



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF CONGRESSIONAL
AND INTERGOVERNMENTAL RELATIONS

The Honorable Ed Whitfield
Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Whitfield:

Thank you for your July 14, 2014, letter to the Environmental Protection Agency in which you requested responses to Questions for the Record following the June 19, 2014, hearing before the Subcommittee on Energy and Power entitled, "EPA's Proposed Carbon Dioxide Regulations for Power Plants."

The responses to the questions are provided as an enclosure to this letter. If you have any further questions, please contact me, or your staff may contact Josh Lewis at lewis.josh@epa.gov or (202) 564-2095.

Sincerely,


Nichole Distefano
Deputy Associate Administrator
for Congressional Affairs

Enclosure

Responses to Questions for the Record from June 19, 2014, Subcommittee on Energy and Power Hearing entitled, “EPA’s Proposed Carbon Dioxide Regulation for Power Plants”

Attachment 1—Additional Questions for the Record

The Honorable Ed Whitfield

1. The Attorney General of West Virginia wrote to EPA Administrator Gina McCarthy on June 6, 2014 regarding EPA’s view that the agency is not bound by the plain reading of the statutory language of Section 111(d) found in the U.S. Code, under which EPA has no legal authority to regulate CO2 emissions from power plants under Section 111(d). Our understanding is that EPA has taken the position that it does not need to read the provisions of the U.S. Code literally because there was a technical conforming amendment included in the 1990 Clean Air Act amendments that the agency asserts creates “ambiguity” about what is in the law. EPA itself acknowledged in 2005 that that technical conforming amendment was non-substantive and appears to have been a “drafting error.”
 - a. Is EPA aware of any decision, from any court, which has held that a statute that is unambiguous by its “literal” terms can be rendered ambiguous by a non-substantive conforming amendment?
 - b. If yes, please identify any such decision(s).

Along with the proposed rule, the EPA included in the docket a Legal Memorandum providing background for the legal issues raised by the rule. That Legal Memorandum details the EPA’s understanding, at the time of proposal, of the ambiguity arising from Congress’s simultaneous enactment of two separate versions of this provision. That document can be found using Docket ID Number EPA-HQ-OAR-2013-0602-0419. The EPA is currently reviewing the more than 3.5 million comments received on the proposal, including the comments on the issues addressed in the legal memorandum, and will respond to the issues raised in those comments when we issue a final Clean Power Plan.

2. Has EPA estimated the impact of its proposed CO2 rule for existing power plants in terms of global mean temperature? If yes, what is the estimated impact?

The EPA included with its proposed Clean Power Plan a Regulatory Impact Analysis that estimated the total monetized climate-related benefits and costs of the rule, following applicable statutes, Executive Orders, and other guidance. Although the EPA has not explicitly modeled the temperature impacts of this rule, the Clean Power Plan is an important and significant contribution to emission reductions, thereby slowing the rate of global warming and associated impacts.

3. Has EPA estimated the impact of its proposed CO2 rule for existing power plants in terms of global mean sea level rise? If yes, what is the estimated impact?

The EPA included with its proposed Clean Power Plan a Regulatory Impact Analysis that estimated the total monetized climate-related benefits and costs of the rule, following applicable statutes, Executive Orders, and other guidance. Although the EPA has not explicitly modeled the sea level rise impacts of this rule, the Clean Power Plan is an important and significant contribution to emission reductions, thereby slowing the rate of global warming and associated impacts.

4. Last year the Congressional Budget Office did a study of carbon tax policies. It noted that by raising the cost of using fossil fuels, a carbon tax would tend to increase the cost of producing goods and services, would diminish purchasing power of people's earnings, and would on net reduce the number of people working – it would cause more unemployment.
 - a. Has EPA fully examined the ripple effects caused by the agency's proposed CO2 rule for existing power plants of higher electricity prices throughout the economy?
 - b. Has that work been subject to independent peer review? Will you supply that work to the Committee?

The EPA's Clean Power Plan for existing power plants was signed on June 2, 2014 and published in the Federal Register on June 18, 2014. The proposed rule's Regulatory Impact Analysis lays out the analysis the agency has conducted. Our analysis is based on peer-reviewed literature, and the proposal and underlying analysis are available for public comment. EPA held a 165-day public comment period on the proposal, which closed on December 1, 2014. The EPA is currently reviewing the more than 3.5 million comments received on the proposal, including comments on the Regulatory Impact Analysis.

In all of our significant rulemakings, the EPA uses the best peer-reviewed science and the best available information to estimate benefits and costs, including both quantifiable and unquantifiable benefits and costs. For those benefits and costs that the EPA is not able to quantify, the Regulatory Impact Analysis includes a robust qualitative discussion of the potential impacts of the regulation.

EPA projects that the Clean Power Plan will continue – and accelerate – the trend among states, cities, businesses and homeowners who have been working for years to increase energy efficiency and reduce growth in demand for electricity. Nationally, this means that, in 2030 when the plan is fully implemented, electricity bills would be expected to be roughly 8 percent lower than they would be without the actions in state plans. That would save Americans about \$8 on an average monthly residential electricity bill.

5. You indicated in your testimony that EPA's proposed CO2 rule for existing power plants would demonstrate U.S. leadership to the rest of the world with regard to addressing climate change.
 - a. Is it the Administration's position that this rule as proposed is necessary to demonstrate climate leadership to other nations?
 - b. On what basis does EPA believe that China, India and other countries will adopt similar regulations that will raise electricity rates?
 - c. On what basis does EPA believe that China, India and other countries will not take strategic competitive advantage of the United States if EPA adopts this proposed regulation?

As stated in the Climate Action Plan, "The Obama Administration is working to build on the actions that it is taking domestically to achieve significant global greenhouse gas emission reductions and enhance climate preparedness through major international initiatives focused on spurring concrete action, including bilateral initiatives with China, India, and other major emitting countries. These initiatives not only serve to support the efforts of the United States and others to achieve our goals for 2020, but also will help us

move beyond those and bend the post-2020 global emissions trajectory further. As a key part of this effort, we are also working intensively to forge global responses to climate change through a number of important international negotiations, including the United Nations Framework Convention on Climate Change.”

On November 11, 2014, President Obama and President Xi Jinping of China made a joint announcement on climate change and clean energy cooperation. Building on strong progress during the first six years of the Administration, President Obama announced a new target to cut net greenhouse gas emissions 26-28 percent below 2005 levels by 2025. At the same time, President Xi Jinping of China announced targets to peak CO2 emissions around 2030, with the intention to try to peak early, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. The announcement is the culmination of months of bilateral dialogue, highlighting the critical role the two countries must play in addressing climate change.

6. In the proposed CO2 rule for existing fossil fuel-fired electric generating units (EGUs), EPA proposes to set mandatory state CO2 targets derived from four “Building Blocks,” the combination of which EPA maintains reflect the “best system of emission reduction” (BSER) for affected EGUs.
 - a. With regard to Building Block 2 of the BSER, under what legal authority can EPA require the utilization or dispatch rates of natural gas combined cycle units?
 - b. With regard to Building Block 3 of BSER, under what legal authority can EPA require the utilization or dispatch of renewable energy and “at risk” and under construction nuclear capacity?
 - c. With regard to Building Block 4 of BSER, under what legal authority can EPA require states to implement energy efficiency improvement programs?

In the proposed Clean Power Plan, the EPA proposed four Building Blocks that make up the “best system of emission reduction ... adequately demonstrated” (BSER) that, in turn, serves as the basis for the state CO2 emissions goals. The EPA discussed its legal justification for why those measures qualify as part of the BSER at length in both the preamble for the proposed rule (79 Fed. Reg. 34,830, 34,878 – 34,892) and the accompanying Legal Memorandum (Docket ID Number EPA-HQ-OAR-2013-0602-0419, pages 33-93). The EPA is currently reviewing the more than 3.5 million comments received on the proposal, including the comments on the issues addressed in the legal memorandum, and will respond to the issues raised in those comments when we issue a final Clean Power Plan. The EPA notes that the proposed Clean Power Plan builds on what states are already doing to reduce carbon pollution from existing power plants. It does not require that the states actually use each of the building blocks as they develop their plans for meeting the state goal. Instead, it empowers the states to chart their own, customized path to meet their goals. Under the proposal, the states have a flexible compliance path that allows them to design plans sensitive to their needs, including considering jobs and communities in a transitioning energy economy.

7. Under the proposed rule for existing power plants, EPA would require that each State develop a state implementation plan and submit it to EPA for approval.
 - a. What if a State chooses not to participate? Would EPA impose a Federal Implementation Plan (FIP)?

- b. If EPA were to impose a FIP on a State, does EPA maintain that it has the legal authority to implement Building Blocks 2-4 referred to above? If so, please cite and explain the source of that authority, and how it would be implemented for each of the building blocks.
- c. Why did EPA decide not to issue a draft FIP or model FIP under its proposed CO2 rule for existing power plants? Please explain the agency's reasoning for not issuing a draft or model FIP.
- d. Does EPA plan to issue a model FIP relating to its proposed CO2 rule for power plants? If yes, when? If not, why not?

Under Section 111(d) the EPA is proposing a two-part process where the EPA sets state-specific goals to lower carbon pollution from power plants, and then the states must develop plans to meet those goals. States develop plans to meet their goals, but EPA is not prescribing a specific set of measures for states to put in their plans. This gives states flexibility. States will choose what measures, actions, and requirements to include in their plans, and demonstrate how these will result in the needed reductions. The Clean Air Act gives EPA the authority to write a federal plan if a state does not put an approvable state plan in place. In response to requests from states and stakeholders since the proposed Clean Power Plan was issued, EPA announced in January 2015 that we will be starting the regulatory process to develop a rule that would set forth a proposed federal plan and could help states starting to think about developing their own plans. EPA's strong preference remains for states to submit their own plans that are tailored to their specific needs and priorities. The agency expects to issue the proposed federal plan for public review and comment in summer 2015.

8. Why did EPA choose 2012 as the base year for establishing binding CO2 emissions rates for states? For the final Mercury Air Toxics Standards rule, for example, EPA used heat input data over a three-year period to set base-year emissions. Why, then, did EPA decide to use just one year (2012) in setting binding emissions rates for state plans under the agency's proposed CO2 rule for existing power plants?

EPA did not set a baseline or a base year. EPA projects that by 2030, when states meet these goals, the U.S. power sector will emit approximately 30 percent less carbon pollution than it did in 2005. But 2005, 2012 – or any other year – is not used a “baseline” year for a fixed percentage of reductions.

To set state-specific goals, EPA analyzed the practical and affordable strategies that states and utilities are already using to lower carbon pollution from the power sector. These include improving energy efficiency, improving power plant operations, and encouraging reliance on low-carbon energy sources. We gathered publicly available data for each state, from 2012, which is the most current information available. From 2012, EPA looked ahead to what could reasonably be accomplished by 2030 across the power sector if states made practical and affordable changes to generate electricity without emitting as much CO₂. In a Notice of Data Availability published on October 30, 2014, we also published data from 2010 and 2011 to allow commenters to weigh in on the data from earlier years and whether we might use a period greater than one year.

9. In the proposed CO2 rule for existing power plants, EPA states that a State Implementation Plan (SIP) “must include enforceable CO2 emissions limits that apply to affected EGUs. In doing so, a state plan may take a portfolio approach, which could include enforceable CO2 emission limits that

apply to affected EGUs as well as other enforceable measures, such as RE and demand-side EE measures.”

- a. Would all measures included in a SIP become federally enforceable? If yes, how would they be enforceable?
- b. What is EPA’s legal view as to who will be legally responsible for meeting a state’s binding emissions limit?
- c. How will citizen suits under Section 307 of the Clean Air Act come into play? For instance, consider a situation in which a state’s demand response program fails to achieve the required results as mandated by an EPA-approved SIP. If a person or particular group files a citizen suit, at whom would that suit be directed? A utility? The state? Specific electricity consumers?

Under a state plan approved under Clean Air Act (CAA) §111(d), all measures that a state adopts into the plan and submits to EPA for approval, and that EPA approves, become federally enforceable. Under the proposed rule, the states have significant discretion in determining what types of measures to adopt and submit to EPA for approval. The EPA will approve a state plan if it meets the state goal. EPA discussed the concept of federal enforceability, including the availability of citizen suits, in the preamble to the proposed rule (79 Fed Reg 34,830, 34902-34,903) and the accompanying legal memorandum (Docket ID Number EPA-HQ-OAR-2013-0602-0419, page 4) and the agency will review any comments we receive on this issue.

10. If EPA deems a particular component of a SIP deficient in its review of the state’s progress in attaining its 2030 emission limit, does EPA maintain that it can require the state to create and enforce a more stringent renewable portfolio standard? Or to create and enforce a more stringent demand response program? Or to dispatch greater amounts of natural gas? Or to utilize nuclear units at a higher rate?

Under the proposed Clean Power Plan, a state may choose to adopt and submit to EPA for approval a state plan that inherently requires both interim progress and the full level of required emission performance in a manner that is federally enforceable against affected EGUs. The EPA refers to this type of state plan as self-correcting. This type of plan is not required to include periodic programmatic milestones. If the state chooses to adopt and submit to EPA for approval a state plan that is not self-correcting, then the state must include periodic programmatic milestones and specify corrective measures that will be implemented if the state’s progress in achieving its level of performance falls short of what the state projected. The EPA requested comment on various aspects of the corrective measures.

Under the proposed Clean Power Plan it is the states, not EPA, who choose what measures to include in their plans as well as the stringency of those measures. EPA is committed to work with states and provide assistance and support, in the form of tools and guidance, etc. to help states develop approvable plans. The approvability of a plan is based on a demonstration that the goal will be met and not on the stringency of any individual measure.

11. EPA’s plan proposes to allow States to hold “other entities to be legally responsible for actions under the plan that will, in aggregate, achieve the emission performance level” (79 Fed. Reg. at 34901)
 - a. Does this mean States will be able to sue third parties, such as industrial, commercial and residential end users, for violations of EPA-approved State Implementation Plans?

- b. If the State fails to take action against these “other entities” will EPA be able to bring an enforcement proceeding?

Under a state plan approved under Clean Air Act (CAA) §111(d), all measures that a state adopts into the plan and submits to EPA for approval, and that EPA approves, become federally enforceable. Under the proposed rule, the states have significant discretion in determining what types of measures to adopt and submit to EPA for approval. For example, under the proposed portfolio approach, a state plan would include emission limits for affected EGUs along with other enforceable measures, such as renewable energy and demand-side energy efficiency measures that reduce CO₂ emissions from affected EGUs. (79 Fed Reg 34,901). We also requested comments on an alternative approach where state requirements for entities other than affected EGUs would not be components of the state plan and therefore would not be federally enforceable (79 Fed Reg 34,902). EPA discussed the concept of federal enforceability, including the availability of citizen suits, in the preamble to the proposed rule (79 Fed Reg 34,830, 34902-34,903) and the accompanying legal memorandum (Docket ID Number EPA-HQ-OAR-2013-0602-0419, page 4) and the agency will review any comments we receive on this issue.

12. Under the proposed CO₂ rule for existing power plants, EPA assumes that States can cut total electricity use by 1.5% annually.
 - a. What types of energy efficiency measures does EPA anticipate would be required?
 - b. Who would be responsible for the costs associated with undertaking these measures?
 - c. Who would be liable if the efficiency goals aren't met? Commercial, industrial and residential end users?
 - d. How does EPA plan to monitor and enforce consumer behavior?
 - e. What authority does EPA have to require energy consumers to reduce their electricity consumption? What other federal agencies have this authority?

As noted, the basis for EPA's fourth Building Block, demand-side energy efficiency, is that over time States can achieve annual electricity savings of 1.5% annually. This Building Block is one of four that make up the “best system of emissions reduction ... adequately demonstrated” (BSER) that, in turn, serves as the basis for the state CO₂ goals. The basis for Building Block four is discussed at length in the preamble to the proposal (79 FR 34830-34950) and the GHG Abatement Measures Technical Support Document, available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-ghg-abatement-measures>. EPA does not propose to require the inclusion of any particular type of measures, including demand-side energy efficiency, as plans are developed for meeting the state goal. Instead, states are empowered to chart their own, customized paths to meet their goals.

13. State Public Utility Commissions traditionally have authority over energy resource planning, distribution systems, and demand-side management programs within their borders.
 - a. How would EPA's proposed CO₂ rule for existing power plants impact State authority over integrated resource planning?

- b. How would EPA's proposal impact State authority to design, operate, enforce and revise state renewable energy programs?
- c. How would EPA's proposal impact State authority to develop, operate, enforce and revise demand-side management programs?

States would continue to retain existing authority to regulate the electricity sector.

- 14. EPA's proposal suggests that the largest potential for CO₂ reduction is in "re-dispatch" from high-emitting generation sources (e.g., coal units) to lower-emitting existing natural gas combined cycle units.
 - a. Does this mean EPA favors a generation dispatch model based on a plant's environmental attributes, rather than the current economic dispatch model which picks generation from least expensive to most expensive?
 - b. What precedent is there for such a dramatic shift?
 - c. Some states belong to Regional Transmission Organizations (RTO), which control the order in which generation is dispatched. How does EPA account for the fact that states in RTOs do not have control over dispatch? Will RTOs be required to review SIPs if a state relies upon dispatch methodology that differs from normal RTO operations? What if two states within the same RTO have conflicting SIP proposals for the dispatch of generation?

EPA's understanding of how dispatch to lower-emitting forms of generation would work is discussed at length in the preamble to the proposal (79 FR 34830-34950) and the GHG Abatement Measures technical support document, available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-ghg-abatement-measures>. We note, however, that even restructured markets already are able to account for pollution control requirements that apply to power plants.

- 15. States within organized electricity markets – which represent about two-thirds of the country – do not have control over the dispatch of electricity. Rather this is controlled by regional grid operators that are subject to oversight by the Federal Energy Regulatory Commission. How does EPA propose to allow States in organized electricity markets to claim credit for dispatch decisions that are outside both their authority and EPA's authority?

EPA's understanding of how dispatch to lower-emitting forms of generation would work is discussed at length in the preamble to the proposal (79 FR 34830-34950) and the GHG Abatement Measures technical support document, available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-ghg-abatement-measures>. We note, however, that even restructured markets already are able to account for pollution control requirements that apply to power plants.

- 16. In the proposed rule, EPA assumes that natural gas combined cycle (NGCC) plants can operate at 70% capacity.
 - a. Has EPA calculated how much additional natural gas will be required to operate the fleet at 70% capacity?

- b. How many of the existing plants have the pipeline capacity to receive sufficient supply to operate at 70%?
- c. What is the pipeline capacity needed to supply the current and anticipated natural gas plants with enough natural gas to maintain 70%?
- d. What is the anticipated schedule for the construction of the additional pipelines needed?

Natural gas is a relatively clean and low-emitting form of energy, and the proposed Clean Power Plan recognizes the role it can play in lowering CO₂ emissions. While natural gas demand is anticipated to increase in response to the guidelines and other power sector rules, we believe supply is sufficient to justify the 70% capacity factor. More details about our understanding of the availability of natural gas, including the infrastructure that would be needed to supply it, are available in Chapter 3 of the Greenhouse Abatement Measures TSD, available at: <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-ghg-abatement-measures>.

17. In the proposed CO₂ rule for existing power plants, EPA sets renewable targets on a regional basis. Some states within a region are being asked to reduce CO₂ emissions based on the renewable targets of surrounding states. This may or may not be applicable to some states. Why did EPA choose this approach? Does this put some states in a difficult position, especially given that their ability to comply within their state boundaries may be limited?

In the proposal, the EPA estimated the potential renewable energy available to states as part of BSER by developing a scenario based on Renewable Portfolio Standard (RPS) requirements already established by a majority of states. The EPA views the existing RPS requirements as a reasonable foundation upon which to develop such a scenario for two principal reasons. First, in establishing the requirements, states have already had the opportunity to assess those requirements against a range of policy objectives including both feasibility and costs. These prior state assessments therefore support the feasibility and cost of this scenario as well. Second, renewable resource development potential varies by region, and the RPS requirements developed by the states necessarily reflect consideration of the states' own respective regional contexts. This scenario's results for states represent a level of renewable resource development for individual states—with recognition of regional differences—that we view as reasonable and consistent with policies that a majority of states have already adopted based on their own policy objectives and assessments of feasibility and cost.

We solicited comment on an alternative method of quantifying renewable energy that relies on a state-by-state assessment of RE technical and economic potential, rather than a regional application of state RPS commitments. More detail is available in the preamble; in the Alternative RE Approach TSD, available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-ghg-abatement-measures>; and in a Notice of Data Availability that the agency issued on October 28, 2014, available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule>. We also solicited comment generally on the proposed state RE targets and will carefully consider comments received on this issue as we craft the final rule.

18. How does EPA propose to account for CO₂ emissions from biomass renewable resources in calculating the amount of CO₂ reduced if states choose biomass as a compliance option?

EPA intends to allow the states flexibility in developing their plans with respect to biogenic feedstocks, similar to other components of the CPP, such as energy efficiency. In the proposal EPA recognized that every state has a unique set of energy systems and fuel mixes, and renewable energy policies. A number of states have already developed a variety of sustainable forestry and land use management policies and programs that recognize the multiple benefits these lands provide.

The EPA will evaluate the biogenic feedstock components of proposed state plans—along with all other aspects of each plan—as part of the compliance plan review and approval process and may speak further in the final rule or other technical documents to the basis on which it will make such biomass-related evaluations. As in the case of many other aspects of the CPP, we expect other experts, such as our colleagues at USDA, states and stakeholders to be critical in helping provide clarification and examples of existing state and third-party programs already recognized as meeting sustainability goals as articulated by the President’s Climate Action Plan.

19. In the proposed CO₂ rule for existing power plants, EPA projects that under the rule an additional 46 to 50 gigawatts of coal-based electric generation may “be uneconomic to maintain and may be removed from operation by 2030.”
 - a. How did EPA estimate the amount of coal-based electric generation that would shut down by 2030?
 - b. How many coal-based generating units does this represent? And in which states are those coal-based units located?

Consistent with statute, Executive Orders, and OMB guidance, the EPA conducted a regulatory impact analysis that shows illustrative benefits and costs of compliance with the proposed Clean Power Plan. The actual benefits and costs will depend on what measures the states choose to implement their goals. The EPA’s illustrative RIA relied on peer-reviewed modeling to show that, in 2030, we predict that coal and natural gas will each continue to account for more than 30% of electricity generation. More details, including the detailed modeling inputs and outputs, are available in the RIA and the docket.

20. Does EPA’s proposed CO₂ rule for existing power plants preclude states from providing coal-fired EGUs that face special circumstances (i.e., plants that have no fleets to offset emissions, and which have made significant investments in pollution control equipment) with alternative compliance pathways, including more time and flexibility to meet specific requirements under the rule?

The EPA’s proposed state goals do not impose specific requirements on any individual source. Instead, states have the flexibility to choose their own compliance pathways, including avoiding stranded assets and maintaining electric reliability. Following publication of the proposed rule, EPA published a Notice of Data Availability [79 FR 64543, October 30, 2014] that provided additional information on certain issues that had been consistently raised by a diverse set of stakeholders, , including ideas about the glide path of emission reductions from 2020-2029. EPA issued the NODA to ensure that all stakeholders and the public were aware of these issues and could consider them as they commented on the proposed Clean Power Plan.

21. The polar vortex events in January and February exposed the fragile nature of the electric grid. An estimated 50 gigawatts of coal-fired generation is expected to shut down in the next couple of years due to prior EPA rules, including the MATS rule, and EPA is estimating that the proposed CO₂ rule

for existing power plants could result in the retirement of another 46 to 49 GW by 2020. Has EPA requested NERC and FERC to complete a reliability assessment of the proposed rule? If not, why not?

Utilities are making substantial progress in complying with MATS. The electric power sector is doing the necessary planning and making the investments needed to reduce emissions of mercury and other hazardous air pollutants across the existing fleet of power plants. EPA, together with FERC and DOE, has been closely monitoring these compliance activities for any potential reliability issues that may arise. All of the information that EPA has seen to date indicates that the planning authorities and grid operators, through their established processes, have been able to manage the changes to their respective systems.

Throughout the development of the proposed CPP, EPA met with FERC, DOE, state regulators, grid operators, NERC and the industry to hear their suggestions and advice as to how to address reliability concerns. We are confident that our careful consideration of the comments we have received and our diligent efforts to monitor compliance will ensure that the transition to a cleaner electric power system, called for by the CPP, can be achieved while reliability is maintained.

22. Interagency comments on EPA's proposal made public in the Federal Register indicate that EPA's compliance cost estimates did not model the cost of state emissions rate reductions using EPA's proposed building block framework. Is this correct? If so, please explain why, and provide EPA's estimated compliance costs for states and/or regions that were based on EPA's proposed building block framework.

Consistent with statute, Executive Order, and OMB guidance, the EPA conducted a Regulatory Impact Analysis that shows illustrative benefits and costs of compliance with the proposed Clean Power Plan. The actual benefits and costs will depend on what measures the states choose to implement their goals. Because states have flexibility in how to meet their goals, the EPA allowed such flexibility in estimating compliance impacts. Failing to do so would make our estimates less accurate and informative.

23. EPA estimates that power sector compliance costs associated with its proposed (primary option) rule will be between \$7.3 billion and \$8.8 billion in 2030. Please provide a breakdown of the components of this estimate, including projected incremental costs for electricity transmission, power plant operations and maintenance, pipeline infrastructure, fuel costs, energy efficiency, and other costs.

Consistent with statute, Executive Order, and OMB guidance, the EPA conducted a Regulatory Impact Analysis that shows the benefits and costs of illustrative scenarios states may choose in complying with the proposed Clean Power Plan. Because states have flexibility in how to meet their goals, the actions taken to meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated are available in the RIA (<http://www2.epa.gov/sites/production/files/2014-06/documents/20140602ria-clean-power-plan.pdf>.)

24. The proposed rule sets a national *mass-based* carbon emissions reduction target of 30 percent below 2005 levels by 2030, but then proposes individual *rate-based* emissions reductions for individual states. Please provide EPA's estimate of the mass-based emissions reductions projected for each state necessary to achieve the national reduction target of 30%. Please also provide EPA's estimate of mass reductions that would be achieved through building block on a state-by-state basis.

The EPA did not set a mass-based target of 30 percent reductions as you state. Instead, the EPA conducted unprecedented outreach to learn about what actions states, utilities, and others are already taking to reduce carbon pollution from existing power plants. Using that information, we interpreted the statutory provisions of the Clean Air Act, which directs the EPA to determine the “best system of emissions reduction...adequately demonstrated” by considering several factors. Having arrived at our proposed conclusions, we then quantified the results of implementing this best system and projected that it would lead to approximately a 30% reduction in CO2 relative to 2005 utility sector emissions. We note that proposed state targets are calculated as rate-based goals, but the proposal would give states the option to convert these to mass-based goals for compliance purposes.¹

25. Has EPA done an analysis of the funding and personnel that would be required to implement and enforce EPA’s proposed CO2 rule for existing power plants?
- a. If yes, how much funding and personnel would be required at the federal and state level to carry out EPA’s proposed CO2 regulations for existing power plants? And is EPA’s analysis publically available?
 - b. If no, does EPA plan to prepare such an analysis of the funding and personnel that would be required to implement and enforce EPA’s proposed CO2 rule for existing power plants?

Because of the flexibility afforded to states in meeting their proposed targets, it is difficult to project in advance quantitative impacts on funding and personnel. As indicated in the preamble to the proposal, a detailed Federalism Summary Impact Statement (FSIS) describing the most pressing issues raised in pre-proposal and post-proposal comments will be forthcoming with the final rule, as required by section 6(b) of Executive Order 13132.

26. It is our understanding that early in 2015, the Obama Administration plans to announce a U.S. CO2 reduction commitment that it hopes will form the basis of a new international agreement to replace the Kyoto Protocol. EPA’s existing power plants rule is expected to be central to this international proposal, but the Administration has not been transparent with Congress or the American public regarding what it intends to pursue.
- a. Please detail EPA’s involvement in Administration discussions leading up to this new international commitment, including when meetings are taking place, what agencies and officials are involved, and what options are under consideration.
 - b. Does EPA intend to bolster the Administration’s international efforts by following the power plant rule with new GHG regulations on other sectors, such as refining, manufacturing, agriculture, and chemicals? If so, what is the timetable for those follow-on rules?

The EPA has provided technical assistance, when requested, in understanding the emissions reductions from our voluntary and regulatory efforts to reduce GHG emissions. We have also contributed to a thorough understanding of the science of climate change.

¹ In November 2014 EPA released a rate to mass technical support document in which we outline two possible methods for doing a rate-to-mass translation, and include mass-based equivalents for each state. The TSD is available at: <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents>

The EPA is not currently developing national standards to specifically regulate GHG emissions from any other source categories, including petroleum refineries. Were the EPA to propose a New Source Performance Standard that would limit GHG emissions from another source category, the proposal would reflect the best available science and data, including information about all applicable regulations, to determine what standard represents the Best System of Emissions Reduction as defined by the Clean Air Act. Any such proposal would be made available for public comment.

27. It is my understanding that EPA is currently considering an application for an Alternative Renewable Biomass Tracking requirement from the Argentinian biodiesel association. The purpose of this application is to establish an alternative compliance mechanism to prove that these foreign companies are in fact using soybeans that qualify under the renewable biomass definition of the program. Ensuring that fuels are produced from renewable biomass is the foundation of the underlying program. Domestic fuel producers are required to meet stringent standards that add to the production costs of the fuel.
- a. In addition, the approval of such a plan would have significant impact on the biodiesel producers here in the U.S. and the volumes of fuels they are producing in order to fulfill the mandate under the EPA's 2014 volume obligations. It is my understanding that our domestic suppliers are concerned that hundreds of millions of gallons of Argentinian biodiesel could be shipped to this country and qualify for RINs. What can the EPA tell us about how these decisions are being considered and whether industry will be able to comment on any alternative compliance proposal?
 - b. As the agency considers the approval of an alternative tracking requirement for foreign producers which would act as a substitute for the traditional compliance requirements, do you intend to make such tracking requirements should be open to the public comment period so that industry stakeholders can weigh in on the proposal?

The regulations allowing for an Alternate Biomass Tracking program were put in place in 2010 through an extensive notice and comment rulemaking process as part of the final regulations for the Renewable Fuel Standard (RFS) program. Under these regulations, parties may submit applications for consideration and approval of an Alternate Biomass Tracking program. On January 27, 2015, following an extensive review process, EPA approved the Alternate Biomass Tracking Program plan submitted by *Camara Argentina de Biocombustibles* (CARBIO). CARBIO's plan includes a robust tracking program that requires an independent third party to conduct an annual survey of the entire biofuel supply chain. This approved plan enhances existing regulatory oversight requirements currently applied to qualifying renewable fuels being imported from Argentina. Any and all subsequent alternate biomass tracking program applications that are submitted will be reviewed thoroughly by the Agency, and EPA will ensure any decision is fully consistent with the regulations.

In setting the annual volume standards, the Agency considers all possible sources of renewable fuels, including imports. This would necessarily include consideration of imports from Argentina as well as other countries. Further, Argentina already imports some volume of qualified biofuel under the existing regulations. The decision to import more or less biodiesel in the future will not be made based on a particular compliance approach, but instead will be based on economic factors unrelated to the compliance program. EPA's decision to approve the alternate biomass tracking program did not lift a trade barrier since no trade barrier existed. Instead, it put in place a more robust alternate path to meet the Agency's compliance

requirements, as the CARBIO program provides for a more rigorous approach to ensuring feedstock are grown on qualified land.

Aggregated data for 2014 shows that domestic biomass based diesel production was about 1.5 billion gallons and Imported / foreign produced production was about 300 million gallons. Imports from Argentina totaled approximately 40 million gallons in 2014, or a little more than 10 percent of total imports of biomass-based diesel volumes under the program.

Regarding opportunities for public comment, the regulations that created and define what an approvable alternate biomass tracking program must include were developed through an extensive notice and comment process with significant input from a wide range of stakeholders. Our action to approve the CARBIO proposal is purely a ministerial confirmation that the CARBIO plan complies with those regulations and is not an opportunity to change or adjust the underlying regulations based on further notice and comment.

Attachment 2—Member Requests for the Record

During the hearing, Members asked you to provide information for the record, and you indicated that you would provide that information. For your convenience, descriptions of the requested information are provided below.

The Honorable Joe Barton

1. During the hearing, you testified that you would provide the Committee with the legal support for your testimony that “It is required when we issue a 111(b) standard for a sector to then go forward with a 111(d) standard.” Please provide the Committee with the legal basis for this statement and your position that EPA’s proposal for existing power plants is required under the Clean Air Act.

Response: At the hearing, in her exchange with Congressman Barton, Acting Assistant Administrator McCabe stated that when we issue a 111(b) standard it is required that we go forward with a 111(d) standard. Congressman Barton asked for EPA’s General Counsel to back this statement up and send it to the committee. Along with the proposed rule, the EPA included in the docket a Legal Memorandum providing background for the legal issues raised by the rule. That Legal Memorandum details the EPA’s understanding, at the time of proposal, of the legal issues surrounding the proposed rule. That document can be found using Docket ID Number EPA-HQ-OAR-2013-0602-0419.

The Honorable Robert E. Latta

1. Assistant Administrator McCabe, during the hearing you testified that a state would not be subject to Clean Air Act penalties if they do not obtain EPA approval prior to adjusting their Renewable Portfolio Standard. Please provide the Committee assurances that states will not be subject to Clean Air Act penalties when revising state laws, including renewable energy standards, without EPA approval.

Response: EPA has engaged with a wide range of stakeholders on the role of renewable energy standards and other state laws related to energy in the proposed Clean Power Plan. States and others have indicated the need to be able to change such laws in the future and have expressed concern that this could be problematic if such laws were incorporated into state plans. This

circumstance is not unique to the proposed Clean Power Plan. States can and have historically made such changes and had them incorporated into updated state plans.

However, recognizing that there are interactions between state energy policies and state 111(d) plans to address CO₂ emissions from power plants, the rapid technology changes in power generation technology and the tremendous learning by doing occurring in energy sector regulation (both environmental and economic), the proposed Clean Power Plan discussed additional potential state plan designs that could make it possible for states to change underlying state energy requirements without the need to make resubmissions to EPA. The Agency will be reviewing comments it received on this issue and factoring them into the final 111(d) regulation that it promulgates.

The Honorable Mike Pompeo

1. Please provide the Committee all information related to meetings between EPA and White House personnel concerning this proposed rule for existing power plants, including: dates, location, attendees, and specific subject matter of those meetings.

Response: On June 25, 2013, President Obama announced his Climate Action Plan and issued a Presidential Memorandum directing EPA to use section 111(d) of the Clean Air Act to cut carbon pollution from existing power plants. Immediately following the President's announcement and at his direction, the agency embarked on an extensive public outreach process—one that reached thousands of people through hundreds of meetings, listening sessions, video conferences, phone calls, conference calls, and almost two thousand emails from individuals across the country. We talked to states, power companies, local communities, environmental groups, associations, labor groups, Tribes, and many more. This process was a critical component in developing this rule because it helped focus our attention on what was going on—on the ground—in states and communities across the country, and it generated public discussion and ideas from numerous groups and individuals that helped inform our thinking.

Consistent with E.O. 12866, the proposed rule underwent interagency review prior to its release on June 2, 2014. And as part of the interagency review process, EPA staff met with other agencies and the Office of Management and Budget to discuss the draft proposal.