## United States Senate

## WASHINGTON, DC 20510

January 25, 2024

The Honorable Willie L. Phillips Chairman

The Honorable Allison Clements Commissioner

The Honorable Mark C. Christie Commissioner

Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426

Dear Chairman Phillips and Commissioners Clements and Christie,

As members of the Senate Committee on Environment and Public Works, we write in response to the Federal Energy Regulatory Commission's (FERC) recent Reliability Technical Conference to provide our views on how FERC should carry out its critical responsibility to ensure the reliability of the nation's electric power system.<sup>1</sup> The U.S. electricity system is in transition as it makes the necessary shift to clean generation and responds to increasing demand and rising impacts and threats from extreme weather events. We urge FERC to use its ample authorities to ensure a reliable electric power system now and in the future. In doing so, FERC must support, not slow, the transition to a clean energy economy, and FERC must not undermine strong greenhouse gas emission reduction requirements.

Several Factors Contribute to Longstanding Electric System Reliability Issues

As recent experiences have vividly demonstrated, and as FERC's Reliability Technical Conference discussed, the U.S. electric power system was not designed and built for the twenty-first century. Over the past few decades, the electric power system has been grappling with a suite of inter-related changes, to which the system must adapt to maintain reliability and boost resilience. Specifically, the system must be able to accommodate the new reality of shifting generation sources, rising electricity demand, and climate-driven increasing extreme weather events.

First, the ongoing shifts in electricity generation from coal to both gas and clean generation continue to significantly affect the power system.<sup>2</sup> Increased U.S. natural gas production over the past decade plus has lowered natural gas prices and driven the power sector's dramatic shift from coal (and to some degree nuclear) to natural gas-fired generation. Also, state clean energy and climate policies adopted across the country, massive private-sector demand, and falling costs have simultaneously supported the growth of clean renewable generation, which Congress has

<sup>&</sup>lt;sup>1</sup> FERC, 2023 Annual Reliability Technical Conference (Oct. 26, 2023) (https://www.ferc.gov/media/2023-annual-reliability-technical-conference).

further directed and incentivized through numerous funding programs in the Inflation Reduction Act and Bipartisan Infrastructure Law.<sup>3</sup> The combined shift away from coal to gas and renewable generation is necessitating changes in grid operations, including interconnection process improvements to speed addition of clean energy resources, transmission additions to access lowest-cost clean energy generation sources, and integration of low-cost demand-side resources and virtual power plants.

Second, rising electricity demand also challenges reliability if providers fail to plan for and meet the higher demand. Information technology growth is one large new and growing source of electricity demand. In addition, other economic sectors, such as transportation and buildings, are beginning to reduce their greenhouse gas emissions by shifting from direct use of fossil fuels to electricity, further driving expected demand growth.

Finally, increasingly frequent and extreme weather events exacerbated by climate change (in part driven by power sector emissions) are putting substantial additional stress on the electricity system. Extreme weather events have caused several recent disastrous black-outs and troubling near-misses (due in substantial part to problems related to fossil fuels). Driven by climate change, the rise in wildlands fire frequency, severity and extent is further disrupting the power system in some areas of the country, and the liability risks from wildfires ignited by power lines are imposing significant economic costs on some power providers.

In contrast, the proposed Environmental Protection Agency (EPA) power plant greenhouse gas emissions standards are not driving any of the reliability challenges the electricity supply system has been experiencing to date, despite some claims to the contrary. Reliability concerns—and incidents—are occurring now, even as EPA's rule has yet to be finalized and compliance deadlines are years away. Nor is there reason to believe that the final rule would meaningfully exacerbate current reliability challenges. Rather, as the records for the EPA rulemaking and testimony at FERC's Reliability Technical Conference show, the proposed power plant

<sup>&</sup>lt;sup>2</sup> See, e.g., Energy Information Administration, Electric power sector CO<sub>2</sub> emissions drop as generation mix shifts from coal to natural gas (June 9, 2021) (https://www.eia.gov/todayinenergy/detail.php?id=48296#;~:text=Lower %20CO2%20emissions%20have,2005%20to%2038%25%20in%202019); EIA, Renewable generation surpassed coal and nuclear in the U.S. electric power sector in 2022 (March 27, 2023) (https://www.eia.gov/todayinenergy/detail.php?id=55960) (these sources indicate that as a share of U.S. electricity generation, coal dropped from 50% in 2005 to 20% in 2022, natural gas increased from 19% in 2005 to 39% in 2022, and renewables increased from 9% in 2005 to 21% in 2022).

<sup>&</sup>lt;sup>3</sup> See, e.g., National Regulatory Research Institute, State Clean Energy Policy Tracker (https://www.naruc.org/nrri/nrri-activities/clean-energy-tracker/) (showing 37 states with clean energy policies); Clean Energy Buyers Alliance, 2023 Clean Energy Buyers Alliance Impact Report, 5 (2023) (https://cebuyers.org/wp-content/uploads/2023/10/CEBA-Alliance-2023-Impact-Report.pdf) (finding that CEBA member companies are "responsible for 40% of new carbon-free energy (CFE) added to the U.S. electricity system since 2014").

<sup>&</sup>lt;sup>4</sup> See Axios, The U.S. power grid isn't ready for climate change (Jun. 20, 2023) (https://www.axios.com/2023/06/20/us-power-grid-climate-change-extreme-weather-electricity).

<sup>&</sup>lt;sup>5</sup> U.S. EPA, 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. 33,240 (May 23, 2023) (hereinafter U.S. EPA, EGU NSPS Proposed Rule (May 23, 2023).

greenhouse gas emissions standards are compatible with continued reliable and affordable power.<sup>6</sup> As proposed, the power plant emissions requirements are performance-based standards with numerous built-in flexibilities and long lead-times, providing numerous compliance options and ample ability to plan for and accommodate reliability needs. The proposed power plant emissions standards are neither the cause of current reliability problems nor a future threat.

## FERC Must Act to Ensure Electric System Reliability

As the nation's federal agency responsible for overseeing the interstate transmission of electricity and wholesale sale of electricity in interstate commerce, maintaining the reliable delivery of affordable electricity is a major part of FERC's mission. A key aspect of maintaining reliability is ensuring that our electric power system and its state and regional regulators respond as necessary to the current and future physical, economic, and regulatory conditions under which the system operates. We applaud recent FERC actions aimed at helping the power system adjust to changing conditions. These actions include several critical rulemaking proposals, as well as recent reforms to streamline generator interconnection procedures to help clear the backlog of clean energy projects waiting to connect to the grid. We are also encouraged by FERC's recent efforts to recognize and further improve the reliability of renewable and battery resources, while addressing traditional generation's vulnerabilities to extreme events. As Winter Storm Elliott made starkly clear, past assumptions about the reliability of traditional generation fail to account for these vulnerabilities, with devastating effects on power delivery and consumer costs. 10 Additionally, the failure to accurately assess the reliability of traditional generation assets can undermine the ability of power capacity markets under FERC jurisdiction to deliver the grid reliability services that they are intended to provide. 11

While helpful, FERC's actions to date are clearly insufficient. We urge FERC to swiftly and decisively take several additional actions, at minimum, to improve the electric power system's reliability and resilience. In particular, FERC should expeditiously finalize its proposed

<sup>&</sup>lt;sup>6</sup> See U.S. EPA, EGU NSPS Proposed Rule, preamble section XIV(F) (May 23, 2023); U.S. EPA, Resource Adequacy Analysis: Technical Support Document (April 2023) (https://www.regulations.gov/document/EPA-HQ-QAR-2023-0072-0034); U.S. EPA, Integrated Proposal Modeling and Updated Baseline Analysis: Memo to the Docket (July 7, 2023) (https://www.regulations.gov/document/EPA-HQ-QAR-2023-0072-0237); FERC, 2023 Annual Reliability Technical Conference (Nov. 9, 2023) (https://www.ferc.gov/news-events/events/2023-annual-reliability-technical-conference-11092023). See also, Sue Tierney, Analysis Group, Electric System Reliability and EPA Regulation of GHG Emissions from Power Plants: 2023 (Nov. 7, 2023) (https://www.analysisgroup.com/globalassets/insights/publishing/2023-tierney-electric-reliability-and-epa-ghg-regs.pdf).

<sup>&</sup>lt;sup>7</sup> Federal Power Act, section 201(a); FERC, *FY22-26 Strategic Plan* at 3 (Mar. 28, 2022) (https://www.ferc.gov/media/ferc-fy22-26-strategic-plan).

<sup>&</sup>lt;sup>8</sup> FERC, *Improvements to Generator Interconnection Procedures and Agreements*, 88 Fed. Reg. 61,014 (Sep. 06, 2023).

<sup>&</sup>lt;sup>9</sup> See, e.g., FERC, Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, 87 Fed. Reg. 26,504 (May 4, 2023); FERC, Reliability Standards to Address Inverter-Based Resources, 88 Fed. Reg. 74,250 (Oct. 30, 2023); FERC, Transmission System Planning Performance Requirements for Extreme Weather, 88 Fed. Reg. 41,262 (Jun. 23, 2023).

<sup>&</sup>lt;sup>10</sup> PJM, Offer of Settlement in the Winter Storm Elliott Complaints, Docket No. ER23-2975-000 (Sep. 29, 2023). <sup>11</sup> See id.

improvements to regional transmission planning and cost allocation. Among other elements, the final rule should require transmission providers to conduct regional transmission planning that accounts for anticipated changes in power generation and demand, and it should clearly define a broad set of benefits for cost allocation purposes that reflect the need to achieve reliability, affordability, and our clean energy goals. Additionally, FERC must complete updates to its siting authority over interstate transmission lines, as clarified by the Infrastructure Investment and Jobs Act, in advance of the Department of Energy's (DOE) efforts to designate National Interest Electric Transmission Corridors consistent with equity considerations. FERC already has the authority under the Federal Power Act to take each of the actions that we have identified.

FERC also should provide technical advice to other federal agencies regarding the agencies' regulatory or other actions that affect the power sector. In doing so, however, we believe that FERC's appropriate role is exactly that – to provide technical advice as one input to a decision that Congress has entrusted to another agency, not to serve as the overarching authority. In fact, just as other agencies should take into consideration, where consistent with law, the effects of their actions on the power sector, FERC must oversee the power sector in a manner that accounts for the expected effects of other agencies' actions. The broad swathe of agency activities that could affect the electricity supply system includes, for example, interest rates set by the Federal Reserve Board, trade policies and tariffs applied by the U.S. Trade Representative, labor regulations established by the Department of Labor, tax incentives defined by the Treasury Department, and DOE's grant and loan programs, as well as EPA's emissions regulations. The power system, with FERC's oversight, must accommodate the effects of these and many other federal policy decisions.

## FERC Must Ensure Reliability without Undermining the EPA Power Plant Standards

EPA's proposed greenhouse gas emissions standards would apply to coal and gas-fired electricity generation and could have some effects on electricity generation sources and costs. Accordingly, it is appropriate for FERC to provide its views on options to minimize any potential projected impacts, and for EPA to consider FERC's views among the other factors that EPA must take into account. Thus, we are pleased that in its Reliability Technical Conference last month, FERC considered the implications of the proposed power plant standards for reliability. In providing EPA technical advice, however, FERC must also recognize that the Clean Air Act authorizes EPA to adopt power sector greenhouse gas emissions standards based on the "best system of emission reduction," and in section 135(a)(6) of the Inflation Reduction Act, Congress specifically reiterated the direction to reduce power sector greenhouse gas emissions. In fact, many members of Congress, including several signatories to this letter, have previously urged EPA to finalize standards that achieve greater emissions reductions at least as quickly as EPA has proposed.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> FERC, Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, 87 Fed. Reg. 26,504 (May 4, 2023).

<sup>&</sup>lt;sup>13</sup> FERC, Applications for Permits to Site Interstate Electric Transmission Facilities, 88 Fed. Reg. 2,770 (Jan. 17, 2023).

<sup>&</sup>lt;sup>14</sup> See, e.g., Senator Tom Carper, Chairman, Senate Environment and Public Works Committee, et al., Letter to U.S. EPA Administrator Michael S. Regan (Aug. 8, 2023) (<a href="https://www.epw.senate.gov/public/index.cfm/press-releases-democratic?ID=381306E4-0705-4DDB-A44B-A63A7814EEAB">https://www.epw.senate.gov/public/index.cfm/press-releases-democratic?ID=381306E4-0705-4DDB-A44B-A63A7814EEAB</a>).

In short, economic conditions are driving, Congress and states have directed, and the private sector is demanding an ongoing transition to a cleaner electricity system. FERC must exercise its own authorities to respond to this necessary transition. If FERC believes that these long-anticipated EPA requirements to reduce power plant greenhouse gas emissions would, in fact, have any adverse effects on reliability, FERC should be anticipating and addressing such effects. At minimum, knowing the power plant standards will soon be final, FERC should be well on its way to adopting any improvements that FERC believes may be needed to bolster the resilience of the electric power system.

We firmly believe that the United States can – and must – have a power system that is reliable, affordable, and zero carbon. Neither technological nor economic constraints preclude a clean and reliable U.S. electric power system in the near term. We urge each agency to carry out its statutory mandates to support this critical transition—EPA to cut greenhouse gas emissions from the power sector as quickly as possible, and FERC to undertake immediately all necessary actions to support a clean and reliable system.

Sincerely,

Thomas R. Carper

Chairman

Committee on Environment

and Public Works

Benjamin L. Cardin United States Senator

Bernard Sanders

**United States Senator** 

Sheldon Whitehouse United States Senator

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Jeffrey A. Merkley

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CC The Honorable Michael Regan Administrator Environmental Protection Agency 1200 Pennsylvania Avenue Northwest

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