January 30, 2023

The Honorable Cathy McMorris Rogers, Chair
Committee on Energy & Commerce
U.S. House of Representatives
Washington DC 20515

The Honorable Bill Johnson, Chairman
Subcommittee on Environment, Manufacturing, and Critical Minerals
U.S. House of Representatives
Washington DC 20515

The Honorable Jeff Duncan, Chairman
Subcommittee on Energy, Climate, and Grid Security
U.S. House of Representatives
Washington DC 20515

Dear Chair Rogers, Chairman Johnson, and Chairman Duncan:

We commend the committee for scheduling the hearing tomorrow titled "American Energy Expansion: Strengthening Economic, Environmental, and National Security." To assist the committee, I am attaching a statement for the hearing record. My brief statement focuses primarily on coal retirements, EPA regulations, and the risk both pose for electric reliability. The statement also includes a few recommendations. We would be pleased to provide any additional information that could be helpful to the committee's activities.

Sincerely,

Michelle Bloodworth
President & CEO

Attachment: "Statement of Michelle Bloodworth"

Copy to:

The Honorable Frank Pallone, Ranking Member
Committee on Energy & Commerce

The Honorable Paul Tonko, Ranking Member
Environment, Manufacturing, and Critical Minerals Subcommittee

The Honorable Diana DeGette, Ranking Member
Energy, Climate, and Grid Security Subcommittee

Energy and Commerce Committee Hearing:
"American Energy Expansion: Strengthening Economic, Environmental, and National Security"

Statement of Michelle Bloodworth
President and CEO, America's Power

January 31, 2023

Chair McMorris Rogers, Ranking Member Pallone, and members of the committee, my name is Michelle Bloodworth. I am president and CEO of America's Power which advocates on behalf of coal-fired electricity and its supply chain. We want to commend the committee for holding this hearing today on such a critically important topic and express our appreciation for the opportunity to submit this brief statement. My statement focuses primarily on the value of the coal fleet and the massive retirements of coal power plants which have become a major risk to the reliability of the electricity grid.

All of the Above

The war in Ukraine has taught us many lessons, especially the need for countries to be energy secure and the danger to national and economic security when countries fail to rely on a healthy mix of energy resources. The U.S. needs to keep these lessons in mind and develop a resilient all-of-the-above energy strategy that promotes economic growth and energy security. Unfortunately, our energy strategy is being biased by ideological preferences and unrealistic goals rather than by rational considerations. The U.S. needs to take advantage of fossil fuels, nuclear power, hydro, wind, solar, geothermal, battery storage, demand response, and likely others in the future. The combination of all (not just a few) of these resources can provide reliable, resilient, and affordable electricity.

The coal fleet is an essential part of an all-of-the-above strategy for the following reasons:

- **Dependability**
  Coal plants have a high accredited capacity value (90%) that helps prevent electricity shortfalls. Accredited capacity is a measure of how dependable a resource is when electricity demand peaks, such as during extreme weather. Based on capacity values, coal is six times more dependable than wind (16.7%) and at least twice as dependable as solar (50% but will decline to 20% in the future).[i] Battery storage will eventually improve the capacity values of wind and solar, and technology innovation is one of the reasons the grid transition needs to be gradual.
- **Fuel security**
  The coal fleet has maintained an average on-site coal stockpile equivalent to 76 days of coal burn during the past five years. Therefore, the coal fleet does not

have to rely on weather conditions (wind and sun) or just-in-time fuel delivery (natural gas) to produce electricity. Based on preliminary data, coal was able to provide almost half (47%) of the additional electricity during the height of Storm Elliott in the PJM region, 35% in MISO, and almost 40% in SPP.[ii] The coal fleet's on-site fuel gave coal plants immediate access to fuel when needed.

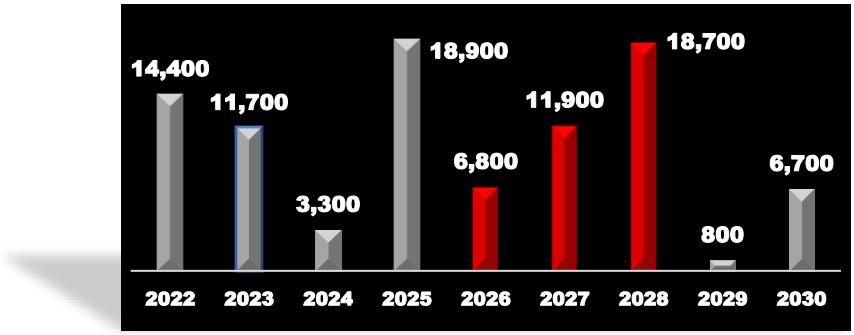
- **Reliability**
  Coal provides most of the attributes that are needed for grid reliability. These include essential reliability services (frequency support, voltage control, and ramping/balancing) and fuel security. The Midcontinent Independent System Operator (MISO) has identified six reliability attributes; coal provides five of the six.

- **Optionality**
  Because of its relatively stable and low price, coal is also a reliable option when other electricity resources are not available or are too expensive. For example, according to EIA, average delivered monthly coal prices over the past 15 years have ranged from $1.88 to $2.45/MMBtu, whereas natural gas prices have ranged from $2.04 to $15.73/MMBtu. During that period, coal prices averaged $2.16/MMBtu and natural gas prices averaged $4.39/MMBtu.

Coal Retirements

Fifteen years ago, the generating capacity of the nation's coal fleet was more than 300,000 megawatts (MW). For a variety of reasons, the coal fleet has shrunk to less than 200,000 MW today but still provided 22% of U.S. electricity last year. By comparison, wind and solar provided 12%. Unfortunately, utilities have announced plans to retire more than half (106,000 MW) of the remaining coal fleet by 2030.

The chart below shows announced coal retirements (in MW) nationwide for each year during 2022-2030. These announced retirements do not take into account the impact of new EPA rules (see next section). The red bars show that announced retirements total 37,400 MW during 2026-2028. This three-year period is highlighted because we estimate that coal retirements will increase considerably during that time, given EPA's likely compliance schedule for six rules.



Coal retirements on such a massive scale and over a relatively short period of time will increase reliability risks significantly by depriving the grid of the reliability attributes of coal-fired generation.

EPA Rules

We estimate that at least six EPA rules will cause coal retirements to rise sharply during 2026-2028 and exacerbate the risk of grid reliability problems. The number of coal retirements will depend on the stringency of the rules.

For example, EPA estimates that its proposed Ozone Transport Rule (aka "Good Neighbor Rule") will cause the retirement of 23,000 MW of coal, more than 10% of the existing coal fleet, by 2025.[iii] (Certain of these rules could also cause the premature retirement of gas- and oil-fired generation.) The other five are the Coal Combustion Residuals (CCR) Rule, Effluent Limitations Guidelines (ELG), Regional Haze Rule, a replacement for the Affordable Clean Energy Rule (carbon regulation), and revised Mercury and Air Toxics Standards (MATS).

EPA could use the Transport Rule, Regional Haze Rule, and a more stringent MATS to require the installation of the most expensive emission controls on most, if not all, coal capacity that does not already have advanced controls. We estimate that 92,000 MW of coal-fired generation, even though already well-controlled, lack the most expensive controls (e.g., selective catalytic reduction and/or flue gas desulfurization (FGD) systems). For example, an FGD system for a large coal unit can easily cost more than $300 million. It is almost certain that a significant number of coal plants would retire early rather than install these expensive controls. The retirement of coal due to EPA rules would add to the 106,000 MW of retirements already announced. Note that this at-risk coal generation does not include retirements (or idling) that are likely to result from the CCR or ELG rules.

Recommendations

We urge Congress to take steps, including the following, to promote grid reliability and minimize coal retirements:

- We commend the committee for holding this important hearing today and encourage the committee to continue its oversight by holding agencies accountable for identifying and properly addressing the many challenges facing the electric sector. One of these challenges is the impact of EPA rules on energy prices and grid reliability. Congress should ensure that EPA pays careful attention to the concerns of the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Corporation (NERC), grid operators, utilities, and utility commissioners and design its rules so as to avoid causing reliability problems and minimize retirements of coal and other dispatchable resources. If EPA is willing, the agency could choose regulatory options that cause the fewest retirements; defer to states about how to implement certain rules; make regulations as flexible as possible, not prescriptive; and provide adequate time for retiring generating capacity to be replaced.
- Congress should pass legislation directing FERC to work with grid operators to identify specific attributes that are necessary for reliability and ensure that market rules provide just and reasonable compensation for those attributes. MISO, for example, has suggested a number of reliability attributes but, at the

same time, indicated that "MISO, and the industry as a whole, are still defining attributes."[iv] Legislation should include a deadline for attributes to be identified and a deadline for FERC to take action on changes to market rules to compensate those attributes.

- Congress should pass legislation requiring federal agencies to conduct formal reliability assessments for rules and policies that could adversely impact grid reliability. The reliability assessments should explain all risks to grid reliability that could result from the rules or policies and describe steps an agency has taken to avoid causing reliability problems. If a rule is projected to cause the retirement of dispatchable resources (coal, natural gas, or nuclear power), the reliability assessment should show that adequate accredited replacement capacity will be placed in service by the time retirements are projected to occur.

In closing, we appreciate the opportunity to submit these comments for the record and would be pleased to provide any additional information that might assist the committee.

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[i] See, for example, page 6 of PowerPoint presentation "MISO System Attributes Workshop," September 21, 2022. Wind's capacity credit is 16.7%, solar declines from 50% to 20% over time, hybrid declines from 60% to 30%, and battery declines from 100% to 75%. Coal, gas and nuclear are accredited between 90% and 100%.

[ii] These percentages represent the contribution of resources that provided additional electricity due to Elliott.

[iii] See Table 4-14, *Regulatory Impact Analysis for Proposed Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard*, EPA-452/D-22-001, February 2022. https://www3.epa.gov/ttn/ecas/docs/ria/transport_ria_final-csapr_2011-06.pdf

[iv] "Mind the Gap," OMS Resource Adequacy Summit, August 8, 2022.