking the opinion of the nation's governors on the topic of a renewable portfolio standard (RPS).

Your letter dated May 24, 2007 asked for information as to what analysis has been done on portfolio standards. As you know, twenty-one states and the District of Columbia have adopted renewable portfolio standards. Many states include sources such as wind, solar, landfill gas, energy efficiency, and biomass and vary in terms of requirements. Attached is a document detailing the analysis that has been done on existing state RPS standards.

With regard to developing federal legislation involving an RPS, governors believe that federal action should reflect each state's ability to bring a unique blend of resources and approaches to common problems. Unless the national interest is at risk, federal action should not preempt additional state action. While governors recognize that federal intervention may be appropriate when states fail to act on issues of legitimate national concern, preemption should be the exception and not the rule. This is especially true in areas that have long been the responsibility of the states, such as the states' traditional authority over the protection of the environment and the judicious management of their energy and other natural resources

We appreciate your interest in the states as a "laboratory of innovation" and look forward to working with you.

Sincerely,

Raymond C. Scheppach

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Question 1, e. Setting Renewable Portfolio Standards

This report summarizes a national, regional and a number of leading state renewable portfolio standards, including estimates of co-benefits. Since most a recent most data are estimates and projections. More information is likely available and this is not intended to be comprehensive.

NATIONAL

A new Lawrence Berkely National Laboratory report reviews the cost impact analyses of 28 state-level renewable portfolio programs (RPS). The report, *Weighing the Costs and Benefits of State Renewables Portfolio Standards: A Comparative Analysis of State-Level Policy Impact Projections*, finds that the long-term electricity rate impacts of state RPS policies are expected to be relatively modest.

The report's authors surveyed 28 state RPS cost impact projections and found that, despite uncertainties, majority of studies project modest cost impacts. They conclude that 70 percent (21 of 30 states) state RPS cost analyses predict rate increases of less than or equal to 1 percent. The report also finds that:

- Wind power is expected to serve majority of the state-RPS renewable energy demand;
- Studies use a variety of different methods and data sources to calculate costs and benefits – a standard study template has not emerged; and
- Assumptions for primary and secondary costs and benefits likely to be more important than what model is used.

The authors conclude that as states accumulate more empirical evidence with state RPS policies, actual costs should be benchmarked against state RPS costs projections. This can help inform future state analyses of the costs and benefits of state RPS policies.

To date, 21 states and the **District of Columbia** have adopted RPS standards, requiring a certain percentage of electricity generated to be from renewable sources, including wind and solar. Additional states, such as **Illinois** and **Vermont**, have established voluntary RPS standards.

Related Links (in pdf):

- Full Report
- Report Findings in PowerPoint

REGIONAL

At the 2004 annual meeting of the Western Governors' Association (WGA) the governors endorsed a resolution calling for 30,000 MW of clean energy development by 2015. While chair of WGA, **New Mexico** Governor Bill Richardson called for the development of 4,000 to 6,000 megawatt-hours (MW) of wind energy[1] and 700 to 1,300 MW of solar and biomass energy in New Mexico.[1] If this is achieved, benefits will include:

- $5 billion in new economic development, focusing on rural New Mexico;
- $250 million per year of consumer savings;
- 250 billions gallons of water savings; and

- 18 tons of nitrous oxides (NOx) emissions avoided.

The Northwest Power Council[1] (the Council) that evaluated energy resource use and potential in the Northwestern U.S. The Council's "5th Power Plan"[1] concludes that conservation has saved Washington 2,000 MW in energy needs over the past 20 years, the equivalent of the needs of two cities the size of Seattle.

- Projections show that an additional 3,000 MW of savings from energy conservation are achievable by 2020, allowing the state's full future energy load, in theory, to be met from energy efficiency.[1]

MINNESOTA

Currently, 11 percent of the electricity used in **Minnesota** is derived from renewable energy resources. Minnesota Governor Tim Pawlenty announced his "25 by 25" energy program, which set a goal that 25 percent of state energy produced and used in Minnesota be derived from renewable sources by 2025.

- In 2005, the SEO reported that over 23,000 Minnesota consumers purchased approximately 78,000,000 kilowatt-hours of green electricity, a 30 percent increase from the report released three years earlier.[1]
- The latest state energy office data indicate that renewable energy production in Minnesota comes from three sources: wind (23.19 percent), hydropower (27.41 percent) and biomass (49.40 percent).[1]
- These reports confirm that Minnesota's state-owned utilities produced 2.6 percent of their energy using renewable sources in 2003, which offset more than 10 tons of greenhouse gases (GHG) and 320 pounds of mercury. Governor Pawlenty reported that the state's ethanol industry generates more than $1.3 billion in economic activity and creates 5,300 jobs in Minnesota.[1]

NEW YORK

The RPS went into effect on January 1, 2006, requiring 25 percent of electricity sold in New York by 2013 to be renewable.

Work by NYSERDA predicated that by 2013 New York's RPS program would offset wholesale energy costs in New York by $362 million because of reduced dependence on fossil fuels.

- NYSERDA estimates show that full implementation of the RPS will reduce nitrogen oxide (NOx) by 6.8 percent, sulfur dioxide (SO_2) by 5.9 percent, and carbon dioxide (CO_2) emissions by 7.7 percent.
- A 2003 study funded by NYSERDA concluded efficiency and renewable energy could be expected to reduce New York's annual electricity generation requirements by 19,939 gigawatt-hours (GW) by 2012 and by more than 27,244 GW by 2022, which represents 12.7 percent and 16.1 percent, respectively, of expected state requirements over that timeframe.
    - The study also reported that by 2022 up to 45 percent of renewable energy in the RPS would be considered competitive with conventional electric generation.
- NYSERDA study found that 45 percent of renewable energy technical potential would be considered competitive with conventional electric generation by 2012

Energy Efficiency Analyses

Notably, New York's system benefit charge for energy conservation saves approximately 1,700 GW in annual electricity usage while creating almost 4,500 jobs. Through 2005, cumulative

emission reduction benefits from the SBC-funded programs equaled 1,500 tons of nitrogen oxides (NO_X), 2,700 tons of sulfur dioxide (SO_2), and 1.2 million tons of carbon dioxide (CO_2).[1]

PENNSYSLVANIA

In 2004, Governor Edward Rendell signed legislation establishing a Commonwealth Alternative Energy Portfolio Standard (AEPS) requiring 20 percent of the electricity sold in Pennsylvania be from renewable and indigenous resources.

- By the AEPS 15th year, avoided emissions are estimated to be 6.5 millions tons of CO_2, 50,000 tons of SO_2 and over 14,000 tons of NO_X. Related benefits include the creation of up to 4,000 MW of new wind deployment over twenty years, along with 3,500 more jobs and a $9 billion increase in projected gross state production.[1]

NEVADA

The current requirement is that 15 percent of retail electricity sales in 2015 be derived from renewable sources. As part of the State Energy Plan, **Nevada**'s governor and the Nevada State Office of Energy (NSOE) provided a framework for the collection and analysis of energy data.

- A 2003 economic-impact model assessment of the state's renewable energy usage – 3.9 percent of Nevada's electricity consumption is from renewable sources – shows that 850 Nevada jobs arise either directly or indirectly from the state's renewable energy generation.
- According to the work by NSOE's Renewable Energy Task Force, if the current proportion of renewable energy consumed remains constant the annual impact on GSP averages $124 million annually in nominal dollars through 2035. *If 15 percent of electric needs come from renewable energy generated within the state, over 5,000 jobs can be attributed to the industry along with an average annual GSP effect of $665 million through 2035.*[1]

NEW MEXICO

Under the RPS, public electric and gas utilities must produce 20 percent of their power from renewable resources by 2025. In March 2007, Governor Richardson signed Senate Bill 418, which grew the state's RPS by requiring investor-owned utilities to generate 15 percent renewable energy by 2015 and 20 percent by 2020.

- Analysis funded by the New Mexico SEO shows the state's solar bonding act could save utilities $46 million over the 20-year life of the bond. After the bond is paid off, the net revenue returned to state coffers could be as much as $18 million.[1]

Climate Change Analyses. In late December 2006, a public-private group of stakeholders provided Governor Richardson with 69 recommendations to reduce the state's greenhouse gases. Preliminary analyses indicate that if all measures were achieved, New Mexico would reduce its GHG by 267 million metric tons over the 2007-2013 timeframe, saving an estimated $2 billion through energy efficiency measures alone.