

MEMORANDUM

June 2, 2023

TO:	Members of the Subcommittee on Environment, Manufacturing, and Critical Materials
FROM:	Committee Majority Staff
RE:	Hearing entitled "Clean Power Plan 2.0: EPA's Latest Attack on Electric Reliability"

I. INTRODUCTION

On Tuesday, June 6, 2023, at 10:30 a.m. in 2322 Rayburn House Office Building, the Subcommittee on Environment, Manufacturing, and Critical Materials will hold a hearing entitled "Clean Power Plan 2.0: EPA's Latest Attack on Electric Reliability." The hearing will examine preliminary observations concerning the Environmental Protection Agency's (EPA) proposed greenhouse gas emissions standards for the power sector and the reliable delivery of electricity.

II. WITNESSES

- **Patrick O'Loughlin**, President and CEO, Buckeye Power Inc. and Ohio Rural Electric Cooperatives
- Todd Snitchler, President and CEO, Electric Power Supply Association (EPSA)
- Michael J. Nasi, Partner, Jackson Walker
- Jay Duffy, Litigation Director, Clean Air Task Force

III. BACKGROUND

A. Proposed GHG Standards for the Power Sector

Following the U.S. Supreme Court ruling in *West Virginia v. EPA*, EPA issued on May 11, 2023, an omnibus proposed rulemaking that would limit greenhouse gas (GHG) emissions for fossil fuel-fired power plants, including from both new and existing natural-gas-fired plants and from existing coal-fired plants, pursuant to <u>Section 111</u> of the Clean Air Act (CAA).¹

¹ The Proposed Rules involve five separate proposed actions. See "New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emissions Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule," at <u>88 Fed. Reg. 33,240</u> (May 23, 2023).

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Section 111 of the CAA authorizes the EPA Administrator to list categories of stationary sources that, in the judgment of the Administrator, cause or contribute "significantly to air pollution which may reasonably be anticipated to endanger public health or welfare" and to establish "standards of performance" for such sources.²

Section 111(b) of the CAA applies to new, modified, and reconstructed sources and authorizes the EPA Administrator to establish Federal standards of performance, frequently referred to as "New Source Performance Standards" (NSPS) for listed categories of sources.³ Section 111(d) applies to existing sources and authorizes the Administrator to prescribe regulations establishing a procedure under which States submit to the Administrator a plan establishing standards of performance for certain existing sources and certain air pollutants. Under section 111(d) and the agency's implementing regulations, EPA has issued "Emission Guidelines" for existing sources for six source categories that remain in effect.⁴

For purposes of Section 111, a "standard of performance" is defined as: "a standard for the emissions of air pollutants which reflects the degree of emission limitation **achievable** through the application of the **best system of emission reduction** which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines **has been adequately demonstrated**."⁵

The May 11, 2023, proposal for fossil-fuel fired power plants would set limits for new gasfired combustion turbines, certain existing gas-fired combustion turbines, and existing coal, oil, and gas-fired steam generating units. The proposed standards are based on technologies including carbon capture and sequestration/storage (CCS), low-greenhouse-gas (GHG) hydrogen co-firing, and natural gas co-firing, which can be applied directly to power plants that use fossil fuels to generate electricity.

The EPA proposals are complex. For example, EPA is proposing requirements for four categories of existing coal units, depending on when the units retire: commit to retire before 2032; commit to retire before 2035 and limit operation to 20 percent capacity by 2030; commit to retire before 2040 and co-fire with 40 percent natural gas by 2030; and commit to retire after 2040 and install CCS to achieve 90 percent carbon dioxide capture by 2030.⁶

For new gas-fired units, EPA is proposing three general subcategories of units: low load (capacity factor less than 20%); intermediate load (capacity factor between 20% and 50%); and

² 42 U.S.C. § 7411(b).

³ Under section 111(b), EPA has listed and set NSPS standards for more than 70 stationary source categories and subcategories. A list of sources regulated under section 111 can be found in <u>40 CFR Part 60</u>

⁴ The current categories include sulfuric acid plants (acid mist), issued in 1977; phosphate fertilizer plants (fluorides), issued in 1979; Kraft pulp plants (total reduced sulfur), issued in 1979; primary aluminum plants (fluorides), issued in 1980; municipal solid waste landfills (landfill gases), issued in 2016; and fossil-fuel fired electric generating units (carbon dioxide), issued in 2019.

⁵ 42 U.S.C. §7411(a) emphasis added.

⁶ See EPA site: <u>https://www.epa.gov/stationary-sources-air-pollution/greenhouse-gas-standards-and-guidelines-fossil-fuel-fired-power#rule-summary</u>, and <u>Overview Presentation: Clean Air Act Section 111 Regulation of</u> Greenhouse Gas Emissions from Fossil Fuel-Fired Electric Generating Units (pdf)

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base load (capacity factor greater than 50%). Options for compliance, depending on subcategories, include 90 percent CCS beginning in 2035 or co-firing with 30 percent low-GHG hydrogen beginning in 2032 and increasing to 96 percent hydrogen by 2038.⁷

How these proposed standards affect decisions to continue operations or invest in new baseload fossil generating units and the related infrastructure required for compliance will be an issue for policymakers.

B. EPA's EGU strategy

The proposed rules are part of a larger, comprehensive suite of regulatory actions for power plants. EPA Administrator Regan announced this suite of actions, known as the EGU (for "electric generating unit") strategy, to address climate, health, and environmental burdens from power plants.⁸ These regulatory actions include the Interstate Transport Rule, Regional Haze, Risk and Technology Review for the Mercury Air Toxics Rule, effluent limitations, and a legacy coal combustion residue rule.

These rules are impacting operations of existing baseload generation in the bulk power system, compelling, in many instances, retirements of generating sources earlier than had been planned. For example, when EPA proposed its ozone Interstate Transport Rule, also known as the "Good Neighbor Rule," in February 2022, it modeled that the rule would accelerate the retirements of an additional 18 GW of coal generation by 2030. Other estimates projected the impacts as high as 42 GW of early coal generation retirements in affected regions by 2027—upwards of 50 percent of coal generation capacity in some cases.⁹ (The rule was finalized in March 2023 and has been subject to litigation in several Federal Circuit Courts.)

C. Electric reliability

Electric sector authorities, including grid operators and reliability entities, have reported increasing risks to electric sector reliability with the accelerated retirement of traditional baseload generation over the past several years, as well as insufficient firm generation entering interconnection queues.

The North American Electric Reliability Corporation (NERC) warned in its reliability assessment for the Summer of 2022¹⁰ that more than half the nation was at elevated risk of forced blackouts —including large regions extending from Louisiana to Wisconsin with increased risks during <u>normal</u> summer conditions. NERC's 2023 Summer reliability assessment finds that roughly two-thirds of the nation remain at elevated risk during above normal demand, noting that "new environmental rules that restrict power plant emissions will limit the operation of coal-fired

⁷ Id. Overview Presentation.

⁸ Administrator Michael Regan, Remarks to CERAWeek About EPA's Approach to Deliver Certainty for Power Sector and Ensure Significant Public Health Benefits linked <u>here</u>.

 ⁹ See NRECA Comments on Proposed Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard, June 21, 2022. (Docket ID NO. <u>EPA-HQ-OAR-2021-0668</u>)
¹⁰ "2022 Summer Reliability Assessment," NERC, May 2022.

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generators in 23 states. . . . "¹¹

In February 2023, the nation's largest grid operator, the PJM Interconnection, released a report noting that the current pace of retirements of dispatchable generation, mainly coal- and gas-fired generation, may outpace the addition of new resources onto the bulk power system. The PJM report cites three specific EPA policies that are leading contributors to this challenge, coal combustion residuals regulation, effluent limitations, and the Interstate Transport Rule, as key drivers in the loss of some 23 GW generation.¹²

IV. ISSUES

The following issues may be examined at the hearing:

- The impacts of the proposed standards on the reliable delivery of power
- The technical and economic challenges relating to the new standards and their implementation
- The impacts of the proposed standards on the electricity generation mix

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Peter Spencer, Jacob McCurdy, or Mary Martin of the Committee staff at (202) 225-3641.

¹¹ "2023 Summer Reliability Assessment," NERC, May 2023, at page 6 referencing the Ozone Transport Rule.

¹² PJM Interconnection, "Energy transition in PJM: Resource Retirements, Replacements, and Risks," February 24, 2023, at 7.