United States Senate
WASHINGTON, DC 20510

November 2, 2023

The Honorable Willie L. Phillips
Chairman

The Honorable James Danly
Commissioner

The Honorable Allison Clements
Commissioner

The Honorable Mark C. Christie
Commissioner

Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Dear Chairman Phillips and Commissioners:

In response[1] to our letter of June 30, 2023, the Commission has scheduled a limited review of the potential impact of the Environmental Protection Agency's ("EPA") proposed rule to regulate emissions of greenhouse gases from fossil-fueled power plants ("Proposed Clean Power Plan 2.0") on electric reliability.[2] We appreciate the Commission having taken this step. Nevertheless, to develop an adequate record of the potential impacts of the EPA's proposed rule, we believe you must do more than devote only a portion of your annual Reliability Technical Conference on November 9, 2023 ("Technical Conference") to this subject. At the very least, you must develop a record in Federal Energy Regulatory Commission ("FERC" or "the Commission") Docket No. AD23-9-000 and submit that record to EPA Docket No. EPA-HQ-OAR-2023-0072-0007 for the Proposed Clean Power Plan 2.0 in order to inform Congress, the Commission, the EPA and the public of the facts and circumstances necessary to safeguard reliability of electric service.

On the basis of the current public record, it appears you will give the Proposed Clean Power Plan 2.0 far less attention than the four technical conferences[3] that your predecessors dedicated in 2015

[1] Letter from Chairman Willie Phillips to Ranking Member Barrasso and Ranking Member Capito (August 9, 2023).
[2] New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 88 Fed. Reg. 33240 (May 23, 2023).
[3] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64707 (Oct. 23, 2015), https://www.govinfo.gov/content/pkg/FR-2015-10-23/pdf/2015-22842.pdf (hereinafter "Clean Power Plan"). Each of the four technical conferences were entitled "Technical Conference on Environmental Regulations and Electric Reliability, Wholesale Electricity Markets, and Energy Infrastructure; Notice of Technical Conferences." These four conferences included: 1. National Overview, 79 Fed. Reg. 77001-77002 (Dec. 23, 2014), 2. Western Region, 80 Fed. Reg. 6073 (Feb. 4, 2015), 3. Eastern Region, 80 Fed. Reg. 9715 (Feb. 24, 2015), and 4. Central Region, 80 Fed. Reg. 12472 (Mar. 9, 2015).

to the original Clean Power Plan. Commissioner Danly's comments in the EPA docket highlight insufficient coordination between the FERC and the EPA on the reliability impacts of the Proposed Clean Power Plan 2.0.[4] The Technical Conference and the record developed in Docket No. AD23-9-000 provide an opportunity to correct this significant shortcoming.

We urge you to be especially thorough in exercising your responsibility to protect electric reliability. Unless the EPA withdraws or significantly revises its Proposed Clean Power Plan 2.0, the EPA will unnecessarily and significantly increase risks to electric reliability. It will also increase dramatically the costs of generating electric power and make electricity less affordable for American families. If Commissioners and FERC staff do not bring to bear your expertise and fact-based analysis to dissuade the EPA from continuing on its current course, you will bear at least partial responsibility for any blackouts and brownouts that occur as result of electric resource shortages that would be attributable to compliance with a final rule resembling the Proposed Clean Power Plan 2.0.

Further, it is paramount that the FERC considers the Proposed Clean Power Plan 2.0 in the proper context of other regulations and economic factors facing the power sector. Only then will you have provided the EPA, Congress, and the public with reasonable and adequate analysis of the full reliability repercussions of the Proposed Clean Power Plan 2.0.

The proposed rule is part of a larger suite of regulations the EPA and the Biden Administration calls their Power Sector, or Electric Generating Unit ("EGU") Strategy.[5] That strategy is intended to remake the American power sector in order to meet the Administration's publicly-stated climate goals. The Biden Administration's EGU Strategy consists of an avalanche of related proposed and final EPA regulations covering the media of air, water, and soil that would severely reduce affordable generating capacity by dramatically increasing the operating costs or forcing the early retirement of fossil fuel-fired power generation. Beyond the Proposed Clean Power Plan 2.0, the EGU Strategy includes the:

- Final Ozone Transport Rule for the 2015 Ozone National Ambient Air Quality Standards ("NAAQS") ("Good Neighbor Rule");[6]
- Proposed New National Emissions Standards for Coal- and Oil-Fired Electric Utility Steam Generating Units ("Mercury and Air Toxics Standards");[7]
- Proposed Supplemental Effluent Limitations Guidelines and Standards for Steam Electric Power Plants ("ELGs");[8]

[4] Commissioner James Danly, Comment to the EPA (August 8, 2023), Docket No. EPA-HQ-OAR-2023-0072, https://www.ferc.gov/news-events/news/comment-commissioner-james-p-danly-epas-proposed-new-source-performance-standards.

[5] Sean Reilly and Kevin Bogardus, *Inside EPA's Climate Strategy for Power Plants*, E&E News, October 24, 2022, https://www.eenews.net/articles/inside-epas-climate-strategy-for-power-plants/ (discussing Biden Administration slides from February 2021 presenting on a "Power Sector Strategy").

[6] Federal "Good Neighbor Plan" for the 2015 Ozone National Ambient Air Quality Standards, 88 Fed. Reg. 36654 (June 5, 2023).

[7] National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review, 88 Fed. Reg. 24854 (April 24, 2023).

[8] Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 88 Fed. Reg. 18824 (March 29, 2023).

- Proposed Coal Combustion Residuals Permitting and Legacy Surface Impoundments Rules ("CCR"); [9] and
- Proposed NAAQS for Fine Particulate Matter ("$PM_{2.5}$"). [10]

The Proposed Clean Power Plan 2.0 is the centerpiece of this regulatory suite and is predicated on modeling that assumes these other rules are implemented and their associated costs are borne by the market. Assumptions in the proposal's underlying modeling[11] also rely upon other Administration targets (*e.g.*, the Department of Energy's ("DOE") "Hydrogen Shot" goal of driving down the price of hydrogen produced by electrolysis to $1 per kilogram within a decade[12]) and expectations of market distortions from subsidies in the so-called Inflation Reduction Act. The sum of these assumptions is a Regulatory Impact Analysis[13] that unrealistically downplays the costs and overstates the benefits associated with the Proposed Clean Power Plan 2.0.

Most troublingly, the underlying model for the Proposed Clean Power Plan 2.0 betrays either a lack of understanding or of interest in the economic and technical realities facing the grid. For example, the EPA assumes that there will be no demand growth for electricity through 2035, even though its own proposed *Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles Rules*[14] effectively mandates the increased production of electric vehicles, and will necessarily induce significant additional electric demand.

Similarly, the Proposed Clean Power Plan 2.0 relies upon switching to hydrogen fuel produced by electrolysis as a pathway for compliance for power plants. Its economic model assumes unrealistically low prices for this so-called "green" hydrogen. This assumption is based solely upon the DOE's Hydrogen Shot policy goals: that a domestic "green" hydrogen supply is simply and immediately available as needed by the power sector and that production of such "green" hydrogen does not necessitate additional electric generation capacity to produce.

The Clean Power Plan 2.0 also assumes the widespread deployment of carbon capture and sequestration ("CCS") technology. It makes this assumption despite the lack of an existing commercial facility operating at the 90-percent capture rate required to comply with the proposed rule. Additionally, significant infrastructure would be needed to support deployment of this technology. One estimate found that 150 large carbon dioxide pipelines, transiting 50,000 miles, would be necessary by 2035 to support CCS buildout.[15] This would be equivalent to building more

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[9] Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, 88 Fed. Reg. 31982 (May 18, 2023).
[10] Review of the National Ambient Air Quality Standards for Particulate Matter, 85 Fed. Reg. 82684 (Dec 18, 2020).
[11] EPA, Integrated Proposal Modeling and Updated Baseline Analysis: Memo to the Docket, Docket No. EPA-HQ-OAR-2023-0072-0237 (July 7, 2023), https://www.regulations.gov/document/EPA-HQ-OAR-2023-0072-0237.
[12] DOE, *Hydrogen Shot*, https://www.energy.gov/eere/fuelcells/hydrogen-shot
[13] EPA, Regulatory Impact Analysis, Docket No. EPA-HQ-OAR-2023-0072-0007 (May 2023), https://www.regulations.gov/document/EPA-HQ-OAR-2023-0072-0007.
[14] Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, 88 Fed. Reg. 29184 (May 5, 2023).
[15] EFI Foundation, *How Much, How Fast? Infrastructure Requirements of EPA's Proposed Power Plant Rules*, https://efifoundation.org/wp-content/uploads/sites/3/2023/10/EPA-H2-Infrastructure-1.pdf.

than one quarter of our nation's existing petroleum pipeline network in less than 12 years. Given the well-documented challenges in building pipelines,[16] this assumption is dubious at best.

When one considers the length of the permitting and environmental review processes, as well as the likelihood of dilatory litigation that plagues most major infrastructure projects, these unrealistically optimistic predictions of assets instantly coming online to fill demand for "green" hydrogen and CCS quickly fall apart. Moreover, assumptions that there will be no increase in electric demand fly in the face of history; electricity demand growth generally has tracked growth in the gross domestic product. These assumptions also ignore recent increased estimates in growth in electric demand in specific geographic areas and fail to account for other policies the Biden Administration is advancing to electrify transportation, commercial and residential heating, and other sectors of the economy. In short, the EPA's broader regulatory approach will drive premature retirements of dispatchable EGUs while simultaneously feeding demand growth through 2035. If implemented, these policies will be disastrous for electric reliability and affordability.

Given FERC's mission, the Commission must consider the combined impact on reliability of the Proposed Clean Power Plan 2.0 and the other component rules of the broader EGU Strategy, as well as other regulations such as the EPA's light- and medium-duty vehicle emissions standards. To date, we are aware of no robust and exhaustive analysis by FERC, EPA, or DOE of the cumulative impacts on reliability of these rules, or the underlying modeling assumptions supporting them. Finally, panelists for the Technical Conference must have the expertise and command of the facts required to explain in detail what will be necessary to undertake large-scale upgrades to facilities in the face of known and reasonably foreseeable permitting, siting, supply chain, workforce, and litigation challenges.

Please ensure that each question presented along with this letter is addressed during the upcoming Technical Conference and in the record developed after the conference. Please also respond to our questions and file your responses in the record of the Proposed Clean Power Plan 2.0 in time to influence EPA's decisions in connection with the pending rulemaking. We intend to follow the record you develop and the extent to which the Commission communicates that record to the EPA. We expect you to develop the record with the utmost transparency and include input from all parties participating in the conference.

Sincerely,

John Barrasso, M.D.
Ranking Member
Committee on Energy and Natural Resources

Shelly Moore Capito
Ranking Member
Committee on Environment and Public Works

CC: The Honorable Michael Regan, Administrator, U.S. Environmental Protection Agency

[16] Leah Douglas, *Analysis: US carbon capture pipeline setbacks reflect challenges in climate fight*, Reuters (September 28, 2023), available at https://www.reuters.com/sustainability/us-carbon-capture-pipeline-setbacks-reflect-challenges-climate-fight-2023-09-28/.

Questions

1. According to the agenda for the Technical Conference available on the Commission's website, of just three panels devoted to Proposed Clean Power Plan 2.0, only one, "Afternoon Panel 1," will be led by the Commission.
    a. Why is only Afternoon Panel 1 to be led by the Commission?
    b. Why is Afternoon Panel 1 to be comprised solely of EPA Principal Deputy Assistant Administrator Goffman?
    c. Do each of you Commissioners plan to attend and participate in Afternoon Panels 2 and 3?
    d. For any Commissioner who does not plan to attend and participate in Afternoon Panels 2 and 3, why have you chosen not to participate?

2. As noted in our letter of June 30, 2023, Chairman Phillips and Commissioners Danly and Christie issued dire warnings about current threats to electric reliability at the Senate Committee on Energy and Natural Resources hearing on May 4, 2023. Chairman Phillips and Commissioner Christie, respectively, warned about the impact of "the pace of retirements" and the "subtraction of dispatchable resources." As we previously explained:

> Commissioner Danly warned of "an impending, but avoidable, reliability crisis" caused by "public policies that are otherwise designed to promote the deployment of non-dispatchable wind and solar assets or to drive fossil-fuel generators out of business as quickly as possible."[1] Commissioner Christie explicitly warned about a "looming reliability crisis" if "the far too rapid subtraction of dispatchable resources, especially coal and gas" continues unabated.[2] Chairman Phillips said during the hearing that he is "extremely concerned when it comes to the pace of retirements that we are seeing of generators that we need for reliability on our system." He went on to say that "NERC and grid operators have warned about this . . . this is something that we have to keep a careful eye on."[3]

   Accordingly, to the best of your ability, please answer the following questions as soon as possible after the technical conference and in such a manner as to timely contribute to the record of the EPA's ongoing rulemaking. Please also pose these questions to the EPA and parties to Docket No. AD23-9-000 so as both to inform the EPA of, and to enable impacted entities to highlight, the risks presented by the Proposed Clean Power Plan 2.0.
    a. How, specifically, do owners of EGUs plan to comply with the Proposed Clean Power Plan 2.0 if it is adopted as proposed?
    b. How, in detail, does the EPA expect compliance to unfold?

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[1] Full Committee Hearing to Conduct Oversight of FERC, May 4, 2023. Hearing Testimony from FERC Leadership including: 1. The Honorable Willie L. Phillips, Chairman, 2. The Honorable James Danly, Commissioner, 3. The Honorable Allison Clements, Commissioner, 4. The Honorable Mark C. Christie, Commissioner.
[2] *Id.*
[3] *Id.*

c. Given the range of expectations for compliance with the Proposed Clean Power Plan 2.0, what is the best estimate of the number of EGUs that will retire rather than comply?
d. If all Inflation Reduction Act ("IRA") subsidies relevant to compliance with the proposed rule and mentioned throughout the IRA expire at the existing expiration date pursuant to the IRA, how will this change the expected number of EGU retirements?
e. Please prepare and provide a chart, based on the record of the Technical Conference and on questions to owners of EGUs and Regional Transmission Organizations ("RTOs")/Independent System Operators ("ISOs") after the Technical Conference, of the units at risk of retirement based upon the Proposed Clean Power Plan 2.0.
f. What is the best estimate of the timing of the retirements comprising the number of EGUs identified in response to Questions 2.c and 2.e above?
g. Given current projections for load growth, what is the best estimate of the ability of balancing authorities ("BAs") registered with the North American Electric Reliability Corporation ("NERC") to meet their NERC compliance obligations in the face of EGU retirements or curtailments projected as a result of Proposed Clean Power Plan 2.0?
h. If the Proposed Clean Power Plan 2.0 goes into effect as proposed, how do the Commission, RTOs, ISO, owners of EGUs, and BAs expect to maintain electric reliability each year until 2035, 2040, and 2050?
i. If transmission and renewable deployment do not keep pace with the EPA's assumptions, how do the Commission, RTOs, ISOs, owners of EGUs and BAs expect to maintain reliability each year until 2040?
j. The EPA provides projections on capacity, generation, etc. for a number of categories throughout the "Integrated Proposal Modeling and Updated Baseline Analysis."[4] One category is "non-hydro RE" which it defines as "biomass, geothermal, landfill gas, solar, and wind." What share do wind and solar comprise of the EPA's projections for non-hydro RE?
k. What share of non-hydro RE projections are comprised of dispatchable power?
l. What electric generating technologies and EGUs are currently available to serve electric load and comply with the Proposed Clean Power Plan 2.0?
m. How much installed generating capacity of each EGU technology type identified in response to Questions 2.h and 2.l is currently available? How much installed generating capacity of each EGU technology type identified in response to Questions 2.h and 2.l is projected to be available in each year from the date on which Proposed Clean Power Plan 2.0 goes into effect until 2035, 2040 and 2050?

[4] EPA, Integrated Proposal Modeling and Updated Baseline Analysis: Memo to the Docket, Docket No. EPA-HQ-OAR-2023-0072-0237 (July 7, 2023), https://www.regulations.gov/document/EPA-HQ-OAR-2023-0072-0237.

n. What are the most significant threats to resource adequacy that the Commission, RTOs, ISOs, owners of electric generating units and BAs identify as a result of the Proposed Clean Power Plan 2.0 taking effect? How should the Commission and EPA mitigate such threats?
o. How will the Commission ensure that it receives specific answers to the questions that accompany the Agenda published in Docket No. AD23-9-000? How and when will it supply such answers and other material from the record of the Technical Conference and any other record information in Docket No. AD23-9-000 to the EPA?
p. To the best of your knowledge, how, when, and in what manner and to what extent, will the EPA receive and take into account the information that the Commission receives in the record of the Technical Conference and any other information in Docket No. AD23-9-000 as it related to the ongoing Proposed Clean Power Plan 2.0 rulemaking?
q. What actions should the Commission or each of the Commissioners take in response to the Record in Docket AD23-9-000?
r. What rules and regulations of the Commission would likely be impacted by EPA's foreseeable implementation of the Proposed Clean Power Plan 2.0 or EPA-regulated entities' compliance with that rule if finalized as proposed?
s. What provisions of tariffs on file with the Commission will likely be impacted by EPA's foreseeable implementation of the Proposed Clean Power Plan 2.0 or by EPA-regulated entities' compliance with that rule if finalized as proposed?
t. Would you support a request by the Commission to EPA requesting that the EPA issue a supplemental notice of proposed rulemaking (or take an equivalent procedural step) to enable the EPA to respond to the significant record that will be developed in Docket No. AD23-9-000? If not, why not?
u. Will the Commission formally or each of you personally support Commissioner Danly's comment, dated August 8, 2023 in EPA Docket EPA-HQ-OAR-2023-0072, urging EPA to extend the comment period in that docket "to afford FERC the opportunity to lodge the record of the upcoming technical conference, including comments FERC receives from the public, in the administrative record"[5] of EPA's Proposed Clean Power Plan 2.0 proceeding? If not, why not?

[5] Commissioner James Danly, Comment to the EPA (August 8, 2023), Docket No. EPA-HQ-OAR-2023-0072, https://www.ferc.gov/news-events/news/comment-commissioner-james-p-danly-epas-proposed-new-source-performance-standards.