Committee on Energy & Commerce
Subcommittee on Energy & Power

Commissioner Philip Moeller’s
Answers to
Preliminary Questions for the Federal Energy Regulatory Commission
July 29, 2014

The following questions relate to the U.S. Environmental Protection Agency’s (“EPA”) recently proposed “Clean Power Plan.” See Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34830 (June 18, 2014), referred to herein as the “Proposal” or “Clean Power Plan.”

Interagency and State Coordination

1. During an Energy & Power Subcommittee hearing on June 19, 2014, EPA Acting Air Administrator Janet McCabe testified that electric reliability “was paramount in our minds as we worked through the proposal” and that EPA “consulted with FERC and DOE and other agencies that have this as a chief responsibility.” She stated that “I or my staff have consulted with staff at FERC. They are part of the interagency review process that we always go through, and so they have given us their input on electric reliability.”

a. Describe each consultation you have had with EPA regarding the Proposal, including where it occurred, the date(s) on which it occurred, with whom it occurred and identify any other participating agencies. Also provide details of the outcome of those consultations and relevant materials relating to those consultations.

Answer: I have had no consultations with EPA on its proposal.

b. Did EPA request that FERC provide written advice or an analysis regarding the potential impacts of the Proposal on the reliability of the electric grid? If yes, provide a copy of the request and any resulting advice or analysis.

Answer: I am not aware of any request by EPA for written advice or analysis from FERC.

c. Are you aware of any outreach by EPA to the North American Electric Reliability Corporation (NERC) regarding reliability impacts prior to issuing the Proposal? If yes, to your knowledge what was the nature of that outreach?

Answer: I am not aware of any outreach by EPA to NERC.

1 Further, the Proposal states that “EPA has met on several occasions with staff and managers from the Department of Energy and the Federal Energy Regulatory Commission to discuss our approach to the rule and its potential impact on the power system.” See 79 Fed. Reg. at p. 34899.

a. Did FERC prepare this analysis?

**Answer:** To my knowledge, FERC did not prepare this analysis.

b. To your knowledge, did NERC prepare this analysis?

**Answer:** To my knowledge, NERC did not prepare this analysis.

c. To your knowledge, did FERC or NERC assist in the preparation of this analysis or consult with EPA regarding its preparation or its results? Please provide relevant details and materials.

**Answer:** I am not aware of FERC or NERC assistance or consultation in the preparation of the analysis or its results.

d. Did FERC have an opportunity to review this analysis before the Proposal was announced?

**Answer:** I am aware that a FERC staffer was allowed to visually review the draft rule prior to its release, but I do not know if that included this analysis.

e. Has FERC independently reviewed this analysis? Does FERC agree with EPA’s conclusion that the “proposed rule will not raise significant concerns over regional resource adequacy or raise the potential for interregional grid problems”? See 79 Fed. Reg. at p. 34899.

**Answer:** I am not aware of an independent review of this analysis by FERC.

3. The Proposal states that the “EPA and other federal entities, including . . . the Federal Energy Regulatory Commission (FERC) . . . are committed to sharing expertise with interested states as they develop and implement their plans.” Please explain when and in what manner FERC expressly “committed” to sharing its expertise with States. Please provide relevant details and materials.

**Answer:** I am not aware of any commitment by FERC to share its expertise with the states.

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**Clean Power Plan Impacts on Fuel Diversity and Electric Reliability**

1. Has FERC independently analyzed EPA’s Clean Power Plan to determine the impact it could have on generating unit retirements and potential impacts on fuel diversity and electric reliability? If yes, what were the results of this evaluation? If not, does FERC intend to independently analyze the Proposal to evaluate potential impacts on fuel diversity and electric reliability?

**Answer:** I am not aware of any FERC independent analysis of the Clean Power Plan.
2. EPA projects nearly 180 gigawatts of generation capacity will retire between 2010 and 2020 in response to the Clean Power Plan and other factors, such as EPA’s previously finalized Mercury and Air Toxics (MATS) rule. EPA’s Option 1 model specifically identifies each electric generating unit expected to retire by 2020 by name, location, and capacity. See EPA- HQ-OAR-2013-0602-0368 and EPA-HQ-OAR-2013-0602-0220.

a. Does FERC staff possess the expertise to complete an independent reliability assessment that (i) geographically plots each of the specific units identified in EPA’s model for retirement and each unit that has already retired or announced retirement; and (ii) evaluates the potential regional, state, and local reliability impacts resulting from such retirements?

Answer: I believe FERC has the expertise-along with NERC, the NERC Regional Entities, RTO’s and ISO’s, and the affected power plant owners-to conduct such as assessment. To my knowledge, FERC has not been asked to conduct such an assessment.

b. Will you commit to having FERC staff complete such an independent assessment prior to October 1, 2014, so that the public may understand the potential impacts on reliability prior to submitting comments on the Proposal, due on October 16, 2014? If not, why not?

Answer: This decision would be up to the Chair or Acting Chair of the Commission.

Clean Power Plan Impacts on Electricity Markets

1. Would existing organized wholesale electricity markets have to be redesigned to implement EPA’s Proposal? For example, are Regional Transmission Organizations (RTOs) prepared to transition from economic to environmental dispatch? Did EPA consult with FERC regarding the feasibility of switching from economic to environmental dispatch? What RTO implementation challenges would environmental dispatch present?

Answer: Yes, markets would need to be fundamentally altered and redesigned to implement EPA’s proposal to accommodate environmental dispatch. To my knowledge, EPA did not consult with FERC on this subject. Changing from economic dispatch to environmental dispatch is truly a fundamental change that would require a complete redesign of markets to include essentially a carbon fee on any resources that emit carbon dioxide.

2. EPA’s Proposal wrongly assumes States dispatch electricity. Given that electricity is actually dispatched by RTOs or other market operators on the basis of competitive market results, how would State compliance plans be implemented in electricity markets?

Answer: RTOs and other market operators must comply with applicable state and federal law. It is not clear to me how State compliance plans could be implemented in electricity markets.

a. Would a State Implementation Plan (SIP) take priority over market dispatch performed by an RTO?
Answer: It is not clear to me how an RTO could prioritize various State Implementation Plans over its own market dispatch.

b. Would a SIP take priority over bilateral contracts between a buyer of power in one State and a seller of power in another? If so, how, and what is the authority for this?

Answer: It is not clear to me how State Implementation Plans would affect bilateral contracts between states.

c. Would a State have authority to compel the continued operation of existing nuclear power plants if those plants are not being dispatched in wholesale electricity markets because their bid costs are too high compared to other generation?

Answer: I do not believe that a state can compel a nuclear power plant to continue operations, especially if the plant is not being dispatched by the system operator.

d. How would RTOs reconcile conflicting SIPs within a region?

Answer: I do not know how the RTOs will be able to reconcile conflicting SIPs within a region.

3. EPA’s Proposal is silent on the treatment of purchase power agreements and interaction of energy markets for States that are net importers versus exporters. Do you believe that EPA’s Proposal adequately addresses interstate power flows?

Answer: No, I do not believe that EPA’s Proposal adequately addresses interstate power flows.

4. Do you believe that EPA’s Proposal could result in stranded financial investments for units that have been retrofitted with emissions controls for other programs, such as EPA’s MATS rule? What impacts could this have on the owners of stranded assets, wholesale energy markets and consumer electricity costs?

Answer: Yes, I believe that EPA’s Proposal could result in stranded financial investments for units that have been retrofitted with emissions controls for other programs, such as EPA’s MATS rule. As for impacts, this will only raise costs to consumers.

Increased Reliance on Natural Gas, Renewables and Energy Efficiency

1. EPA’s Clean Power Plan contemplates natural gas combined cycle (NGCC) plants running at a 70% capacity factor to displace a significant amount of coal-fired generation. EPA’s regulatory impact analysis projects pipeline capacity increases of 4-8% beyond base case projections by 2020.

a. Has FERC analyzed whether the natural gas infrastructure exists to reliably serve NGCC plant needs while preserving reliable gas service for non-power generation use?
Answer: I am not aware of any analysis by FERC on whether the natural gas infrastructure exists to reliably serve NGCC plant needs while preserving reliable gas service for non-power generation use.

b. Did EPA consult with FERC regarding the adequacy of natural gas infrastructure prior to publishing its Proposal?

Answer: I am not aware of any consultation by EPA with FERC regarding the adequacy of natural gas infrastructure prior to publishing its Proposal.

c. Given the challenges of gas supply in the most recent winter, and continued concerns about gas deliverability to certain parts of the country, do you agree with EPA that its modeled capacity increases are feasible by the initial compliance date of 2020?

Answer: I am skeptical of EPA’s contention that the modeled capacity increases are feasible by 2020. This is partly due to the fundamental manner in which the proposed rule would change the way that electricity is dispatched. Increased demand under the proposed rule will be addressed by adding more gas-fired generation. It’s unclear what role these new plants will play in markets that have security constrained economic dispatch. Because these plants will be dispatched on merit, the owners of such plants are less likely to sign long-term contracts for gas supply. Long-term contracts (usually signed by local gas distribution companies) have provided the financial underpinnings of pipeline expansion. The new demand for pipeline gas will be from this class of generators, and it is not clear how the necessary infrastructure will be deployed and financed.

2. Has FERC completed any electric transmission system capability and reliability analysis that demonstrates that the increases in NGCC plant utilization that EPA assumes in its Proposal could replace retired coal-fired generation are practicable, taking into account the location of the coal plants being retired and the location of existing NGCC plants?

Answer: I am not aware of any FERC analysis demonstrating that the increases in NGCC plant utilization that EPA assumes in its Proposal could replace retired coal-fired generation are practicable, taking into account the location of the coal plants being retired and the location of existing NGCC plants.

3. Has FERC analyzed the integration issues (e.g., voltage control, natural gas backup power, etc.) associated with a substantial expansion and deployment of intermittent renewable energy resources, as contemplated by EPA’s Clean Power Plan? Did EPA consult with FERC regarding these integration issues?

Answer: As far as I know, FERC has not analyzed integration issues (e.g., voltage control, natural gas backup power, etc.) associated with a substantial expansion and deployment of intermittent renewable energy resources, as contemplated by EPA’s Clean Power Plan. And as far as I know, EPA has not consulted with FERC on these integration issues.

4. Has FERC studied whether under the EPA Proposal additional transmission lines would need to be built to integrate more renewables, where the lines may be built, and how long it may take to site, permit and build these lines? Has FERC estimated the cost of transmission necessary
to supply increased renewable resources under EPA’s Proposal?

Answer: As far as I know, FERC has not studied whether additional transmission lines would need to be built under the EPA Proposal to integrate more renewables, where the lines may be built, and how long it may take to site, permit and build these lines. And as far as I know, FERC has not estimated the cost of transmission necessary to supply increased renewable resources under EPA’s Proposal.

5. The Clean Power Plan would facilitate the rapid expansion of renewable resources, particularly rooftop solar underwritten by long-term leases.

a. Has EPA requested, and has FERC conducted, an analysis of the potential reliability impacts associated with a rapid rise in the use of variable generating sources?

Answer: As far as I know, EPA has not requested, and FERC has not conducted, an analysis of the potential reliability impacts associated with a rapid rise in the use of variable generating sources.

b. Do you believe that rapid changes in the use of variable generation sources could pose challenges to electric reliability on a local or national basis?

Answer: Yes, rapid changes in the use of variable generation sources could pose challenges to electric reliability on a local or national basis.

6. The Clean Power Plan contemplates significant increase in energy efficiency and demand-side management. How would the increased role of energy efficiency and demand-side resources impact wholesale energy markets? Reliability? Can FERC regulate such resources, particularly given the recent court ruling vacating FERC’s Order No. 745?

Answer: The role of energy efficiency—which I fully support—is uncertain related to how this product will be treated in wholesale markets; its role in reliability is less concerning. As for demand side management, the Commission’s role in fostering DSM remains clouded in light of the recent DC Circuit decision pertaining to Order 745.