



U.S. HOUSE OF REPRESENTATIVES
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CHAIRMAN FRED UPTON

The Oversight Series
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EPA's Proposed CO₂ Regulations for Existing Power Plants: Critical Issues Raised in Hearings and Oversight



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I. OVERVIEW

The Environmental Protection Agency's (EPA) proposed carbon dioxide (CO₂) regulations for existing power plants, referred to by the agency as its "[Clean Power Plan](#)," reflect an unprecedented attempt to change how electricity is generated, transmitted, and consumed in the United States. The proposed rule was announced in June 2014, and the comment period closed December 1, 2014. The agency plans to finalize the rule by June 2, 2015.

Since the proposed rule was announced, the Subcommittee on Energy and Power has held three hearings regarding the proposal with testimony from EPA, the Federal Energy Regulatory Commission (FERC), and state energy and environmental regulators. Review of information and testimony collected in connection with the hearings and additional comments establish five preliminary conclusions regarding the proposal:

- There are fundamental legal questions about the EPA's authority to regulate in this area and, assuming such authority, the scope of that authority;
- EPA's plan would transform federal and state decision-making concerning the transmission and delivery of electric power in the United States;
- Many of the key assumptions in the EPA's proposed "building blocks" are unrealistic;
- The proposal would not be workable for potentially many states because of a host of implementation challenges; and
- The accelerated timeline for completing the rulemaking appears inadequate to respond fully to all substantive comments.

This majority staff report outlines the proposal, provides information on threshold legal issues, and provides examples of key testimony received by the committee since June 2014. The report is intended to assist in understanding critical issues and challenges presented by this rulemaking based on the information currently available.

II. EPA'S PROPOSAL

The EPA's proposed CO₂ regulation for existing power plants was announced in June 2014.¹ The proposal is being advanced as part of President Obama's [Climate Action Plan announced in June 2013](#).²

¹ The proposed rule was announced on June 2, 2014, and [published](#) in the Federal Register on June 18, 2014. *See* 79 Fed. Reg. 34830 (June 18, 2014) ("Proposal"). The proposal does not apply to Vermont, the District of Columbia, tribal lands or U.S. territories. *See* [Proposal](#) 79 Fed. Reg. at 34895, n. 258. On October 8, 2014, EPA announced a [supplemental proposed rule](#) for Indian Country and U.S. territories. *See* 79 Fed. Reg. 65482 (Nov. 4, 2014).

EPA proposed a 90-day comment period, but because of the complexity of the rule and accompanying information³ and questions of compliance costs and related workability, the agency received numerous requests for extension, including from [53 U.S. Senators](#) from 27 states, as well as other state officials.⁴ Extensive concerns were also raised by at least [15 governors](#).⁵ In September 2014, EPA extended the public comment period by 45 days to [December 1, 2014](#).⁶ EPA [reportedly](#) intends to finalize the rule within only six months of the comment deadline, [by June 2, 2015](#).⁷ To date, more than 1.4 million comments have been submitted, including thousands of pages of substantive comments on the proposal.⁸

² The proposal was [highlighted](#) by the President at the United Nations Climate Summit in New York in September 2014, as part of the run-up to an [international climate meeting](#) (a/k/a “UNFCCC COP 21”) to be held in Paris in December 2015.

³ The rulemaking documents, including the [Regulatory Impact Analysis](#), are available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule>. Additional [technical support documents](#) (TSDs), a [legal memorandum](#), and other related memoranda are available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents>. See also EPA’s “[Clean Power Plan Toolbox for States](#)” available at <http://www2.epa.gov/cleanpowerplantoolbox>.

⁴ See, e.g., [Aug. 25, 2014 Letter to EPA from the Attorneys General of West Virginia, Nebraska, Oklahoma, Alabama, Indiana, Kansas, Louisiana, Montana, North Dakota, Ohio, South Carolina, South Dakota, and Wyoming](#); [Aug. 25, 2014 Letter to EPA from Kentucky Attorney General](#) (also requesting withdrawal of the proposal) [August 28, 2014 Letter from Alaska Department of Environmental Conservation](#); [Aug. 12, 2014 Letter from North Carolina Department of Environment and Natural Resources](#); [Aug. 21, 2014 Letter from Kansas Department of Health & Environment](#); [August 19, 2014 letter from Mississippi Department of Environmental Quality](#).

⁵ See Letter available at <http://www.scribd.com/doc/239195664/Republican-Governors-Urge-President-Obama-to-Promote-Reliable-Affordable-Energy-Policy>.

⁶ EPA subsequently published two related notices for which it also solicited comment by December 1, 2014. See “[Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Generating Units](#),” [Notice of Data Availability](#) published at 79 Fed. Reg. 64543 (Oct. 30, 2014) (addressing “emission reduction compliance trajectories created by the interim goal for 2020 to 2029, certain aspects of the building block methodology, and the way state-specific carbon dioxide (CO₂) goals are calculated”) and related [Fact Sheet](#) and [Press Release](#); see also “[Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units](#),” [Notice](#) published at 79 Fed. Reg. 67406 (Nov. 13, 2014) (“to provide further discussion of potential approaches for translating the emission rate-based carbon dioxide (CO₂) goals that the EPA has proposed for each affected jurisdiction to an equivalent mass-based metric”); see also related [Fact Sheet](#), [Technical Support Document](#), and Maps with [Mass-Based Equivalents by State, Tribe, and Territory](#).

⁷ In June 2013, President Obama issued a [Presidential Memorandum](#) directing the agency to complete standards for new, modified and reconstructed power plants under section 111(b) of the Clean Air Act (CAA), and for existing power plants under section 111(d) of the CAA, by June 1, 2015. See Presidential Memorandum available at <http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards>. On [January 8, 2014](#), EPA proposed rules for [new plants](#) (see 79 Fed. Reg. 1430 (Jan. 8, 2014)), and on [June 18, 2014](#) proposed rules for [modified and reconstructed power plants](#) (see 79 Fed. Reg. 34960 (June 18, 2014)). For additional background, see [Nov. 14, 2013 hearing memorandum](#) available at <http://docs.house.gov/meetings/IF/IF03/20131114/101482/HHRG-113-IF03-20131114-SD002.pdf>; [June 19, 2014 hearing memorandum](#) available at <http://docs.house.gov/meetings/IF/IF03/20140619/102346/HHRG-113-IF03-20140619-SD003.pdf>; and [July 29, 2014 hearing memorandum](#) available at <http://docs.house.gov/meetings/IF/IF03/20140729/102558/HHRG-113-IF03-20140729-SD003.pdf>.

⁸ The docket, including comments on the proposal, is available at <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2013-0602>. As a practical matter, it is not clear how

Under its Clean Power Plan, EPA proposes mandatory CO₂ “goals” for each state’s power sector and requires states to submit individual or multi-state plans to meet those goals. EPA describes the goals as “rate-based goals,” and for each state includes an “interim goal” for the period 2020 to 2029, and a “final goal” beginning in 2030. The mandatory CO₂ emissions goals proposed by EPA are included in Appendix 1.⁹

These mandatory goals were derived by EPA based on four “building block” measures identified by the agency. The building blocks include 1) making heat rate improvements at coal-fired power plants, which EPA assumes for each state could result on average in a 6 percent CO₂ emissions reduction from the affected coal-fired electric generating units; 2) shifting away from coal-fired generation and operating the state’s natural gas combined cycle plants at a 70 percent capacity factor; 3) shifting away from coal-fired generation and expanding use of existing nuclear and renewable energy generation; and 4) reducing the use of electricity through energy efficiency programs that EPA assumes for each state could improve electricity savings by up to 1.5 percent annually.¹⁰ In September, EPA posted on its website a “Clean Power Plan State Goal Visualizer,” which attempts to show how each state’s goals were calculated by the agency.¹¹ As an alternative, EPA also proposes that a state could convert its assigned “rate-based goals” into an equivalent “mass-based goal.”¹²

the agency could properly review and respond fully to all substantive comments on the proposed rule by June 2015, nor is it clear how EPA could carry out the interagency, state, and stakeholder consultations needed to address those comments appropriately, or whether thorough interagency review of a final rule could be conducted in such a limited time frame.

⁹ While EPA has described the proposal as reducing CO₂ emissions from the power sector by [30 percent nationwide below 2005 levels](#), the goals are calculated using 2012 rather than 2005 data. At the June 19, 2014, hearing EPA Acting Assistant Administrator McCabe testified that “the starting point for this rule is 2012.” See EPA hearing transcript, available at <http://docs.house.gov/meetings/IF/IF03/20140619/102346/HHRG-113-IF03-Transcript-20140619.pdf>, at p. 75. In response to a question why a state like Georgia, which has already achieved nearly 30 percent reduction below 2005 emissions levels, is subject to stringent emissions rate targets, she testified: “This rule was not set up to achieve a specific goal of reduction. That is not the way it works. It was set up to look at what the available technologies are, and for each State, that results in a different trajectory and a different ultimate goal.” *Id.* at p. 116.

¹⁰ See [Proposal](#) 79 Fed. Reg. 34830, 34855-34892 (June 18, 2014), including at 34859-34862 (Building Block 1), 34862-34866 (Building Block 2), 34866-34871 (Building Block 3), 34871-34875 (Building Block 4). See also, e.g. [“Fact Sheet: Clean Power Plan Framework”](#). With respect to renewable energy under “Building Block 3,” see also [Alternative \[Renewable Energy\] Approach Technical Support Document](#) available at <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-alternative-re-approach.pdf>.

¹¹ The formulas and methodologies for setting state targets are described in a [“Goal Computation Technical Support Document.”](#) On Sept. 9, 2014, EPA sent Congressional staff an email advising that the agency would be posting a “State Goal Visualizer” tool on its website, stating: “Today EPA is posting an additional tool to help stakeholders understand the data and information we released as part of the proposed Clean Power Plan. The tool, known as the State Goal Visualizer, is available on the “Clean Power Plan Toolbox for States” webpage (<http://www2.epa.gov/cleanpowerplantoolbox>).”

¹² See [Proposal](#) 79 Fed. Reg. at 34953. See also EPA TSD entitled [“Projecting EGU CO₂ Emission Performance in State Plans”](#) available at <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-projecting-egu-co2emission-performance.pdf>. On Nov. 6, 2014, EPA posted a notice addressing mass-based emissions rate equivalency calculations. See [Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility](#)

Under the proposal, each state would be required to submit a plan to meet its mandatory goals to the EPA for approval. The agency’s website states, “EPA encourages states to look broadly across their electricity system to identify strategies for their plans to reduce carbon pollution. Strategies can include:

- Demand-side energy efficiency programs
- Renewable energy standards
- Efficiency improvements at plants
- Dispatch changes
- Co-firing or switching to natural gas
- Construction of new Natural Gas Combined-Cycle plants
- Transmission efficiency improvements
- Energy storage technology
- Retirements
- Expanding renewables like wind and solar
- Expanding nuclear
- Market-based trading programs
- Energy conservation programs”¹³

EPA encourages states to consider including cap-and-trade programs in their state plans.¹⁴

Under the proposal, state plans would be due June 30, 2016, with a possible 1-year extension for individual state plans and 2-year extension for plans that include a multi-state approach.¹⁵ These plans would need to include emissions standards that are “quantifiable, verifiable, non-duplicative, permanent, and enforceable.”¹⁶ In each plan, states would be required to include detailed information, including identification of all affected entities, a description of the plan approach and geographic scope, identification of the state emission performance levels for affected entities that would be achieved through implementation of the plan, and demonstrations relating to projected emission performance levels.¹⁷

[Generating Units,” Notice](#), 79 Fed. Reg. 67406 (Nov. 13, 2014); *see also* [Fact Sheet](#), [Technical Support Document](#), and Maps with [Mass-Based Equivalents by State, Tribe, and Territory](#).

¹³ See <http://cleanpowerplanmaps.epa.gov/CleanPowerPlan/>.

¹⁴ See [Clean Power Plan – States](#) available at <http://cleanpowerplanmaps.epa.gov/CleanPowerPlan/> (identifying “participation in a greenhouse gas cap and trade programs” for potential inclusion in individual or regional plans). See also e.g., [Proposal](#), 79 Fed. Reg. at 34834, 34848, 34880, 34900 (June 18, 2014) (citing New England’s Regional Greenhouse Gas Initiative (RGGI) and/or California’s “Global Warming Solutions Act”).

¹⁵ See [Proposal](#), 79 Fed. Reg. at 34952.

¹⁶ *Id.* at 34953.

¹⁷ *Id.* at 34951-34952. The plan would also need to i) identify monitoring, reporting and recordkeeping requirements for each affected entity; ii) describe the process, contents and schedule for annual state reporting to the EPA about plan implementation and progress; and iii) certify that a hearing on the state plan had been held and include a list of witnesses and summaries of presentations. *Id.* at 34952. The plan would also need to include materials demonstrating the state’s legal authority to carry out each component of its plan, supporting the projected

These state plans would need to be approved by the EPA Administrator and could not be changed without EPA approval.¹⁸ If a state fails to submit a plan, or EPA finds a submitted plan unsatisfactory, the agency would impose a federal implementation plan, a model of which has not been developed by the agency.¹⁹ Once approved, all measures included in the plans would be federally enforceable.²⁰

Under the Clean Power Plan, EPA projects that up to 50 gigawatts of additional coal-fired generation may become uneconomic by 2030, with the vast majority retiring by 2020. EPA specifically estimates that in 2020, the amount of additional coal-fired generation that may be removed from operation would represent 19% of all coal-fired capacity (and 4.6% of total generation capacity in 2020).²¹ This would be over and above units already scheduled to be retired in the coming years.²² The Government Accountability Office (GAO) recently estimated that 42,192 megawatts “has either been retired since 2012 or is planned for retirement by 2025.”²³ The GAO’s projections are illustrated below:

emission performance level that will be achieved by affected entities, supporting the projected mass-based emission performance goal if applicable; and materials “necessary to support evaluation of the plan by the EPA.” *Id.*

¹⁸ *Id.* at 34954.

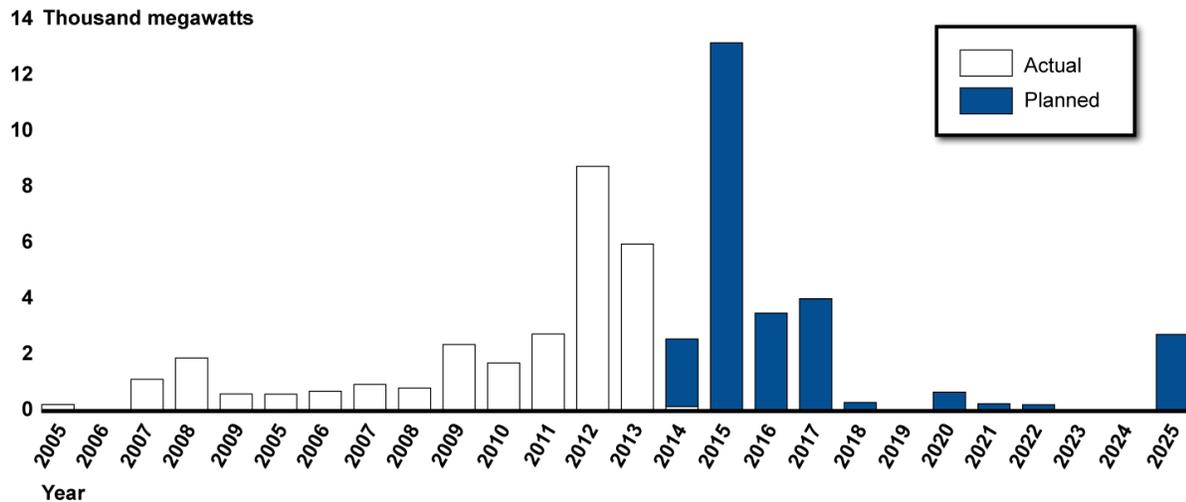
¹⁹ *Id.* at 34954.

²⁰ *Id.* at 34901 (“The EPA is proposing that all measures relied on to achieve the emission performance level be included in the state plan, and that inclusion in the state plan renders those measures federally enforceable”).

²¹ *Id.* at 34935 (“Under Option 1, the EPA projects 46 to 50 GW of additional coal-fired generation may be uneconomic to maintain and may be removed from operation by 2030”); *see also* RIA, pg. 3-46 (“Under the provisions of this rule, EPA projects that approximately 46 to 49 GW of additional coal-fired generation (about 19% of all coal-fired capacity and 4.6% of total generation capacity in 2020) may be removed from operation by 2020.”)).

²² In the United States, existing coal-fired power plants are the largest source of our electricity. The U.S. Energy Information Administration [reports](#) that in 2013, energy sources and the percentage share of total electricity generating were as follows: Coal 39%; Natural Gas 27%; Nuclear 19%; Hydropower 7%; Other Renewable 6%, including Biomass (1.48%), Geothermal (0.41%), Solar (0.23%), Wind (4.13%); Petroleum 1%; and Other Gases < 1%. *See* <http://www.eia.gov/tools/faqs/faq.cfm?id=427&t=3>.

²³ *See, e.g.* U.S. Government Accountability Office Report entitled “[EPA Regulations and Electricity: Update on Agencies’ Monitoring Efforts and Coal-Fueled Generating Unit Retirements](#)” available at <http://www.gao.gov/assets/670/665325.pdf>.



Source: GAO analysis of SNL Financial data. | GAO-14-672
 See <http://www.gao.gov/assets/670/665325.pdf>

III. Threshold Legal Issues

The proposed Clean Power Plan is being issued pursuant to a rarely invoked provision of the Clean Air Act (CAA) known as section 111(d).²⁴ This provision has had only limited application and scope and been applied to only a few emissions sources, primarily in the 1970s and 1980s.²⁵ President Obama directed EPA to regulate greenhouse gas emissions from existing power plants under this provision.²⁶ EPA Acting Assistant Administrator Janet McCabe testified at a June 19, 2014, hearing that the proposed rule “is completely within the four corners of 111(d).”²⁷

Despite this assertion, the express language of the CAA, as set forth in the U.S. Code, provides that EPA does not have the legal authority to regulate CO2 emissions from existing power plants under section 111(d). Specifically, section 111(d) excludes the regulation of any pollutant emitted from a source category which is being regulated under section 112 of the CAA.

²⁴ Section 111(d) of the Clean Air Act authorizes the EPA Administrator to prescribe regulations establishing a procedure under which states submit to the Administrator a plan establishing standards of performance (also known as “Existing Source Performance Standards”) for certain existing sources and certain air pollutants. See [42 U.S.C. § 7411\(d\)](#).

²⁵ Over the last 40 years, the agency has regulated pollutants under CAA section 111(d) from only five source categories: phosphate fertilizer plants (1977) (fluorides), sulfuric acid plants (1977) (acid mist), Kraft pulp mills (1979) (total reduced sulfur), primary aluminum plants (1980)(fluorides), and municipal solid waste landfills (1996) (landfill gas). See [Proposal](#), 79 Fed. Reg. at 34844, n. 43. EPA has also regulated sewage sludge incinerators under section 111(d) in conjunction with CAA section 129. *Id.* at 34845, n. 44.

²⁶ See [Presidential Memorandum](#) dated June 25, 2013 available at <http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards>.

²⁷ See EPA hearing [transcript](#) at p. 27.

See [42 U.S.C. § 7411\(d\)\(A\)](#).²⁸ Because EPA now regulates electric generating units as sources under CAA section 112 pursuant to the agency’s 2012 “Mercury and Air Toxics” or “Utility MACT” rule,²⁹ this language prohibits EPA from setting standards for these sources of emissions under section 111(d).

EPA maintains that notwithstanding the express language set forth in the U.S. Code, the agency “may reasonably construe the provision to authorize regulation of [greenhouse gases] under CAA section 111(d).”³⁰ EPA asserts its interpretation is permissible due to ambiguities that stem from “apparent drafting errors that occurred during enactment of the 1990 Clean Air Act Amendments, which revised section 111(d).”³¹ Specifically, EPA asserts that a conflicting Senate provision that remained in the legislation enacted by Congress creates ambiguities that allow for the current proposed regulation because the language appears to exclude only section 112 pollutants from regulation under section 111(d), not section 112 sources as provided in the U.S. Code referenced above. Although EPA notes the presence of this language appears to be a “drafting error,” because the provisions are presented as bracketed text in the Statutes at Large,³² EPA argues that “[u]nder these circumstances, the EPA may reasonably construe the provision to authorize the regulation of GHGs under CAA section 111(d).”³³

²⁸ The U.S. Code Section 111(d)(A)(1) provides: “(d) Standards of performance for existing sources; remaining useful life of source (1) The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section [7410](#) of this title under which each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under section [7408 \(a\)](#) of this title or emitted from a source category which is regulated under section [7412](#) of this title but (ii) to which a standard of performance under this section would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such standards of performance. Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.” See [42 U.S.C. § 7411\(d\)\(A\)](#).

²⁹ See [National Emissions Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units](#), 77 Fed. Reg. 9304 (Feb. 16, 2012). For additional information regarding this regulation, see <http://www.epa.gov/mats/actions.html>.

³⁰ See [Proposal](#) 79 Fed. Reg. at 34853. Nevertheless, EPA notes that “the pertinent language [in the U.S. Code] in CAA section 111(d) would exclude the regulation of any pollutant which is ‘emitted from a source category which is regulated under section 112.’” *Id.*

³¹ *Id.* See also: [70 Fed. Reg. 15994](#), 16031 (Mar. 29, 2005)(“While **it appears that the Senate amendment to section 111(d) is a drafting error and therefore should not be considered**, we must attempt to give effect to both the House and Senate Amendments as they are both part of the current law.”)(Emphasis added).

³² As written in the Statutes at Large, CAA Section 111 (d) (1)(A): “...establishes standards of performance for any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under section 108(a) [or emitted from a source category which is regulated under section 112] [or 112(b)]...” An accompanying footnote on the brackets states “The amendments, made by section 108 (g) and 302 (a) of P.L. 101-549, appear to be duplicative or conflicting; both, in different language, change the reference to section 112.” See <http://legcounsel.house.gov/Comps/Clean%20Air%20Act.pdf>.

³³ See [Proposal](#) 79 Fed. Reg. at 334853.

Despite EPA's position, the evidence indicates Congress intended the language in the U.S. Code to be the law. Committee staff has reviewed the legislative history relating to the 1990 Amendments to the CAA. The legislative history shows (a) the Senate and House conferees considered and amended the section containing House-originated statutory language providing that sources regulated under section 112 cannot be regulated as existing sources under section 111, and (b) the Senate expressly receded to the House with respect to these substantive provisions regarding section 111(d). The Statement of Senate Managers states as follows:

SECTION 108-MISCELLANEOUS PROVISIONS.

Senate bill. In section 103 of the Senate bill revises sections 108(e) and (f) of the Clean Air Act to require the Administrator and the Secretary of Transportation to update air quality/transportation planning guidance and to add to the transportation control measures to be evaluated by the Administrator after consultation, when appropriate, with the Secretary.

House amendment. The House amendment contains a similar provision to the one in the Senate bill regarding amendments to section 108 of the Clean Air Act. **In addition, the House amendment contains provisions for a technology clearinghouse to be established by the Administrator, for amending section 111 of the Clean Air Act relating to new and existing sources, for amending section 302 of the Clean Air Act which contains definitions, to provide a savings clause, to state that reports that are to be submitted to Congress are not subject to judicial review, and for other purposes.**

Conference agreement. The Senate recedes to the House except that with respect to the requirement regarding judicial review of reports, the House recedes to the Senate, and with respect to transportation planning, the House recedes to the Senate with certain modifications. [emphasis added]³⁴

By receding to the House language, the conferees effectively removed obsolete references to 112(b)(1)(a) in the underlying Clean Air Act. The legislative history indicates further that the bracketed language in the Statutes at Large from the Senate-originated provision, a "conforming amendment," was essentially an editing oversight that inadvertently remained in the enacted statute.³⁵ This language was not expressly considered by the conferees because such

³⁴ See CHAFEE-BAUCUS STATEMENT OF SENATE MANAGERS, S. 1630, THE CLEAN AIR ACT AMENDMENTS OF 1990, *A Legislative History of the Clean Air Act Amendments of 1990*, William S. Hein & Co. Inc. (1998), Volume I, Book 2 at p. 885 (emphasis added). See excerpts available at <http://docs.house.gov/meetings/IF/IF03/20140619/102346/HHRG-113-IF03-20140619-SD011.pdf>

³⁵ The Senate conforming language can be traced to Senate bill S. 816. Provisions of S. 816, introduced in the U.S. Senate on April 18, 1989, were subsequently incorporated into S. 1630, the legislation that passed the Senate and became the vehicle for the Clean Air Act Amendments of 1990. Identical provisions were included in H.R. 2585, introduced in the U.S. House on June 8, 1989, which was subject along with a competing legislative proposal, H.R. 4, to legislative hearings by the Energy and Commerce Committee. See Hearings Before the Subcommittee on Health and the Environment of the Committee on Energy and Commerce House of Representatives, One Hundred First Congress, First Session entitled "June 22, 1989 TOXIC AIR POLLUTANTS-H.R. 4 and H.R. 2585, July 24, 1989-ADMINISTRATION'S AMENDMENTS," Serial No. 101-116. Neither H.R. 2585 nor H.R. 4 were reported out of Committee. Subsequently, H.R. 3030, which was introduced on July 27, 1989, specifically incorporated language that served to prohibit the application of section 111(d) to pollutants emitted from source categories

consideration was unnecessary. The language served as a technical correction, the point of which was to replace a statutory reference that had been rendered obsolete by amendments to section 112 with a reference that would accurately conform to the revised section 112. This technical edit inadvertently remained in the legislation taken up by Congress. Once the substantive House provisions were adopted, this technical edit was rendered non-executable because the reference it replaced no longer existed. Subsequent review by the Office of Law Revision Counsel³⁶ correctly identified this obsolete provision and corrected it in the U.S. Code.³⁷

In short, based on review of the legislative history, it does not appear that this rulemaking falls within “the four corners of 111(d).” When corrected for technical drafting imperfections, as the U.S. Code revisions have done, EPA cannot regulate existing power plants under section 111(d) because these plants are already regulated as sources under section 112.

This threshold issue is already the subject of litigation pending in the Court of Appeals for the District of Columbia.³⁸ Even assuming that EPA has authority under section 111(d) to regulate existing electric generating units, there remain fundamental issues regarding the scope of such authority,³⁹ including whether EPA would have authority to require actions “beyond-the-fence” of the electric generating units that are the subject of the regulation.⁴⁰ In particular, while

regulated under section 112. *See A Legislative History of the Clean Air Act Amendments of 1990*, William S. Hein & Co. Inc. (1998), Volume I, Book 2 at pp. 443-444. The Committee eventually considered and reported favorably H.R. 3030 which was passed in the U.S. House to become the vehicle for the House Clean Air Act Amendments. *Id.* at pp. 405-406.

³⁶ The Office of Law Revision Counsel is an independent, nonpartisan office in the U.S. House of Representatives under the authority of the Speaker of the House that prepares and conducts the codification process for the U.S. Code. While the Statutes at Large serve as legal evidence of laws ([1 U.S.C. § 112](#)), the subsequent codification process of the U.S. Code serves to correct technical errors in the law, eliminate obsolete provisions, and ultimately replaces, once enacted as positive law, the Statutes at Large as legal evidence of laws (1 U.S. Code section 204 and 2 U.S. Code section 205b(1)).

³⁷ The U.S. Code notes specifically that the amendment “could not be executed, because of the prior amendment by Pub. L. 101-549, §108(g),” which contained the substantive House language.

³⁸ This threshold issue is the subject of litigation pending in the Court of Appeals for the D.C. Circuit. *See In Re Murray Energy Corporation*, U.S. Court of Appeals for the District of Columbia, Case No. 14-1112; *State of West Virginia v. United States Environmental Protection Agency*, U.S. Court of Appeals for the District of Columbia, Case No. 14-1146.

³⁹ *See, e.g.,* [Perspective of 18 States on Greenhouse Gas Emission Performance Standards for Existing Sources under § 111\(d\) of the Clean Air Act \(September 11, 2013\)](#); [“The Oklahoma Attorney General’s Plan: The Clean Air Act Section 111\(d\) Framework that Preserves States’ Rights” \(April 2014\)](#); [“North Carolina § 111\(d\) Principles” \(Jan. 27, 2014\)](#); [“N.C. Department of Environment & Natural Resources Comments on EPA’s Proposed Rules for Controlling Greenhouse Gas Emissions under the Clean Air Act, Section 111\(d\)” \(June 30, 2014\)](#); [EPA’s CO₂ Rules and the Cooperative and Municipal Question](#), Regulatory Issues Implicated by the Proposed Rule (October 2014), Raymond L. Gifford et al.

⁴⁰ *See e.g.,* Letter of [15 Governors](#) available at <http://www.scribd.com/doc/239195664/Republican-Governors-Urge-President-Obama-to-Promote-Reliable-Affordable-Energy-Policy> (“Under federal law, EPA has the authority to regulate emissions from specific sources, but that authority does not extend outside the physical boundaries of such sources (*i.e.*, ‘outside the fence’)” and that “In attempting to regulate outside the fence, the Agency’s proposal not only exceeds the scope of federal law, but also, in some cases, directly conflicts with established state law”); *see also*,

the sources to be regulated under the proposal are limited to “existing fossil-fuel fired electric generating units,”⁴¹ EPA is seeking to set emissions limits that would not be achievable through emissions controls or other actions at the actual units subject to regulation.⁴² Rather, to meet EPA’s proposed emissions limits, states would need to undertake measures, such as building blocks 2, 3 and 4, outside the boundaries of the units.

Other questions relate to what legal authority the agency would have to include its various building blocks in a federal implementation plan. There are also questions regarding the potential need for state and/or federal implementing legislation, as well as the consistency of the Clean Power Plan’s approach with state laws or pending legislation.⁴³ Further, there are at least six states that have passed laws that provide that any CO₂ performance standards established by the state for existing power plants be based on “inside the fence” measures and/or require state legislative approval of a plan, and there are at least twelve additional states that have passed similar resolutions in either their House or Senate or both. *See* Appendix 2.

IV. COMMITTEE HEARINGS

To date, the Subcommittee on Energy and Power has held three hearings regarding the proposal: a [June 19, 2014, hearing](#) with EPA Acting Assistant Administrator for Air and Radiation Janet McCabe (“EPA hearing”), a [July 29, 2014, hearing](#) with all five FERC Commissioners (“FERC hearing”), and a [September 9, 2014, hearing](#) with state energy and environmental regulators, including regulators from Texas, Montana, Indiana, Arizona, Maryland and Washington (“states hearing”).⁴⁴

e.g., “EPA’s Section 111(d) Carbon Rule: What if States Just Said No?” available at <http://www.insideronline.org/summary.cfm?id=23304> (“EPA has ‘creatively’ reinterpreted its Section 111 authority for adopting performance standards and, for the first time, has proposed standards based on ‘outside-the-fence’ actions”).

⁴¹ *See* [Proposal](#), 79 Fed. Reg. at 34830.

⁴² *See, e.g.* [Proposal](#), 79 Fed. Reg. at 34888-34889 (In response to concerns raised by stakeholders that EPA’s authority is limited to measures that may be undertaken at the affected units, and does not include “beyond-the-unit” or “beyond-the-fenceline” measures, EPA states: “As discussed above, we propose that the provisions of CAA section 111 do not by their terms preclude the [best system of emissions reduction] from including [building blocks 2, 3 and 4]”).

⁴³ *See e.g.* [EPA’s Co₂ Rule and 18 States’ Resolutions and Legislation, EPA’s Proposed CO₂ Rule Collides with Flexibility Asserted By States](#), Raymond L. Gifford et al. (August 2014).

⁴⁴ A preliminary transcript for the EPA hearing held June 19, 2014 may be found at <http://energycommerce.house.gov/hearing/epa%E2%80%99s-proposed-carbon-dioxide-regulations-power-plants> (hereinafter referred to as “EPA hearing transcript”). A preliminary transcript for the FERC hearing held July 29, 2014 may be found at <http://energycommerce.house.gov/hearing/ferc-perspectives-questions-concerning-epa%27s-proposed-clean-power-plan-and-other-grid> (hereinafter referred to as “FERC hearing transcript”). A preliminary transcript for the States hearing held on September 9, 2014 may be found at <http://energycommerce.house.gov/hearing/state-perspectives-questions-concerning-epa%E2%80%99s-proposed-clean-power-plan> (hereinafter referred to as “States hearing transcript”).

The hearings identified a range of technical, feasibility, and legal issues, separate from the issue of whether EPA has legal authority to regulate under section 111(d). According to hearing testimony, EPA’s rule would not be workable for many states.⁴⁵ Testimony is summarized below.

A. Preliminary Jurisdictional Issues

Testimony highlighted that EPA’s proposal raises potentially significant jurisdictional issues involving FERC, which has responsibility for overseeing the reliable operation of the nation’s bulk power system and enforcement of electric reliability standards, as well as ensuring just and reasonable rates for the transmission and sale of electricity in interstate commerce.⁴⁶

FERC Commissioner Phillip Moeller testified that EPA is effectively proposing rules requiring the movement from a system of “economic dispatch” to “environmental dispatch.” He specifically stated that “we have traditionally gone under something called economic dispatch where the cheapest power plants are called in the merit order of dispatch. This would change it to environmental dispatch. You can do that with a carbon fee and mesh the two, but obviously the prices go up. It is a fundamental change, not only with how we regulate power but actually how the system is operated”⁴⁷

FERC Commissioner Tony Clark testified that departing from a system of economic dispatch to environmental dispatch could lead to a “jurisdictional train wreck between EPA and FERC,” noting that FERC’s authority comes through the Federal Power Act, which “requires just and reasonable rates and non-discriminatory rates.”⁴⁸ He explained, “[w]e have always judged that by economic dispatch. So to depart from economic dispatch and move to something else could potentially be challenging for the commission, I think.”⁴⁹

Testimony also indicated that there are jurisdictional issues for states, which have exclusive jurisdiction over intrastate electricity matters.⁵⁰ FERC Commissioner Clark testified,

⁴⁵ At the States hearing, regulators from four states (Texas, Arizona, Indiana, and Montana), from different regions of the country, testified they would be unable to comply with the rule. *See* States hearing [transcript](#) at pp. 93-94.

⁴⁶ *See* sections 205 (16 USC 824d) and 215 (16 USC 824o) of the Federal Power Act.

⁴⁷ *See* FERC hearing [transcript](#) at p. 25.

⁴⁸ *Id.* at p. 57.

⁴⁹ *Id.*

⁵⁰ *See* section 201 of the Federal Power Act (16 U.S.C. § 824(a)) (FERC jurisdiction “extend[s] only to those matters which are not subject to regulation by the States.”). *See also Electric Power Supply Association v. FERC*, D.C. Circuit Court of Appeals, Case No. 11-1486, [Opinion](#) at p. 14 (May 23, 2014) (“Because FERC’s rule entails direct regulation of the retail market—a matter exclusively within state control—it exceeds the Commission’s authority”). For a copy of the opinion, *see* [http://www.cadc.uscourts.gov/internet/opinions.nsf/DE531DBFA7DE1ABE85257CE1004F4C53/\\$file/11-1486-1494281.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/DE531DBFA7DE1ABE85257CE1004F4C53/$file/11-1486-1494281.pdf).

“What was once a relationship of interacting and cooperating entities will be one in which there is a clear senior partner. In the past, EPA authority extended to specific generating plants or groups of plants, but by a state voluntarily agreeing to seek EPA *approval* of its overall integrated regulation of the electric industry, it will have entered a comprehensive ‘mother-may-I?’ relationship with the EPA that has never before existed.”⁵¹ FERC Commissioner Clark further testified:

The concern that I raised is I do think there is a risk that this is a rather dramatic change jurisdictionally, and states will at least need to consider it as they decide whether they are going to go down the path of a state compliance plan. The reason I say that is in the past, EPA might just be regulating emission sources either by source or a fleet, but not the entire regulatory regime in an integrated resource plan standpoint that a state might have.

So to the degree that a state goes down the path of creating effectively a carbon integrated resource plan, they will be putting into that things that have traditionally been set by state legislatures, renewable portfolio standards, building codes, energy efficiency standards, in addition to traditional sort of power plant decisions.⁵²

B. State Targets and Building Blocks

The hearings identified extensive questions about EPA’s state targets and building blocks. For example, Montana Public Service Commission Commissioner Travis Kavulla testified:

These four building blocks, as the EPA calls them, are in general already being used by states to varying degrees for a variety of purposes, including carbon reduction. Yet, the EPA essentially ignores the details of a state situation and instead applies a cookie cutter formula that uses sweeping regional or national assumptions about the degree to which each individual building block is achievable.⁵³

Texas Public Utility Commission Commissioner Kenneth Anderson testified that “the fact of the matter is that use of any - of block 1, 2, and 3 will work counter - will work cross-purposes.”

In addition to the hearing testimony, on November 5, 2014, the North American Electric Reliability Corporation (NERC), which develops and enforces electric reliability standards,

⁵¹ See [written testimony](http://docs.house.gov/meetings/IF/IF03/20140729/102558/HHRG-113-IF03-Wstate-ClarkT-20140729.pdf) available at <http://docs.house.gov/meetings/IF/IF03/20140729/102558/HHRG-113-IF03-Wstate-ClarkT-20140729.pdf> (emphasis in original). He further testified: “After an implementation plan is approved by the EPA, a state will have lost its ability to chart its own course as to how it regulates public utilities and its energy sector as a whole.” *Id.*

⁵² See FERC hearing [transcript](#) at p. 53.

⁵³ See States hearing [transcript](#) at p. 46.

released an [initial reliability analysis](#) of the EPA's building blocks that also raised concerns.⁵⁴ The NERC analysis is one of several reports that have raised concerns with the underlying assumptions for EPA's building blocks.⁵⁵

Major concerns have been outlined by FERC, state witnesses, NERC, and other entities regarding EPA's assumptions and determinations behind its proposed building blocks.⁵⁶

Building Block 1

Testimony challenged the credibility of EPA's assumption that coal plants could achieve a 6 percent efficiency improvement. For example, Montana Commissioner Kavulla testified that "[t]his assumption is applied uniformly across the country, regardless of whether a given power plant has or has not made these upgrades already" and cited examples of why this assumption could not be applied to certain facilities.⁵⁷ Indiana Department of Environmental Management Commissioner Tom Easterly also raised specific technical issues that would preclude plants from achieving the heat rate improvements assumed by the agency under this building block.⁵⁸

⁵⁴ The review is entitled "Potential Reliability Impacts of EPA's Proposed Clean Power Plan" and is available at http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/Potential_Reliability_Impacts_of_EPA_Proposed_CPP_Final.pdf (hereinafter "[NERC Initial Reliability Review](#)"). NERC is the electric reliability organization (ERO) for North America, subject to oversight by FERC and governmental authorities in Canada. On November 12, 2014, NERC also released a long-term reliability assessment that raised similar concerns relating to the "Clean Power Plan." See [2014 Long Term Reliability Assessment](#) available at <http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2014LTRA.PDF>; see also [Announcement](#) available at http://www.nerc.com/news/Headlines%20DL/LTRA%2012NOV14_FINAL.pdf

⁵⁵ A [report](#) by Energy Ventures Analysis, available at http://evainc.com/publications/impact_analysis_cpp/ stated: "With respect to the proposed [Clean Power Plan], EVA has reviewed the EPA's underlying assumptions of the four building blocks the EPA utilized to formulate the proposed CO₂ emission rate limits for each state, and based on EVA's expertise in energy market analysis, we are unable to accept the EPA's assumptions." See [Report](#) at p. 7.

⁵⁶ For examples of comments raising questions regarding the legality and feasibility of the proposed rule, see the Association of Air Pollution Control Agencies website, [Comments on EPA's Clean Power Plan](#), available at http://www.csg.org/aapca_site/news/111dComments.aspx. See also, e.g. [June 19, 2014 List of Questions for EPA; Questions](#) and [June 29, 2014 Hearing](#) (See witnesses and individual responses to preliminary hearing questions); [August 4, 2014 Letter from Arkansas Attorney General to EPA Re: Clean Air Act 111\(d\) Rule-The Clean Power Plan; and State Implementation of CO₂ Rules, Institutional and Practical Issues with State and Multi-State Implementation and Enforcement](#), A White Paper, Release 2.0 (November 12, 2014), Raymond L. Gifford et al.

⁵⁷ See Kavulla Testimony, States hearing [transcript](#) at p. 47 ("Montana's 2,100-megawatt Colstrip facility, the second largest in the American west, has made the efficiency improvements that the EPA contemplates, obtaining 4 to 5 percent efficiency upgrades out of a total 6 percent the EPA speculates is possible and yet it receives no credit for these efficiency upgrades"). He further testified that the controls required to meet other EPA rules such as for regional haze, may make the efficiency improvements assumed by the agency in this rule infeasible. *Id.* at p. 47-48.

⁵⁸ See Easterly Testimony, States hearing [transcript](#) at p. 77 ("The power plants, there are constraints under the Clean Air Act about when you can make an efficiency improvement and not be subject to other additional requirements. But they have had, for a long time, an incentive to produce the power with the least amount of energy necessary. . . Additional emission controls that people have to put on the power plants will reduce their net output. And if you do carbon sequestration, that reduces your net output by 20 to 25 percent. So there are substantial practical problems with how you actually increase thermal efficiency of a plant. . . . And the other one I

In its recent analysis, NERC stated that “improving the existing coal fleet’s average heat rate by 6 percent may be difficult to achieve,” and that “[s]ite-specific engineering analyses would be required to determine any remaining opportunities for economic heat rate improvement measures.”⁵⁹ Additionally, the National Coal Council (NCC), which is the Federal Advisory Committee to the U.S. Secretary of Energy, issued an [assessment](#) in May of 2014 that stated that improving unit efficiency is a highly site-specific matter:

In some cases, the opportunity will be negligible because the unit either is already operating in a highly efficient mode with some or all of the improvements in place or because the implementation of potential improvements is not cost-effective and/or technically feasible. As such, the degree of efficiency improvement possible at a given unit is highly site-specific, and may depend on the design of the unit, current maintenance procedures, whether the unit operates as base load or cycling, the type of coal used by the unit, system economics and the economics of the specific measure and the configuration of the unit. Even the location of a unit is relevant to efficiency because plant efficiency is sensitive to ambient temperature and atmospheric pressure (elevation).⁶⁰

The NCC further noted that existing CAA permitting requirements may impact the ability to make efficiency improvements:

The New Source Review (NSR) permitting program unintentionally limits investments in efficiency. Some actions to improve efficiency at an existing power plant could lead to a designation of the change as a “major modification” subjecting the unit to NSR permitting requirements. These requirements usually entail additional environmental expenditures (that can reduce efficiency), as well as delays associated with processing the permit. In general, if a plant owner expects that an efficiency improvement would lead to such a designation, the efficiency project will not be pursued as the resulting permitting process would be extensive and the compliance requirements would be onerous and likely too stringent to be practicable. Unfortunately, this prospect has all but eliminated RD&D that would more than marginally innovate the fleet.⁶¹

Building Block 2

think you have heard in the testimony is, as you let the plant cycle up and down, they are less efficient. They are most efficient running at a fixed rate, and that is how you get your highest thermal efficiency. So we are very concerned that this is not achievable.”)

⁵⁹ See [NERC Initial Reliability Review](#) at pp. 2, 8.

⁶⁰ See National Coal Council report entitled: “Reliable & Resilient, The Value of Our Existing Coal Fleet, An Assessment of Measures to Improve Reliability & Efficiency While Reducing Emissions,” May 2014, available at <http://www.nationalcoalcouncil.org/NEWS/NCCValueExistingCoalFleet.pdf> (hereinafter “NCC Report”) at pp. 4-5.

⁶¹ *Id.* at p. 5.

Testimony indicated EPA’s assumption that states could operate their combined cycle natural gas plants at 70 percent capacity factor is unrealistic. For example, FERC Commissioner Moeller testified, “Well, that is one of the four building blocks, and the building block is an aspiration to get the gas fleet up to 70 percent dispatch, which has been very rarely done in this country, only in very limited circumstances . . . I don't think they fully appreciate the challenges we have with getting more pipeline infrastructure.”⁶² Maryland Public Service Commission Commissioner Kelly Speakes-Backman, testified, “. . . there are questions still that we have on a technical basis, including the natural gas capacity factor of 70 percent . . . and the ability to get natural gas into the Northeastern and Mid-Atlantic region.”⁶³ Montana Commissioner Kavulla elaborated further:

The second building block of the EPA simply adds error upon error. The EPA assumes that this [coal-fired] facility, Big Stone, could be substantially replaced with natural gas-fired electricity generated at the Deer Creek generating station hundreds of miles away. There is one obvious problem with this. The plants are owned by different people, they didn't participate in the same markets together, and there are no existing transmission rights that tie the two plants together and to consumers who consume power from those power plants. . . . Second, as a practical matter, the reduction that EPA assumes relative to Big Stone would result in the plant operating at 23 percent of its capacity. Its minimum run level is 40 percent. This is a point where engineering simply runs up against the reality of the EPA's proposal.⁶⁴

NERC more recently stated, “Upon reviewing the EPA’s Building Block 2 assumptions, NERC found a number of reliability concerns regarding increased reliance on natural gas-fired generation.”⁶⁵ For example, “[w]hile some NGCC units are capable of operating at a high capacity factor, the vast majority of this type of generation is used for load following.” NERC also indicated that while EPA is assuming that there would be no need for any major investments in pipeline infrastructure, there likely would be a need “for additional capital investments.”⁶⁶ NERC further stated that “[a]s gas-electric dependency significantly increases,

⁶² See FERC hearing [transcript](#) at p. 63.

⁶³ See States hearing [transcript](#) at p. 77.

⁶⁴ *Id.* at p. 48. In his [written testimony](#) available at <http://docs.house.gov/meetings/IF/IF03/20140909/102623/HHRG-113-IF03-Wstate-KavullaT-20140909.pdf>, Commissioner Kavulla testified that “Building Block 2 simply does not acknowledge the realities of the power sector. EPA should make accommodations for states where no market relationship exists between a [natural gas combined cycle combustion turbine plants] and the coal-fired generating unit the BSER assumes it will offset. It should also assume a lower average dispatch for the many [natural gas combined cycle combustion turbine plants] whose purpose is not just base-load power, but serving peak needs and integrating weather-dependent renewables.” (Citations omitted)

⁶⁵ See [NERC Initial Reliability Review](#) at p. 9.

⁶⁶ *Id.* at p. 10.

unforeseen events like the 2014 polar vortex could disrupt natural gas supply and delivery for the power sector in high-congestion regions, increasing the risk for potential blackouts.”⁶⁷

Building Block 3

Testimony also questioned EPA’s assumptions that states could significantly expand reliance on renewable energy generation to replace existing coal-fired generation. For example, Montana Commissioner Kavulla testified:

. . . the EPA assumes that renewable energy can be increased in order to reduce the operation of coal-fired energy in an offsetting manner. Coal plants are not engineered or designed to cycle in this way to integrate renewable energy. Moreover, long distance transmission lines, such as the one that runs from the Colstrip plant in Montana to points hundreds of miles west and supplies energy to states like Washington is dependent on the physical inertia that is put onto the grid by the operation of these large prime movers.⁶⁸

Texas PUC Commissioner Anderson further testified that CO2 emissions could potentially *increase* with expanded use of renewables: “It has potential [to add to reliability challenges], particularly, if we utilize the expansion of renewables, just because of the tremendous variables that occurs. And, in fact, it will require more gas to back that renewable up, which will in turn increase the amount of carbon emissions.”⁶⁹

NERC questioned EPA’s assumptions under building block 3, stating, “EPA’s reliance on state RPS standards to compute the regional performance targets poses a variety of issues.”⁷⁰ The organization stated that EPA’s proposal “relies on resource projections that may overestimate reasonably achievable expansion levels and exceed NERC and industry plans and do not fully reflect the reliability consequences of renewable resources.”⁷¹

Building Block 4

Testimony also questioned the feasibility of EPA’s assumption that states could improve annual electricity savings by up to 1.5 percent through energy efficiency programs. Texas PUC Commissioner Anderson testified that “we do have an energy efficiency program, and we were one of the earliest to implement it actually in the 1990s. . . . We would have to redesign the

⁶⁷ *Id.*

⁶⁸ See States hearing [transcript](#) at pp. 48-49.

⁶⁹ *Id.* at p. 95.

⁷⁰ See [NERC Initial Reliability Review](#) at p. 10.

⁷¹ *Id.* at p. 13.

program entirely. And it is not clear, frankly, what we can obtain in a redesign.”⁷² Montana PSC Commissioner Kavulla further highlighted the challenges of verification and enforcement:

. . . energy efficiency is something that happens when someone plugs in a light bulb, replaces their refrigerator. If a state plan includes the compliance target for energy efficiency, it may be difficult to both verify and then enforce compliance if those targets fall short. Unless there is a point of compliance, like a particular utility, it could be difficult. In my experience of measuring and evaluating the robust energy efficiency programs that Montana already has in place, the reports to measure and verify the savings run into the hundreds, almost a thousand pages. It is very -- it is not like plugging on something to a power plant to measure a reduction in emissions. It is a much more difficult measurement task.⁷³

With respect to this building block, NERC’s recent analysis noted that EPA’s estimates for energy efficiency set “performance targets too high for individual states.” NERC specifically concludes that “EPA appears to overestimate the amount of energy efficiency expected to reduce electricity demand over the compliance time frame.”⁷⁴ The organization stated:

The EPA projection for energy efficiency growth at a 1.5 percent annual increase is substantially greater compared to what NERC examined in its current and prior long-term reliability assessments (LTRAs). NERC collects energy efficiency program data that is embedded in the load forecast for each LTRA assessment area. Projected annual energy efficiency growth as a portion of Total Internal Demand since 2011 has ranged from only 0.12 to 0.15 percent . . .⁷⁵

NERC further stated, “Several sources, including but not limited to NERC, EIA, EPRI, and various utilities, have published reports, analysis, and forecasts for energy efficiency that do not align with the CPP’s assumed declining demand trend.”⁷⁶ Additionally, NERC noted that “[t]he CPP assumption appears to underestimate costs and does not reflect the capital investments that would otherwise be required by utilities to meet growing electricity demand or energy efficiency program implementation.”⁷⁷

C. Flexibility

⁷² See FERC hearing [transcript](#) at p. 66.

⁷³ See States hearing [transcript](#) at p. 72.

⁷⁴ See [NERC Initial Reliability Review](#) at p. 16.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

Testimony also called into question EPA’s representations that the plan would be “flexible.” For example, Montana Commissioner Kavulla testified:

The much heralded flexibility that the proposed EPA rule provides to states is a meaningless concept if the underlying goal, a number which is inflexible, has been calculated using generic assumptions that are misleading or false when applied to the facts of a specific state in the specific part of the transmission grid.⁷⁸

Arizona Department of Environmental Quality Director Henry Darwin noted that for his state only one of the four building blocks would be feasible:

By our calculations, switching from coal to natural gas by 2020 is the only building block available to Arizona for meeting EPA's proposed goals. As we explained to EPA, this implementation issue is at odds with their stated intent that states be provided flexibility amongst the building blocks in achieving the goals.⁷⁹

FERC Commissioner Clark testified:

It is quite clear, although the EPA has said that they will offer flexibility to states, a pathway that they have offered up as a potential one that might be compliance, relies in some part on a combination of perhaps cap and trade, like a regional [greenhouse gas] initiative like they have in the northeast, some sort of reliance on energy efficiency and demand response resources, a shuttering of coal plants and, at the same time, pivoting towards heavier reliance on natural gas, perhaps some sort of renewable portfolio standard in the State. . . .So you put all these things together, and it actually looks very much like what one of the regions has already been going through, which is the one that Commissioner Moeller mentioned, which is New England. . . . if someone were to ask me which area of the country do you have the most concern about both as a matter of cost and reliability, I would probably point to New England⁸⁰

D. Costs to Consumers

Testimony highlighted concerns about the potential costs of the proposal. EPA maintains that electricity prices “will go up a little bit, but overall bills will come down,” and that “we predict average electricity bills for American families will be 8 percent cheaper” by 2030.⁸¹ At

⁷⁸ See States hearing [transcript](#) at p. 49.

⁷⁹ *Id.* at p. 33.

⁸⁰ See FERC hearing [transcript](#) at pp. 53-54.

⁸¹ See EPA hearing [transcript](#) at p. 32. EPA Acting Assistant Administrator McCabe testified: “. . . because energy efficiency is such a smart, cost-effective strategy, we predict that in 2030, average electricity bills for American families will be 8 percent cheaper.” *Id.* at p. 23.

the same time, EPA acknowledged that the agency had not examined the ripple effects of the rule across the economy.⁸²

Indiana Commissioner Easterly testified about the accumulation of price increases associated with EPA's other rules:

U.S. EPA predicts that this proposal will increase the cost of natural gas and the per kilowatt hour cost of residential electricity by around 10 percent in the next 6 years. In Indiana, our state utility forecasting group has already predicted a 30 percent increase in Indiana electrical cost from other recent EPA regulations, not including this one, and that group is presently studying the expected impact of this rule on top of the other ones on our energy rates, but it will no doubt find that our rates will increase.⁸³

With respect to costs, EPA does not appear to include the costs of much of the new transmission infrastructure, construction of pipelines, intermittent resource integration, regulatory approvals, or other costs that would be required or the stranded costs associated with forced closures of coal-fired power plants.⁸⁴ FERC Acting Chairman Cheryl LaFleur testified: “. . .to build pipelines, to build transmission is going to cost money. The long run costs are really unknown . . .”⁸⁵ FERC Commissioner Clark testified with respect to costs:

. . . I think it is a bit too early to tell specifically because we don't know what the compliance plans would look like or what a federal compliance plan would look like. I would just point to the trend lines which is in those states that have moved more aggressively and have been first movers on some of these issues, the trend line has been towards increasing electric rate environment.⁸⁶

⁸² *Id.* at pp. 67-68. At the EPA hearing, Rep. Cassidy raised these issues with EPA Acting Assistant Administrator McCabe, asking: “Has the EPA examined the ripple effects of this throughout the economy?” to which she testified: “The EPA has focused on the impacts in the power sector.” *Id.* Further, he asked: “But throughout the economy, the users of that power, the Ford motor plant or Louisiana has \$90 billion in announced construction projects involving polymers, petrochemical, gas to liquids, industry that will create great paying jobs for working Americans. Have you analyzed the impact of this regulation upon that \$90 billion of announced expansion to manufacturing base?” to which she responded: “No. No, we haven't.” *Id.*

⁸³ See States hearing [transcript](#) at p. 23.

⁸⁴ An recent [report](#) by Energy Ventures Analysis, available at http://evainc.com/publications/impact_analysis_cpp/ concluded that “The EPA's [Clean Power Plan] would result in significant development of new generating capacity, transmission lines, gas lines and other infrastructure, the cost of which is not discussed in EPA's published results. The EPA does not appear to take into account the time required to pre-engineer, permit, engineer, procure and construct gas generation and transmission.” See [Report](#) at p. 9.

⁸⁵ See FERC hearing [transcript](#) at p. 45.

⁸⁶ *Id.* at p. 54.

A recent independent study conducted by NERA Economic Consulting estimated costs could total at least [\\$366 billion](#) over a 15 year period.⁸⁷ Similarly, a recent [study](#) of EPA’s proposal by the Midcontinent Independent System Operator (MISO) estimated compliance costs in its 15 state footprint – excluding costs for new transmission and pipeline infrastructure – to range between \$74.2 billion and \$112 billion over a 14 year period.⁸⁸ A recent study by Energy Venture Analysis also raises significant concerns relating to the cumulative cost impacts of the proposal together with other EPA rules.⁸⁹

E. Electric Reliability

Testimony raised serious questions regarding EPA’s conclusion that electric reliability would not be threatened by the proposal. EPA Acting Assistant Administrator McCabe testified that it was EPA’s view that it is “clear that reliability will not be threatened.”⁹⁰ The proposal also states: that the “proposed rule will not raise significant concerns over regional resource adequacy or raise the potential for interregional grid problems.”⁹¹

Despite such assurances, initial questions were raised about the sufficiency of EPA’s consultations with the FERC. While Ms. McCabe testified that the agency had consulted with the Commission,⁹² Acting FERC Chairman LaFleur testified that “EPA did not request written advice or analysis regarding the potential impacts of the proposal on the reliability of the grid.”⁹³ Further, four out of the five Commissioners indicated that they had not been consulted regarding the proposal.⁹⁴

⁸⁷ See “Potential Energy Impacts of the EPA Proposed Clean Power Plan,” NERA Economic Consulting, available at http://americaspower.org/sites/default/files/NERA_CPP%20Report_Final_Oct%202014.pdf.

⁸⁸ This range of cost estimates was provided by MISO staff to the Committee in September 2014. A copy of the MISO document entitled “GHG Regulation Impact Analysis – Initial Study Results,” (Sept. 17, 2014) is available at <https://www.misoenergy.org/Library/Repository/Communication%20Material/EPA%20Regulations/MISOEPA%20CO2EmissionReductionAnalysis.pdf>.

⁸⁹ A [report](#) by Energy Ventures Analysis, available at http://evainc.com/publications/impact_analysis_cpp/ analyzed the potential cumulative cost impacts of EPA’s proposed Clean Power Plan, together with the “Mercury and Air Toxics,” “Cross-State Air Pollution Rule,” and other EPA rules, and projected that cumulatively over the next 10 years “[a]nual power and gas costs for residential, commercial and industrial customers in America would be \$284 billion higher (\$173 billion in real terms) in 2020 compared to 2012.” See [Report](#) at p. 4.

⁹⁰ See EPA hearing [transcript](#) at p. 81.

⁹¹ 79 Fed. Reg. at p. 34899.

⁹² See EPA hearing [transcript](#) at pp. 81, 95.

⁹³ See Acting Chairman LaFleur’s [Response to Preliminary Questions](#), Question 1.b available at <http://docs.house.gov/meetings/IF/IF03/20140729/102558/HHRG-113-IF03-Wstate-LaFleurC-20140729-SD001.pdf>.

⁹⁴ See Responses to Preliminary Questions Question 1.a from Commissioner [Moeller](#) (“I have had no consultations with EPA on its proposal”); [Norris](#) (“To date, I have not consulted with EPA regarding the Proposal”); [Clark](#) (“EPA did not consult with me”); and [Bay](#) (“In my duties as the Director of the Office of Enforcement, I have not had any consultation with EPA regarding the proposal.”). Responses are available at

FERC Commissioner Moeller also testified FERC should have a more formal role going forward, stating:

Essentially, what I have been calling for is a more formal role for our commission as we deal with EPA on these issues, kind of an open and transparent role, so that basically we can get the engineers together to discuss the challenges involved because it really comes down to a very granular level with reliability. The laws of physics will trump regulations. There are always unintended consequences when we shut down power plants because, although they may not produce a lot of power, they may be producing other products, ancillary services that maintain reliability in the grid. And the location of those plants is key, and sometimes you can't replicate a plant in that location.⁹⁵

State regulators emphasized in testimony concerns about the risks of the proposal to electric reliability. Indiana Commissioner Easterly testified, “We are going to lose an amount of generation that we don't have a way to replace.”⁹⁶ Arizona Director Darwin testified that “from what I have been told, if the rule is finalized as proposed, it would create reliability concerns.” Montana Commissioner Kavulla testified, “No reliability analysis of the EPA's proposed best system of emission reduction has been conducted for the western interconnection which encompasses 11 states spanning from California to Montana.” He added, “It is my understanding that the EPA has not conducted either an electric transmission or a gas transmission reliability analysis of its best system of emission reduction.”

Such reliability concerns were also highlighted in NERC's recent initial reliability review, which included recommendations that “[t]he EPA and policy makers should recognize the complexity of the reliability challenges posed by the rule” and urged that detailed analyses be conducted. In NERC's accompanying [press release](#), NERC President and CEO, Gerry Cauley, stated, “Based on our preliminary assessment of the proposed rule, we believe there must be further detailed engineering analysis to demonstrate whether the assumptions and targets are feasible in the timeframe proposed.”⁹⁷ Similarly, recent reliability analyses completed by the Southwest Power Pool (SPP)⁹⁸ and the Electric Reliability Council of Texas (ERCOT)⁹⁹ each

<http://energycommerce.house.gov/hearing/ferc-perspectives-questions-concerning-epa%27s-proposed-clean-power-plan-and-other-grid>.

⁹⁵ See FERC hearing [transcript](#) at p. 26.

⁹⁶ See States hearing [transcript](#) at p. 95.

⁹⁷ See Nov. 5, 2014 Media Release available at http://www.nerc.com/news/Headlines%20DL/EPA%2005NOV14_FINAL.pdf.

⁹⁸ See “[SPP's Reliability Impact Assessment of the EPA's Proposed Clean Power Plan](#),” (Oct. 9, 2014) (“As a result of the assumed EPA retirements with no resource additions, the SPP network was so severely stressed by large reactive deficiencies that the software used in the analysis was unable to produce meaningful results, which is generally indicative of voltage collapse and blackout conditions.”).

concluded that the EPA proposal presents significant reliability concerns, including the potential for blackouts.

F. Timing

Testimony raised specific concerns about the proposed timeline for compliance. While EPA has represented that there would be a “glide path” to compliance,¹⁰⁰ states would have substantial emissions reduction obligations five years from the date of the final rule. For example, Arizona Director Darwin testified, “To comply with the interim goal by 2020, more than 75 percent of Arizona's total reductions must occur by 2020 . . .”¹⁰¹ Similarly, Texas Commissioner Anderson testified:

Well, in terms of the compliance, one of the problems, if the rule is adopted in the form that it is proposed or substantially in the form that it is proposed, is the 2020 interim target. I would just point out that whether it is to build a new combined cycle plant or to build transmission to integrate the renewables that would have to be integrated, you just can't get there.¹⁰²

Texas Commissioner Anderson testified, “We build transmission faster than about anywhere in the country, but it’s still a 5-year – it is 5 or 6 year from inception to it being energized. A combined cycle power plant takes anywhere from -- and this is not counting permitting – it takes anywhere from 20 – from 24 months to 36 months.” Similarly, Montana Commissioner Kavulla testified:

For instance, by the 2020 deadline, it is assumed that this natural gas dispatch will have replaced a substantial amount of coal generation for states with underutilized natural gas generators that run only for peak demands for air-conditioning. The assumption that those would run for 70 percent may have transmission implications that are even less than the 10-year planning horizon that transmission planners typically undertake. As well, transmission planners would often take 20 years for major redesigns of this grid.

NERC also asserted in its recent review of the rule that the timelines and the interim dates are unrealistic. These concerns are such that the organization is recommending “policy makers

⁹⁹ See “[ERCOT Analysis of the Impacts of the Clean Power Plan](#),” (Nov. 17, 2014) (“ERCOT’s primary concern with the Clean Power Plan is that . . . the timing and scale of the expected changes needed to reach the CO₂ emission goals could have a harmful impact on reliability. Specifically, implementation of the Clean Power Plan in the ERCOT region, particularly to meet the Plan’s interim goal, is likely to lead to reduced grid reliability for certain periods and an increase in localized grid challenges.”) The analysis is available at <http://www.ercot.com/content/news/presentations/2014/ERCOTAnalysis-ImpactsCleanPowerPlan.pdf>.

¹⁰⁰ EPA Acting Assistant Administrator McCabe testified that “. . . [the proposal gives] an extended compliance time period all the way out to 2030 with a long glide path down to that . . .” See EPA hearing [transcript](#) at p. 62.

¹⁰¹ See States hearing [transcript](#) at p. 31.

¹⁰² *Id.* at p. 67.

and EPA should consider a more timely approach that addresses [bulk power system] reliability concerns and infrastructure deployments.”¹⁰³

G. Lack of a Federal Implementation Plan

Testimony highlighted that EPA has not developed any federal implementation plan that would be imposed on states.¹⁰⁴ When asked what a federal implementation plan would look like, EPA Acting Assistant Administrator McCabe testified that “we are not focused on that right now,” and that “[w]e really haven’t thought that through.”¹⁰⁵ While she stated that “any proposed plan would be squarely within our authority,”¹⁰⁶ she did not specify what would be within the agency’s authority to include in such a federal implementation plan.

FERC Commissioner Clark testified that this lack of a federal implementation plan contributes to the uncertainties surrounding the proposed rule:

. . . we simply don't know what the potential state implementation plans, compliance plans might look like, and we also don't have a sense for what a federal implementation plan or a federal compliance plan would look like. Typically, as the EPA has proposed rules, there would be a marker for what a federal plan might look like; in this case, we don't have that. . . .¹⁰⁷

Such questions regarding what a federal implementation plan would contain have continued to be raised, as have questions regarding what legal authority EPA would have to include any of its building blocks in a federal implementation plan.¹⁰⁸

H. Limited State Resources

The hearings highlighted the enormous amount of state resources and unprecedented level of coordination that would be required to comply with the proposal. Several of the witnesses testified about the extensive coordination and resources that would be needed for compliance.¹⁰⁹ Montana Commissioner Kavulla testified:

¹⁰³ See [NERC Initial Reliability Review](#) at p. 3.

¹⁰⁵ See EPA hearing [transcript](#) at p. 128.

¹⁰⁶ *Id.* at 128.

¹⁰⁷ See FERC hearing [transcript](#) at p. 33.

¹⁰⁸ See, e.g. “EPA’s Section 111(d) Carbon Rule: What if States Just Said No?” available at <http://www.insideronline.org/summary.cfm?id=23304>.

¹⁰⁹ See, e.g. Testimony of Maryland PSC Commissioner Speakes Backman, see States hearing [transcript](#) at pp. 86-87 (“We are also currently working with our Department of Environment. We also coordinate certain energy issues with the Maryland Energy Administration, which is our energy office. We also need coordination with other States because we will be participating. As EPA has recognized RGGI as a compliance mechanism, we will be coordinating with eight other States in Maryland. In addition, we will be coordinating with our ISO and our fellow States within the PJM Region to understand what this means for our reliability and our cost structures.”); Testimony

Certainly, it would require coordination between the Public Service Commission, the Department of Environmental Quality, the self-governing electric cooperatives, and public power entities of the State of Montana, possibly the Governor's Office, the Department of Commerce, the utilities themselves, which are not agencies. And then if there were to be a multistate plan, since we do have these large exporting generators possibly with the Washington Utilities Transportation Commission, the Oregon Public Utilities Commission, the Idaho Public Utility Commission, a variety of others, perhaps as many as a dozen or two dozen.¹¹⁰

Others also testified about the need for state legislative action. Arizona Director Darwin explained, “I think, in Arizona, it is much of the same. The only thing I would add — and this is not unique to Arizona — is that we will have to go before our state legislature as well.”¹¹¹ Similarly, Texas Commissioner Anderson testified, “Whatever is ultimately adopted is likely to require a change in law with Texas State law. Our legislature only meets every other year in odd number years. This next year, it meets in January until the end of May. The rule doesn't come out until afterwards. The next time they meet won't be until 2017.”¹¹²

This limited nature of state resources was reinforced by [comments](#) dated June 30, 2014, from State of North Carolina's Division of Air Quality, which focused on the amount of state resources that would be required and said that the legality of the proposal should be determined before states are required to take action:

. . . If this rule is finalized in its current form, states will be immediately required to amend not only their state air programs, but will be required to fundamentally restructure the state's entire energy generation and delivery system. This significant undertaking will run parallel with judicial review of this rulemaking. States have been through several exercises where EPA's shaky legal interpretations have resulted in states taking actions to satisfy a federal rule that is later determined by the Courts to be illegal. Look no further than the rulemakings from the Clean Air Interstate Rule and the Clean Air Mercury Rule. A more recent example is the PSD Tailoring Rule. The final rule, whatever form it ultimately takes, should not require states to begin taking action until the completion of judicial review. This is to preserve the state's limited resources and

of Indiana Department of Environmental Management Commissioner Easterly, *id.* p. 87 (“We both need to coordinate with our utility regulators, our utility consumer counselors, our MISO, our Midwest States ISO. And we have this group called the Midcontinent States Energy & Environment Regulators to try and figure this out for all of us. But we have an 18-month rulemaking process. You usually get 3 years to develop a plan. We can't do it in a year.”)

¹¹⁰See States hearing [transcript](#) at p. 86.

¹¹¹*Id.* at p. 87.

¹¹²*Id.* at pp. 87-88.

ensure that actions taken in response to the EPA rule will not be for naught. NCDENR is calling this approach a “legal trigger” deadline and we urge the EPA to respect their state partners and include this provision in any final rule.¹¹³

I. Futility

The hearings highlighted that the rule would not have any measurable impact on global warming. EPA indicates the proposal would achieve about half the emissions reductions achieved by its 2010 greenhouse gas standards for light duty vehicles for Model Year 2012 through 2016 vehicles.¹¹⁴ In that 2010 rulemaking, EPA had projected that the new vehicle standards would reduce global mean temperature by 0.006 - 0.015°C and global mean sea level rise will be reduced by 0.06 - 0.14 cm by the year 2100.¹¹⁵ At the hearing with EPA, Ms.

¹¹³ See N.C. Department of Environment & Natural Resources Comments on EPA’s Proposed Rules for Controlling Greenhouse Gas Emissions under the Clean Air Act, Section 111(d), June 30, 2014 available at http://www.ncair.org/rules/EGUs/NCDENR_comments_on_111%28d%29_public_meeting.pdf. In its comments on the rulemaking submitted December 1, 2014, North Carolina further stated “NCDNER urges that the final compliance deadline be tolled by the litigation timeframe, similar to how EPA handled the implementation of the Cross State Air Pollution rule following the U.S. Supreme Court decision.” See North Carolina Department of Environment and Natural Resources [Comments on Proposed Rulemaking](http://daq.state.nc.us/rules/EGUs/2014_12_01_NCDENR_111(d)_Comments_on_Proposed_Rulemaking_Letter.pdf) dated December 1, 2014 available at [http://daq.state.nc.us/rules/EGUs/2014_12_01_NCDENR_111\(d\)_Comments_on_Proposed_Rulemaking_Letter.pdf](http://daq.state.nc.us/rules/EGUs/2014_12_01_NCDENR_111(d)_Comments_on_Proposed_Rulemaking_Letter.pdf). See also, e.g. Alabama Department of Environmental Management Comments available at http://www.csg.org/aapca_site/news/documents/AL11-21-2014EPASDBADEMCAA111dcomments.pdf (“Further, considering the resources that will be required by states to implement this rule as proposed and given the high likelihood that any final rule promulgated by EPA will be litigated, EPA must delay implementation of the rule until all legal challenges to the rule have been exhausted.”); North Dakota Department of Health Comments available at http://www.csg.org/aapca_site/news/documents/NDDHComments12-1-14.pdf, p.6 (requesting that EPA withdraw its proposal, and if proceeding with a revised proposal that the agency “Sequence any submission deadline for state plan until after the completion of all periods for judicial review.”); and Florida Department of Environmental Protection Comments available at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-23633>, p. 3 (stating that “EPA should consider voluntarily suspending the aggressive implementation deadlines pending the outcome of [legal] challenges to avoid the incredible inefficiencies that could result if the rule is not upheld”).

¹¹⁴ [Proposal](#), 79 Fed. Reg. at 34933-34944 (“Although the GHG emission reductions projected for this proposal are large (the highest estimate is reductions of 555 MMT of CO₂ in 2030—see Table 10 above), the EPA evaluated larger reductions in assessing this same issue in the context of the light duty vehicle GHG emission standards for model years 2012–2016 and 2017–2025. There the agency projected emission reductions roughly double and four times those projected here over the lifetimes of the model years in question [citation omitted] and, based on air quality modeling of potential environmental effects, concluded that ‘EPA knows of no modeling tool which can link these small, time-attenuated changes in global metrics to particular effects on listed species in particular areas. Extrapolating from global metric to local effect with such small numbers, and accounting for further links in a causative chain, remain beyond current modeling capabilities.’”).

¹¹⁵ See [RIA](#) at p. 7-124 available at <http://epa.gov/otaq/climate/regulations/420r10009.pdf>, EPA also indicated that the reductions would be approximately one quarter of the emissions estimated for EPA’s light duty vehicle rule for Model Years 2017-2025, for which EPA estimated Using its MAGICC Model, EPA’s projects global mean temperature will be reduced by 0.0074 to 0.0176°C and global mean sea level rise will be reduced by 0.071 - 0.159 cm by 2100. See at [RIA](#) p. 6-115 available at <http://epa.gov/otaq/climate/documents/420r12016.pdf>.

McCabe was questioned regarding the impact of the rule on specific climate indicators but was not able to provide specific information.¹¹⁶

Montana Commissioner Kavulla testified, “The present national plan attempts to address an intractable problem of geopolitics with a goal that, even if realized, would result in miniscule reductions and no real benefit.”¹¹⁷ Indiana Commissioner Easterly testified, “In examining how the proposed 111(d) regulations further our mission, I have come to the conclusion that this proposal will cause significant harm to Hoosiers and actually to most residents of the U.S. without providing any measurable offsetting benefits.”¹¹⁸

V. CONCLUSION

As outlined, there are fundamental issues concerning the legality of the proposed rule, including whether EPA has legal authority to proceed with this rulemaking or, assuming such authority exists, the scope of that authority. Critical questions include whether the agency has authority to regulate “beyond-the-fence” of the electric generating units that are the subject of the regulation. Other legal and regulatory issues include specific questions about how the regulation affects the jurisdiction of the FERC or jurisdictional issues under the Federal Power Act, how the rule affects states which have exclusive jurisdiction over intrastate electricity matters, as well interstate compliance and enforcement issues, and other matters such as the implications of the proposal for cooperatives and municipal utilities over which states may have limited or no jurisdiction.

Other questions concern the workability and feasibility of the rule, ranging from specific questions about whether the assumptions underlying EPA’s proposed mandatory CO₂ emissions targets for specific states are realistic, to the impacts on electricity markets, electricity reliability, and fuel diversity; the implications of increased reliance on natural gas, renewables and energy efficiency; costs associated with stranded assets, compliance costs associated with building necessary new transmission infrastructure, and costs to consumers and businesses; and impacts on future economic growth, including for states’ energy intensive and trade exposed industries and job creation.

To prepare state plans by June 30, 2016, would require enormous resources and unprecedented coordination between state agencies, federal agencies, legislatures, regulated entities, and other stakeholders and third parties, and may not be feasible for many states. The interim compliance deadlines, moreover, appear insufficient for the necessary actions to finance construction of the new generation and transmission infrastructure required to comply with the proposal, let alone to permit and complete construction of such infrastructure. Nor is there

¹¹⁶ See EPA hearing [transcript](#) at p. 94-95. For example, in response to a question about effects the rule on sea surface temperatures, Ms. McCabe testified that “I can’t answer that. I don’t know.” *Id.* at 94.

¹¹⁷ See States hearing [transcript](#) at p. 92.

¹¹⁸ *Id.* at p. 22.

sufficient time to allow for resolution of the substantial litigation relating to the rulemaking before the state plans would be or the expenditure of resources would be required.

Given the extraordinary burdens on states and affected parties that this rule would impose, and the broad array of legal, technical, and policy issues associated with EPA's proposed rule, and given limited state resources, consideration should be given to whether states should be required to expend resources to comply with any final rule before questions surrounding its legality have been resolved.

APPENDIX 1 - STATE TARGETS

PROPOSED STATE GOALS FOR EXISTING POWER PLANTS (Adjusted Output-Weighted-Average Pounds of CO₂ Per Net MWh From All Affected Fossil Fuel-Fired EGU's)

State	2012 Emissions	Interim Goal	Final Goal
Alabama	1,444	1,147	1,059
Alaska	1,351	1,097	1,003
Arizona *	1,453	735	702
Arkansas	1,640	968	910
California	698	556	537
Colorado	1,714	1,159	1,108
Connecticut	765	597	540
Delaware	1,234	913	841
Florida	1,200	794	740
Georgia	1,500	891	834
Hawaii	1,540	1,378	1,306
Idaho	339	244	228
Illinois	1,895	1,366	1,271
Indiana	1,923	1,607	1,531
Iowa	1,552	1,341	1,301
Kansas	1,940	1,578	1,499
Kentucky	2,158	1,844	1,763
Louisiana	1,466	948	883
Maine	437	393	378
Maryland	1,870	1,347	1,187
Massachusetts	925	655	576
Michigan	1,696	1,227	1,161
Minnesota	1,470	911	873
Mississippi	1,130	732	692
Missouri	1,963	1,621	1,544
Montana	2,245	1,882	1,771
Nebraska	2,009	1,596	1,479
Nevada	988	697	647
New Hampshire	905	546	486
New Jersey	932	647	531
New Mexico *	1,586	1,107	1,048
New York	983	635	549
North Carolina	1,646	1,077	992
North Dakota	1,994	1,817	1,783
Ohio	1,850	1,452	1,338
Oklahoma	1,387	931	895
Oregon	717	407	372
Pennsylvania	1,540	1,179	1,052
Rhode Island	907	822	782
South Carolina	1,587	840	772
South Dakota	1,135	800	741
Tennessee	1,903	1,254	1,163
Texas	1,298	853	791
Utah *	1,813	1,378	1,322
Virginia	1,297	884	810
Washington	1,763	264	215
West Virginia	2,019	1,748	1,620
Wisconsin	1,827	1,281	1,203
Wyoming	2,115	1,808	1,714

* Excludes EGU's located in Indian country within the state

APPENDIX 2 - STATE LEGISLATION AND RESOLUTIONS

- Alabama** Resolution passed Senate and House ([SJR 57](#))
<http://alisondb.legislature.state.al.us/acas/searchableinstruments/2014RS/Printfiles/SJR57-enr.pdf>
- Arizona** Resolution passed Senate and House ([SCR 1022](#))
http://www.azleg.gov/FormatDocument.asp?inDoc=/legtext/51leg/2r/laws/scr1022.htm&Session_ID=112
- Arkansas** Resolution passed Senate during special session ([SR 2](#))
<http://www.arkleg.state.ar.us/assembly/2013/2014S2/Bills/SR2.pdf>
- Florida** Memorial (Resolution) passed Senate and House ([SM 1174](#))
<http://www.flsenate.gov/Session/Bill/2014/1174/BillText/er/PDF>
- Georgia** Resolution passed Senate and House ([HR 1158](#))
<http://www.legis.ga.gov/Legislation/20132014/138326.pdf>
- Illinois** Resolution passed the House ([HR 0782](#))
<http://www.ilga.gov/legislation/98/HR/PDF/09800HR0782lv.pdf>
- Indiana** Resolution passed the House ([HR 11](#))
<http://iga.in.gov/documents/a4a30ad7>
- Kansas** Legislation signed into law ([HB 2636](#))
http://www.kslegislature.org/li/b2013_14/measures/documents/hb2636_enrolled.pdf
- Kentucky** Legislation signed into law ([HB 388](#))
<http://www.lrc.ky.gov/record/14RS/hb388.htm>
- Louisiana** Legislation signed into law ([Act 726](#))
<https://www.legis.la.gov/legis/ViewDocument.aspx?d=915671&n=SB650%20Act%20726>
- Missouri** Legislation signed into law ([HB 1631](#))
<http://www.house.mo.gov/billtracking/bills141/billpdf/truly/HB1631T.PDF>
- Nebraska** Resolution passed Senate (unicameral) ([LR 482](#))
<http://nebraskalegislature.gov/FloorDocs/Current/PDF/Intro/LR482.pdf>
- Ohio** Legislation passed the House ([HB No. 506](#))
http://www.legislature.state.oh.us/bills.cfm?ID=130_HB_506
- Oklahoma** Resolution passed Senate and House ([SCR 39](#))
<https://www.sos.ok.gov/documents/legislation/54th/2014/2R/SC/39.pdf>
- Pennsylvania** Legislation signed into law as Act No. 175 ([HB 2354](#))
<http://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2013&sessInd=0&billBody=H&billType=B&billNbr=2354&pn=3898> and
http://www.legis.state.pa.us/cfdocs/billinfo/bill_history.cfm?syear=2013&sind=0&body=H&type=B&bn=2354
- South Dakota** Resolution passed Senate and House ([HCR 1022](#))
<http://legis.sd.gov/docs/legsession/2014/Bills/HCR1022ENR.pdf>
- Tennessee** Resolution passed the House ([HJR 663](#))
<http://www.capitol.tn.gov/Bills/108/Bill/HJR0663.pdf>
- West Virginia** Legislation signed into law ([HB 4346](#))
http://www.legis.state.wv.us/Bill_Status/bills_text.cfm?billdoc=hb4346%20ENR.htm&yr=2014&sesstype=RS&billtype=B&houseorig=H&i=4346 Resolution passed by House ([HR 13](#))
http://www.legis.state.wv.us/Bill_Status/resolution_history.cfm?year=2014&sessiontype=RS&input4=13&billtype=R&houseorig=H
- Wyoming** Resolution has passed House and Senate ([SJ 0001](#))
<http://legisweb.state.wy.us/2014/Enroll/SJ0001.pdf>