

## SPECIAL REPORT: EPA'S THREAT TO GRID RELIABILITY

### Introduction

The 118th Congress has held eighteen hearings on power generation and grid reliability in the House of Representatives and the Senate. We have heard from electricity reliability experts from the Federal Energy Regulatory Commission (FERC), the North American Electricity Reliability Corporation (NERC) as well as regional transmission operators (RTOs) and independent system operators (ISOs) such as PJM Interconnection (PJM), the Midcontinent Independent System Operator (MISO), the Southwest Power Pool (SPP) and the Electric Reliability Corporation of Texas (ERCOT). They are all in agreement: the U.S. is running into dangerous grid reliability challenges, that experts including members of FERC, now call a crisis. The loss of dispatchable fossil fuel generation is happening far faster than reliable alternatives and essential enabling infrastructure is being added to take its place. Instead of working to address this problem and heed the warnings of experts, the Environmental Protection Agency (EPA) is promulgating and finalizing regulations that will accelerate plant closures and decimate the nation's fossil fuel fleet, most notably the nation's coal power plants.



**“The evidence is straightforward. Due to onerous government regulations, reliable and affordable baseload coal fired power is coming off the grid too quickly with no replacement. America is headed for a reliability crisis that threatens not only our electric grid, but also public health, national security, and the economic freedom of the American people. The EPA is the tip of the spear for the Biden Administration’s anti-coal agenda, and the Congressional Coal Caucus is working to bring much needed accountability. This isn’t an ideological debate, this is about keeping America’s lights on.”**

Congressional Coal Caucus Co-Chair Bill Johnson (R-Ohio)

### Early Indicators

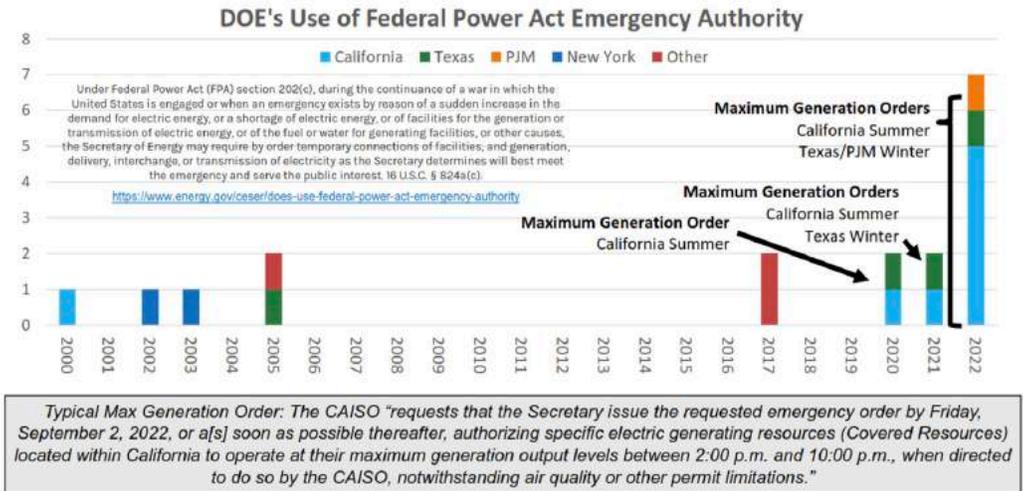
A little-noticed but substantial piece of evidence of the sensitivity of the reliability of our grid is the continued utilization of Section 202(c) of the Federal Power Act (FPA) by the Biden Administration’s Department of Energy (DOE) more than any previous administration.<sup>1,2</sup> The FPA’s Section 202(c) grants DOE the authority to issue emergency orders to address critical situations on the electric grid. This is the equivalent of the Federal government regularly breaking the glass and pulling the fire alarm. While this provision is vital in mitigating potential power outages and preserving grid stability, its increasing use signals a situation that is becoming untenable.

<sup>1</sup> <https://www.energy.gov/ceser/does-use-federal-power-act-emergency-authority>.

<sup>2</sup> <https://www.energy.gov/ceser/does-use-federal-power-act-emergency-authority-archived>.

# Use of Federal Power Act Emergency

On Marginal Days System is Stretched to Limits



## Building the Problem

The regulatory landscape shaped by the EPA targeting the fossil fuel industry is a significant factor influencing the deteriorating grid reliability and growing dependence on FPA Section 202(c). EPA Administrator Michael Regan has been clear about his intention to reshape the nation’s power mix using a “suite of authorities” and closing power plants when possible in order to drive “decarbonization.” At an energy conference in March of 2022, he said, “The industry gets to take a look at this suite of rules all at once and say, ‘Is it worth doubling down on investments in this current facility or operation, or should we look at the cost and say no, it’s time to pivot...?’” He added, “If some of these facilities decide that it’s not worth investing in [control technologies] and you get an expedited retirement, that’s the best tool for reducing greenhouse gas emissions.”<sup>3</sup>

***“We have a suite of regulations that we can present to the power sector in one fell swoop,”*** Regan said.



Administrator Regan’s comments make clear that the EPA is determined to exploit whatever authority it can to accelerate fossil fuel power plant closures regardless of the negative impact on our grid reliability.

The EPA’s regulations, particularly those targeting emissions reduction and environ-

3 What the EPA’s New Plans for Regulating Power Plants Mean for Carbon - Scientific American

mental compliance, play a substantial role in power generation dynamics and impact grid reliability. It is apparent from the congressional testimony and comments filed in the regulatory dockets that regulatory officials should be coordinating with states and grid reliability experts to develop and promulgate power generation regulations. Currently, they are not.

The EPA's regulations are prompting the retirement or reduced use of fossil-fueled power plants, which are the very lynchpins of the dispatchable generation needed for reliable power delivery. This has left the grid with an increasingly alarming shortage of reliable generation capacity, making it more vulnerable to disruptions and emergencies. The EPA's regulations also impose financial burdens on utility companies, making investing in grid infrastructure upgrades and resilience measures more difficult. This further contributes to the grid's vulnerability to disruptions and emergencies.



**“EPA’s power generation regulations further risk the security and reliability of our country’s electric grid, which could lead to energy shortages and rolling blackouts like those experienced across several states this past winter. The EPA must take a more balanced approach when setting new regulations, as Americans still rely on these types of baseload power for most of their energy needs.”**

Congressman Morgan Griffith (R-Va.)

The reactive nature of Section 202(c) interventions can lead to challenges in maintaining a consistent and predictable power supply. These measures are implemented as a response to critical situations. They cannot be used, however, to address the root causes of the problems or provide long-term solutions for enhancing grid reliability. Instead, they perpetuate a cycle of emergency interventions where the grid is repeatedly pushed to its limits before corrective measures are taken. This can undermine the grid's resilience and hinder proactive regulation, planning and investment in infrastructure upgrades and modernization.

A balanced approach that considers both environmental goals and grid reliability is essential to safeguard a sustainable and responsible energy future. Achieving this balance means having reliability experts, states, grid operators and utilities work with the EPA to develop regulations tailored to the grid's specific needs that do not impose unnecessary financial burdens on utility companies or exacerbate electricity reliability shortfalls. It also means investing in grid infrastructure upgrades and resilience measures, regardless of whether they directly reduce emissions. By taking these steps, we can minimize the reliance on emergency interventions, preserving a reliable and resilient electric grid for generations.



**“We’re going to be shutting these [coal] plants down all across America.”**

President Joe Biden, at a campaign event in Carlsbad California, November 2022

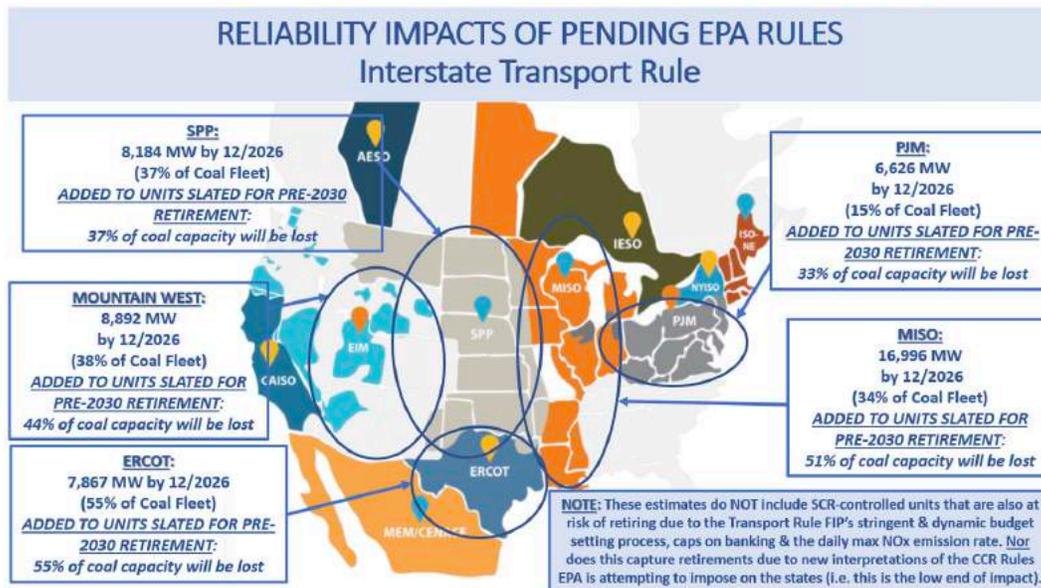


“We are reaching a reliability crisis... Any engineer... will tell you that to keep the lights on, on a 24/7, 365-day basis... you absolutely have to have what is called dispatchable generation... you cannot run a system strictly on intermittents. There’s a role for intermittents... this is not anti-wind or anti-solar. It’s just a position that we have to deal with reality, and you have to have a mix in your system of dispatchable resources as well as intermittents.”

Commissioner Mark Christie, Federal Energy Regulatory Commission

## EPA Regulations at Issue

### Good Neighbor Plan for 2015 Ozone NAAQS



Under the Clean Air Act (CAA), the EPA is required to set National Ambient Air Quality Standards (NAAQS) for several pollutants, including ozone. The CAA also includes a “good neighbor provision which requires the EPA and states to address interstate transport of air pollution that affects downwind states’ ability to attain NAAQS.<sup>4</sup> Specifically, the CAA requires each state in a State Implementation Plan (SIP) to prohibit emissions that will significantly contribute to the nonattainment of a NAAQS, or interfere with maintenance of a NAAQS in a downwind state.<sup>5</sup> If a state fails to submit or EPA disapproves of a state’s SIP, EPA can promulgate a Federal Implementation Plan (FIP) that will be enforceable upon the state.<sup>6</sup>

<sup>4</sup> <https://www.epa.gov/interstate-air-pollution-transport/interstate-air-pollution-transport>.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

Under this authority, EPA has recently denied the SIPs of over twenty states and, in March 2023, issued a final Good Neighbor FIP enforcing the reduction of nitrogen oxide (NOx), which contributes to the formation of ozone, for power plants in twenty-six states.<sup>7,8</sup> The rule would effectively result in the premature closure of over 40,000 megawatts (MW) of coal-fired units, enough capacity to power 30 million U.S. homes, by 2026 unless they install cost-prohibitive selective catalytic conversion (SCR) technology to the unit. These losses, as depicted above, are projected by grid reliability experts including affected RTOs and ISOs, to severely threaten electricity reliability.

Last June, the Electric Reliability Council of Texas (ERCOT), the Midcontinent Independent System Operator (MISO), PJM Interconecion, and the Southwest Power Pool (SPP), the largest RTOs and ISOs in the country, submitted joint [comments](#) in response to EPA’s Good Neighbor Plan. Specifically, the comments read,

*“The Joint ISO/RTOs are concerned that the Proposed Rule could cause generator retirements due to the limitations on operations and/or the cost of installing Selective Catalytic Reduction (“SCR”) by 2026. However, to the extent units do not retire, their ability to operate could be limited by the Proposed Rule, which depending on the region and level of flexibility within the rule, could present a distinct reliability challenge.”<sup>9</sup>*

These comments have resurfaced in bipartisan oversight letters from members of Congress to the Administration over concerns with EPA’s Good Neighbor FIP. For example, in early March, Senator Joe Manchin (D-W.Va.), Chairman of the U.S. Senate Energy and Natural Resources Committee, in a [letter](#) to EPA Administrator Michael Regan, referenced the comments while expressing concern over the rule’s impacts and urged EPA to postpone finalizing the rule.<sup>10</sup> Rather than heeding the warnings of industry experts, EPA moved ahead, finalizing the rule in late March. The widespread industry opposition to the rule has resulted in introductions in both the [House](#) and [Senate](#) of Joint Resolutions of disapproval.



**“West Virginia’s natural resources power the world and have become a target of the Environmental Protection Agency,” said Congresswoman Miller. “Constant and needless regulations on our coal and gas fired power plants are hindering the United States from being energy independent and dominant. Regardless of what the Biden Administration says, coal is not going away anytime soon and if we aren’t producing it, we’ll be buying it from our adversaries. The United States does energy production cleaner and more efficiently than anywhere else in the world and the coal caucus will ensure we continue to do so.”**

Congresswoman Carol Miller (R-W. Va.)

Not only is Congress fighting back against the implementation of the rule, but many states have joined the fight as well, with twelve states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Mis-

7 88 Fed. Reg. 9,336 (February 13, 2023).

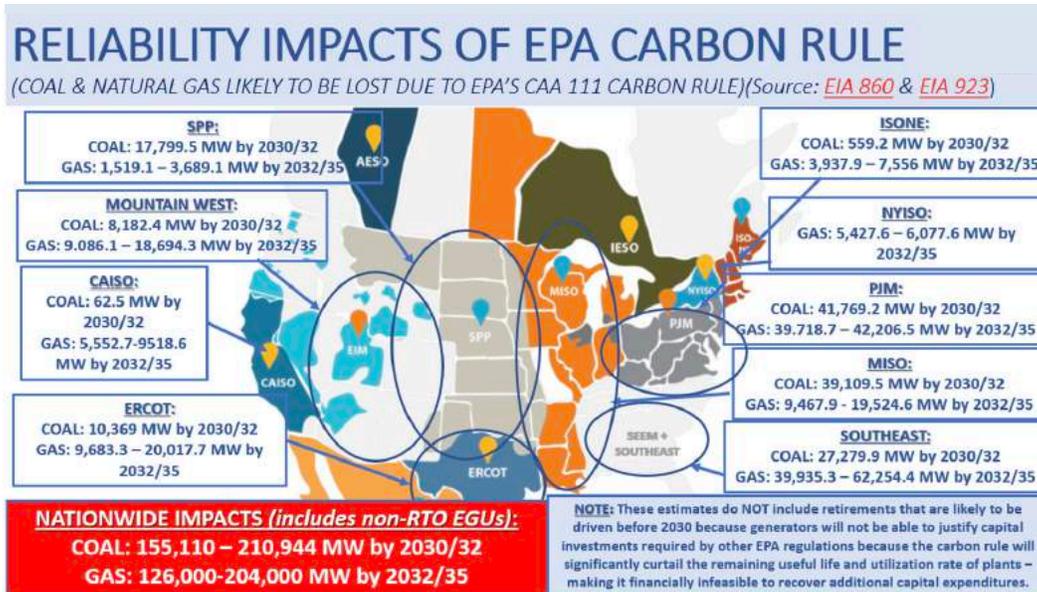
8 88 Fed. Reg. 36,654 (June 5, 2023).

9 <https://nma.org/wp-content/uploads/2023/06/20220621-Joint-ISORTOs-Comments-EPA-Ozone-NAAQS-Proposed-Rule-SPP-ERCOT-MISO-PJM.pdf> at 1-2.

10 <https://nma.org/wp-content/uploads/2023/06/Interstate-Transport-Good-Neighbor-Letter-.pdf>.

souri, Nevada, Oklahoma, Texas, Utah, West Virginia, and Wyoming) having filed lawsuits defending their state’s SIPs in eight federal circuit court of appeals and four lawsuits in four federal circuit court of appeals challenging EPA’s FIP, with more challenges expected to be filed. These lawsuits could have been avoided if EPA had worked with states to modify and approve each state’s SIP rather than issue SIP denials and enforce a nationwide FIP, which states are required to adhere to. EPA’s actions violate cooperative federalism and infringe upon state authority over their power mix.

## New Greenhouse Gas Regulations for Fossil Fuel-Fired Power Plants – “Clean Power Plan 2.0”



EPA has again proposed CAA Section 111 authority to promulgate regulations addressing power plant greenhouse gas (GHG) emissions. If finalized, EPA’s recently proposed GHG emissions rule under this authority would have dire consequences for electricity reliability.

As proposed, this rule would require utilities to determine the fate of their existing coal power plants within the next few years to meet unrealistic timelines for compliance. It’s all but certain to force the closure of the nation’s coal fleet.<sup>11</sup>

Specifically, the proposed rule would require the following:

- Existing coal plants that plan to continue operation past 2040 would be required to employ carbon capture and sequestration (CCS) technology at a 90% capture rate by 2030;<sup>12</sup>
- Plants retiring before 2040 would be permitted to keep operating only if they co-fire with 40% natural gas; plants retiring by 2035 would be required to operate at less than or equal to 20% capacity by 2030 and maintain current emission rates;<sup>13</sup>

11 [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_Nasi\\_511b15e65c.pdf?updated\\_at=2023-06-05T14:32:28.133Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_Nasi_511b15e65c.pdf?updated_at=2023-06-05T14:32:28.133Z) at 11.

12 <https://eelp.law.harvard.edu/2023/05/epa-proposes-new-rules-to-combat-climate-changing-pollution-from-power-plants/>.

13 *Id.*

- Plants retiring before 2032 can maintain current emissions rates through closure.<sup>14</sup>

Should this proposed rule be finalized, states will have to submit SIPs placing 155,000 MW of coal-generated electricity into one of these three categories - enough electricity to power over 116 million U.S. households - all but sealing the fate of the coal fleet by 2027 without regard to replacement generation and reliability of the grid.<sup>15,16</sup>

While development and funding of CCS is critically important to the nation's energy future, EPA's CCS mandate is unlawful. By no definition is CCS economically and commercially viable at scale, as required by the CAA as use as a Best System of Emissions Reduction. Further, it is unrealistic for current coal plants to be able to employ CCS technology by 2030. At present, there is no single U.S. commercial-scale coal power plant



retrofitted with CCS technology that operates at a 90% capture rate, as required in the proposed rule. Additionally, the vast majority of electric generating units (EGUs) cannot easily switch to or co-fire with natural gas due to lack of access to sufficient gas pipeline capacity; doing so would require significant new pipeline infrastructure.<sup>17</sup> Requiring natural gas co-firing forces electricity generation shifting, which was deemed beyond the scope of EPA's authorities under *West Virginia v. EPA*.<sup>18</sup>

EPA must not constrain the state's authority under the CAA to set performance standards for existing units and to consider the remaining useful life of such units. Additionally, EPA must allow states sufficient time to develop plans to comply with CAA limits. Otherwise, rather than take on substantial risk by retrofitting coal plants with CCS or co-firing with 40% natural gas, the result of this regulation will likely be the forced retirement of a substantial amount of coal-powered electricity generation in the U.S. well before enough alternative and reliable electricity sources are able to replace it, further exacerbating the nation's grid reliability crisis



<sup>14</sup> *Id.*

<sup>15</sup> [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_Nasi\\_511b15e65c.pdf?updated\\_at=2023-06-05T14:32:28.133Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_Nasi_511b15e65c.pdf?updated_at=2023-06-05T14:32:28.133Z) at 11.

<sup>16</sup> <https://www.nrc.gov/docs/ML1209/ML120960701.pdf>

<sup>17</sup> <https://nma.org/wp-content/uploads/2023/07/Final-NMA-Comments-on-EPA's-CPP-Pre-Rule-Docket-Submitted.pdf> at 9.

<sup>18</sup> *Id.* at 11.

Experts have already weighed it on the rule’s potential impacts to electricity reliability, which will be felt across the country. In testimony before a Congressional hearing on the proposed rule in June, Michael Nasi, Partner at Jackson Walker, LLP, explained that the rule threatens the retirement of 155,110 MWs of coal-generated power and could kneecap the nation’s supply of dispatchable generation.<sup>19</sup> He warned that “beginning in 2030, culminating in 2040, America’s grid will have lost almost all of its fuel-resilient, dispatchable backbone provided by coal due to EPA’s suite of new regulations (most prominently, EPA’s New Carbon Rule)”.<sup>20</sup> Patrick O’Loughlin, President & CEO of Buckeye Power, Inc. and Ohio Rural Electric Cooperatives, issued a similar warning during the hearing:

*“If enacted, it will jeopardize nearly every coal-fired power plant by 2039 and most by 2030. In our case, Buckeye supplies more than 80% of our annual energy requirements from coal-fired power plants. Buckeye Power will be required to shut down all of our coal-fired units by 2030 with no hope of nearly replacing this energy within that timeframe.”<sup>21</sup>*

## Steam Electric Power Generating Effluent Guidelines

EPA has also continued to ignore serious threats to grid reliability by charging ahead with its rulemaking to revise the effluent limitation guidelines and standards (ELGs) for the steam electric power sector.<sup>22</sup> If finalized as proposed, this rule would set more stringent treatment technology standards for several waste streams from coal-fired EGUs. Unfortunately, this rule is not about setting technologically available and economically achievable technology standards, as the Clean Water Act (CWA) requires. Rather, this rule is an attempt to reshape American energy policy by setting standards that have not been proven in U.S. facilities and are not economically achievable, forcing coal plants to close prematurely. During this rulemaking, EPA repeatedly flouted warnings from Congress and the nation’s reliability regulators and grid operators that the grid is at a crisis point and will not be able to withstand the accelerated rate of coal plant closures.<sup>23</sup>

In comments on the proposed rule, stakeholders from across the entire power sector all raised serious concerns with EPA’s proposed action, including how this rule will threaten grid reliability, the unproven technology basis upon which EPA has based these new standards, the fact that EPA just revised the steam electric ELGs three years ago and has not justified the need to revise these standards again so quickly after utilities already invested in and began complying with the 2020 Rule, and other legal, technical, and policy concerns. The Public Service Commission of West Virginia strongly opposed EPA’s shortsighted strategy, writing that the proposed rule “seriously threatens the reliability and resilience of electricity supplies to U.S. customers.”<sup>24</sup>

In response to EPA’s ELG rule, many stakeholders submitted comments in the docket warning about the rule’s impacts on electricity reliability. In their comments, the Utility Water Act Group (UWAG) expressed particular concern, saying:

*“But hasty plant closures and costs to comply with new ELG requirements*

19 [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_Nasi\\_511b15e65c.pdf?updated\\_at=2023-06-05T14:32:28.133Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_Nasi_511b15e65c.pdf?updated_at=2023-06-05T14:32:28.133Z) at 11.

20 *Id.* at 12.

21 [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_O\\_Loughlin\\_a1b32514ac.pdf?updated\\_at=2023-06-05T13:27:30.695Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_O_Loughlin_a1b32514ac.pdf?updated_at=2023-06-05T13:27:30.695Z) at 3.

22 88 Fed. Reg. 18,824 (March 29, 2023).

23 See U.S. Senate Energy and Natural Resources Committee, Full Committee Hearing to Conduct Oversight of FERC (May 4, 2023) available at <https://www.energy.senate.gov/hearings/2023/5/full-committee-hearing-to-conduct-oversight-of-ferc> (last visited May 30, 2023).

24 Cite to PSC WV comments at 3.

*could cause broad disruptions with unintended impacts, such as reduced grid reliability, diversion of resources away from transition to new generation, and increased electricity costs to consumers.”<sup>25</sup>*

These concerns were echoed by additional industry stakeholders, including the National Rural Electric Cooperative Association (NRECA) and the American Public Power Association (APPA):

**NRECA:** *“This Proposed Rule has significant economic and operational implications for affected steam electric power plants and broader ramifications for electric reliability and affordability in the United States.”<sup>26</sup>*

**APPA:** *“As EPA knows, the suite of requirements affecting the power sector must be coordinated to ensure new regulatory regimes do not disturb the power sector’s obligation to provide affordable, reliable electric service to customers. As such, APPA has concerns that the Proposed Rule does not adequately address concerns about maintaining electric reliability and diverts resources that could be utilized to support the energy transition to a requirement that, if finalized, would generate stranded assets and increase costs for communities that can ill-afford to make new investments as contemplated under the Proposed Rule.”<sup>27</sup>*

Industry has urged EPA to refrain from finalizing and implementing the proposed rule without first adequately analyzing the rule’s impacts on grid reliability in addition to the cumulative impacts to reliability that would result from the implementation of EPA’s entire power sector strategy.

## Coal Combustion Residuals

In 2020, EPA regulations went into effect governing the disposal of coal ash from electric utilities into landfills and surface impoundments for the purpose of addressing risks of contamination due to failure of current coal ash surface impoundments. In those regulations, EPA established a deadline of April 2021 to close unlined CCR surface impoundments.<sup>28</sup> Due to the potential electricity reliability impacts of the regulation, EPA finalized two alternative closure provisions to grant utilities additional time to develop alternative capacity to manage their waste streams before they are required to cease receipt of coal ash and close their surface impoundments. The CCR Part A rule granted facilities the option to submit a demonstration to EPA for an extension to the deadline for unlined CCR surface impoundments to stop receiving waste.<sup>29</sup> The CCR Part B rule allowed a limited number of facilities to request EPA approval to use an alternate liner demonstration to continue operating unlined surface impoundments if they could show the operation would pose no reasonable probability of adverse effects to human health or the environment.<sup>30</sup>

Fifty-nine coal-fired power plants applied for deadline extensions under the CCR Part A rule.<sup>31</sup> While

25 UWAG comments at 9.

26 NRECA comments at 1.

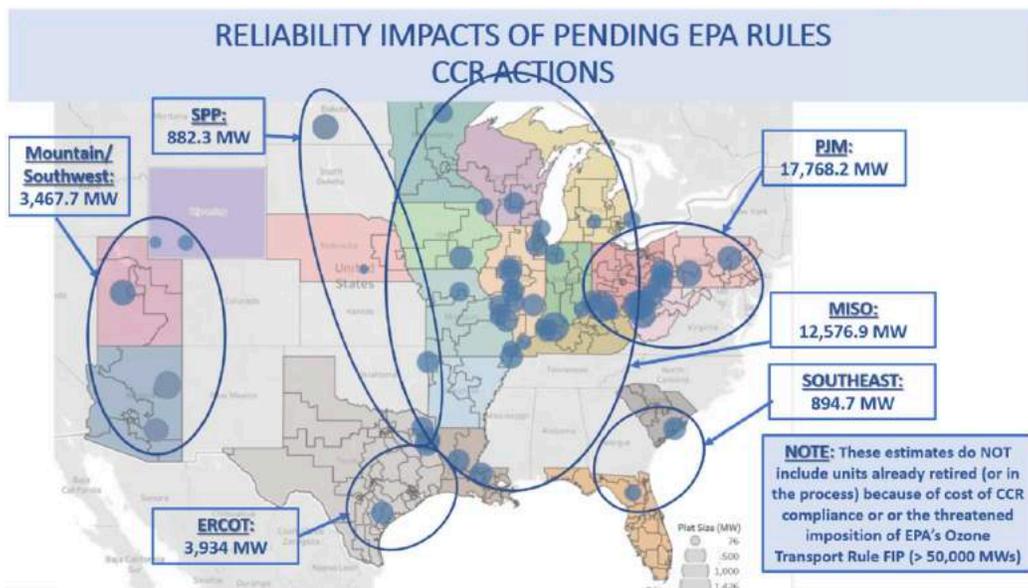
27 APPA comments at 6.

28 85 Fed. Reg. 53,516 (August 28, 2020).

29 <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-implementation>.

30 <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-b-implementation>.

31 <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-implementation>.



some utilities have chosen to withdraw their applications, the EPA has not approved a single extension request, nor issued determinations on many proposals.<sup>32</sup> EPA granted two conditional approvals based on new interpretations of the Resource Conservation and Recovery Act (RCRA), which has resulted in lawsuits. For the CCR Part B Rule, EPA has proposed the denial of all but two demonstrations submitted, with the other two having withdrawn their submissions.<sup>33</sup> Members of Congress and RTOs have already issued public comments questioning the denial of EPA's extensions and raising concerns about direct threats to electricity reliability in states served by the utilities impacted. The map above depicts the potential electricity reliability impacts from EPA's CCR regulations originally threatening as much as 55,000 MW, or enough capacity to power over 41 million U.S. households.

Congressman Bill Johnson, co-chair of the Congressional Coal Caucus, advocated on behalf of several Ohio utilities requesting extensions for the proposed rule, and one that received a proposed denial of their application to comply with the rule, urging EPA Administrator Michael Regan to accept the extension requests and to consider the rules electricity reliability implications.<sup>34</sup> In the letter, Congressman Johnson emphasized, "MISO and PJM both have commented that implementation of the current rule may affect electric grid reliability."<sup>35</sup> Specifically, in their comments, MISO claimed, "The loss of any significant portions of [the five plants in MISO's original comments, not to mention other plants in MISO's service area] would push resource adequacy coverage of regional demands into dangerous territory."<sup>36</sup> PJM additionally provided comments to the Rule, warning that 29,000 MW or 16% of PJM's capacity resources may be impacted by the CCR Rule.<sup>37</sup>

Electricity providers have fought back against the rule, challenging EPA's decision to deny the deadline extension request submitted by Gavin Power, LLC for the General James M. Gavin Power Plant in Cheshire, Ohio, and related actions by filing a lawsuit against EPA.<sup>38</sup> Petitioners in the suit, *Electric Energy, Inc. v. USEPA*, include nine power generation companies, who argue that EPA's interpretation of the CCR rule amounts to legislative rulemaking that violates the Administrative Procedures Act

32 *Id.*

33 <https://www.epa.gov/coalash/coal-combustion-residuals-ccr-part-b-implementation>.

34 <https://nma.org/wp-content/uploads/2022/06/B-Johnson-CCR-docket-EPA-Letter-Ohio-plants.pdf>.

35 *Id.* at 1.

36 *Id.* at 1-2.

37 *Id.* at 2.

38 <https://www.lexology.com/library/detail.aspx?g=82a733fe-1296-40a2-81b3-3445c6dc583b>.

because EPA established a binding rule disguised as rule guidance.<sup>39, 40</sup>

## Congressional Hearings Focused on Electricity Reliability

The current Congress has shed additional light on the current state of America's grid reliability. There have been multiple hearings focused on electricity reliability, ranging from oversight hearings of FERC to hearing testimony from industry experts on the impact of EPA's proposed regulations to oversight hearings of the EPA to hear testimony from EPA Administrator Michael Regan.

In addition to Congressional hearings shining a spotlight on electricity reliability, bipartisan members of Congress who support the importance of maintaining electricity reliability came together this Congress to establish the 118<sup>th</sup> Congress Congressional Coal Caucus, co-chaired by Congressman Bill Johnson (R-Ohio), Congressman Dan Meuser (R-Pa.), Congresswoman Harriet Hageman (R-Wyo.), Congressman Morgan Griffith (R-Va.), and Congresswoman Carol Miller (R-W.Va.) Members of the Caucus have held briefings for their colleagues from industry experts about the importance of coal-powered generation and the impacts of EPA's regulations on the industry and on electricity reliability. The members have been champions in advocating for policies that will protect the coal industry from EPA's explicit desire to strangle it, while also advocating the need for industry and stakeholders to come together to do more to fight back against EPA's punitive regulations.

The hearings and Congressional Coal Caucus meetings provide undisputable evidence that the cumulative impacts of EPA's regulations targeting the fossil fuel industry will exacerbate the electricity reliability crisis and will be felt by Americans nationwide. The following is a list of the congressional hearings in the last six months evaluating EPA's threats to electric reliability:

**Thursday, January 26:** House Energy and Commerce Committee Roundtable on American Energy Security

**Tuesday, January 31:** House Energy and Commerce Committee Full Committee Hearing: "American Energy Expansion: Strengthening Economic, Environmental, and National Security"

**Monday, February 6:** House Ways and Means Committee Hearing: "The State of the American Economy: Appalachia"

**Tuesday, February 7:** House Energy and Commerce Committee Joint Energy, Climate & Grid Security Subcommittee and Environment, Manufacturing & Critical Materials Subcommittee hearing: "Unleashing American Energy, Lowering Energy Costs, and Strengthening Supply Chains"

**Wednesday, February 8:** House Natural Resources Full Committee hearing: "Unleashing America's Energy and Mineral Potential"

**Monday, February 13<sup>th</sup>:** House Natural Resources Energy and Mineral Resources Subcommittee hearing: "Federal Energy Production Supports Local Communities"

<sup>39</sup> *Id.*

<sup>40</sup> <https://www.uschamber.com/assets/documents/U.S.20Chamber20Amicus20Brief20-20Electric20Energy2C20Inc.20v.20EPA2028D.C.20Circuit29.pdf> at 1.

**Thursday, February 16<sup>th</sup>:** House Energy and Commerce Committee Energy, Climate, and Grid Security Subcommittee hearing: “American Energy Expansion: Improving Local Economies and Communities’ Way of Life”

**Tuesday, March 28<sup>th</sup>:** House Oversight & Accountability hearing: “Fueling Unaffordability: How the Biden Administration’s Policies Catalyzed Global Energy Scarcity and Compounded Inflation”

**Tuesday, April 18<sup>th</sup>:** House Oversight and Accountability Committee Economic Growth, Energy Policy, and Regulatory Affairs Subcommittee oversight hearing: “Spending on Empty: How the Biden Administration’s Unprecedented Spending Increased Risk of Waste, Fraud, and Abuse at the DOE”

**Wednesday, April 26<sup>th</sup>:** House Energy and Commerce Committee Environment, Manufacturing, and Critical Materials Subcommittee hearing: “Exposing the Environmental, Human Rights, and National Security Risks of the Biden Administration’s Rush to Green Policies”

**Thursday, May 4<sup>th</sup>:** Senate Energy and Natural Resources Committee full committee hearing to conduct oversight of FERC

**Wednesday, May 17<sup>th</sup>:** House Oversight Committee Economic Growth, Energy Policy, and Regulatory Affairs Subcommittee hearing titled: “Driving Bad Policy: Examining EPA’s Tailpipe Emissions Rules and the Realities of a Rapid Electric Vehicle Transition”

**Tuesday, May 23<sup>rd</sup>:** House Energy and Commerce Committee Oversight and Investigations Subcommittee hearing: “Growing the Domestic Energy Sector Supply Chain and Manufacturing Base: Are Federal Efforts Working?”

**Thursday, June 1<sup>st</sup>:** Senate Energy and Natural Resources full committee hearing: “To Examine the Reliability and Resiliency of Electric Services in the U.S. in Light of Recent Reliability Assessments and Alerts”

**Tuesday, June 6<sup>th</sup>:** House Energy and Commerce Committee Environment, Manufacturing and Critical Materials Subcommittee hearing: “Clean Power Plan 2.0: EPA’s Latest Attack on America’s Electric Reliability”

**Tuesday, June 13<sup>th</sup>:** House Energy and Commerce Committee Energy, Climate, and Grid Security Subcommittee hearing: “Oversight of FERC: Adhering to a Mission of Affordable and Reliable Energy for America”

**Friday, June 16<sup>th</sup>:** House Energy and Commerce Energy, Climate, and Grid Security Subcommittee field hearing: “Enhancing America’s Grid Security and Resilience”

**Wednesday, June 21<sup>st</sup>:** House Oversight and Accountability Economic Growth, Energy Policy, and Regulatory Affairs Subcommittee hearing: “Clearing the Air: Examining the EPA’s Proposed Emissions Standards”

In a June House Energy and Commerce Committee Subcommittee on Energy, Climate, and Grid Security oversight [hearing](#) of FERC, Full Committee Chair Cathy McMorris Rodgers (R-Wash.) stated in her opening statement, “nearly every grid operator across the country has warned it is facing an energy adequacy crisis *now*, which will continue in the near future.”<sup>41</sup>

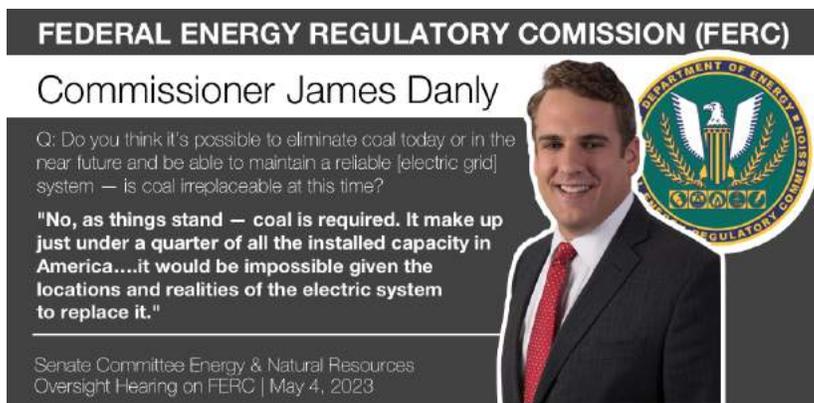
During the hearing, FERC Commissioner Mark Christie, in response to a question from Rep. Morgan Griffith (R-Va.), a Congressional Coal Caucus Co-chair stated:

*“[T]he biggest problem we have right now is we’re losing existing generation capacity that could be running and it’s shutting down prematurely...”*

When asked if the country can rely on a system run by intermittent power, FERC Commissioner James Danly said, “no way, and it has never been tested to have a large-scale electric system run on intermittents; there has to be some amount of backup.”

Recent weather events have proven that not only is the loss of reliable and resilient coal-powered electricity a threat to reliability, but that coal has proven an essential backup when our electricity grid fails us. [Testimony](#) from Michael Nasi for an Energy and Commerce Committee Subcommittee on Environment, Manufacturing, and Critical Materials [hearing](#) on EPA’s Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants, also known as the “Clean Power Plan 2.0,” highlights that important fact. During a winter storm in February 2021, ERCOT, SPP, and MISO experienced massive electricity generation failures that resulted in 4.5 million power outages in Texas alone and tragic casualties.<sup>42</sup> As Mr. Nasi’s testimony points out, the Texas section of the American Society of Civil Engineers (ASCE, 2022), in an analysis of the storm, found that:

*“ASCE Texas section identified two primary and related problems: 1) a failure to support reliable dispatchable power generation, and 2) the negative impact from sources of intermittent electric power generation.”<sup>43</sup>*



**FEDERAL ENERGY REGULATORY COMMISSION (FERC)**

Commissioner James Danly

Q: Do you think it's possible to eliminate coal today or in the near future and be able to maintain a reliable [electric grid] system — is coal irreplaceable at this time?

**"No, as things stand — coal is required. It make up just under a quarter of all the installed capacity in America....it would be impossible given the locations and realities of the electric system to replace it."**

Senate Committee Energy & Natural Resources  
Oversight Hearing on FERC | May 4, 2023

41 <https://energycommerce.house.gov/events/energy-climate-and-grid-security-subcommittee-hearing-oversight-of-ferc>.

42 [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_Nasi\\_511b15e65c.pdf?updated\\_at=2023-06-05T14:32:28.133Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_Nasi_511b15e65c.pdf?updated_at=2023-06-05T14:32:28.133Z) at 4.

43 <https://www.texasce.org/wp-content/uploads/2022/02/Reliability-Resilience-in-the-Balance-REPORT.pdf> at 5.

Furthermore, data from the Energy Information Agency (EIA) shows that coal and nuclear power nearly doubled in the grid during the storm when needed most, while weather-dependent resources like wind and solar were unreliable during the entirety of the weather event.<sup>44</sup> Oklahoma Governor Kevin Stitt, after the event, stated, "...I've talked to several other Governors and coal was really bailing us out in the production."<sup>45</sup>

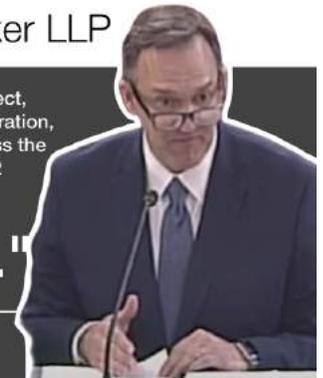
In his testimony, Mr. Nasi stated that the committee should be gravely concerned about the elimination of "the fuel-secure, dispatchable coal capacity" that will result from EPA's rulemaking in the coming few years.<sup>46</sup>

Mr. Mike Nasi | Jackson Walker LLP

Q: If this [EPA Clean Power Plan 2.0] rule goes into effect, along with the litany of other EPA rules on power generation, can my constituents in the PJM grid and families across the country expect equal to or better grid reliability in 2032 than they do right now?

"There is no way..."

House Committee on Energy and Commerce Hearing on EPA's Clean Power Plan 2.0 | June 6, 2023



Putting it more bluntly, FERC Commissioner Mark Christie, during the June Energy and Commerce Committee oversight hearing of FERC in response to an allegation from a Representative that there is "fearmongering going on" about the impacts of premature retirements of dispatchable resources by reliability experts such as FERC, ISOs and RTOs, and NERC, said:

*"I don't think that the head of NERC is fearmongering when he repeatedly says that this is a coming danger. I don't think the head of PJM is fearmongering when he has said we're losing dispatchable resources at a rate we cannot sustain. I don't think the head of MISO is fearmongering when he says we're losing dispatchable resources at a rate we can't sustain. I don't think its fearmongering when the head of NYISO last week said the same thing."<sup>47</sup>*

When asked in a May Senate Energy and Natural Resources Committee oversight [hearing](#) of FERC whether the grid can eliminate coal and maintain a reliable system, all four FERC commissioners responded that it cannot.<sup>48</sup>

A June Senate Energy and Natural Resources Full Committee [hearing](#) to "Examine the Reliability and Resiliency of Electric Services in the U.S. in Light of Recent Reliability Assessments and Alerts," also highlighted industry expert's concern over the electricity reliability impacts of EPA's regulations targeting fossil fuels. Notably:

**NERC President and CEO, James Robb:** *"the pace of change is overtaking the reliability needs of the system." He added, "We must manage the pace of the transformation in an orderly way, which is currently not happening. Conventional generation is retiring at an unprecedented rate."<sup>49</sup>*

44 [https://d1dth6e84htgma.cloudfront.net/06\\_06\\_23\\_Testimony\\_Nasi\\_511b15e65c.pdf?updated\\_at=2023-06-05T14:32:28.133Z](https://d1dth6e84htgma.cloudfront.net/06_06_23_Testimony_Nasi_511b15e65c.pdf?updated_at=2023-06-05T14:32:28.133Z) at 5.

45 *Id* at 5-6.

46 *Id* at 6.

47 <https://www.youtube.com/watch?v=BZu41UWWwrl&t=9314s>

48 <https://www.energy.senate.gov/hearings/2023/5/full-committee-hearing-to-conduct-oversight-of-ferc>

49 <https://www.energy.senate.gov/hearings/2023/6/full-committee-hearing-to-examine-the-reliability-and-resiliency-of-electric-services-in-the-u-s-in-light-of-recent-reliability-assessments-and-alerts>.

**PJM Interconnection President and CEO Manu Asthana:** *“we need to slow down the retirement or restriction of existing generation until replacement capacity is deployed and operational... frankly, we see this as the single largest risk in the energy transition.”*<sup>50</sup>

**David Tudor, CEO of Associated Electric Cooperative Inc.:** *“The accelerated pace of retirements of on-demand, dispatchable coal generation in particular will put reliability in serious jeopardy.”* He added, *“We need more time. We need to get control of the EPA who doesn’t seem to care about reliability or cost.”*<sup>51</sup>

In addition to congressional hearings, the Congressional Coal Caucus has hosted briefings to inform Members of Congress and their staff about the dire electricity implications resulting from EPA’s rules targeting the fossil fuel industry and to develop strategies to challenge EPA’s regulatory onslaught collectively. The industry experts who participated in the meetings include Brian Rich, President of Reading Anthracite Company, Michael Nasi, and Michael Caravaggio, Director of Thermal Fleet at the Electric Power Research Institute (EPRI). During his presentation, Mr. Caravaggio emphasized how coal-generated electricity primarily matches and provides total electricity generation demand in the U.S. as compared to other sources of electricity.

**THE FEDERAL ENERGY REGULATORY COMMISSION  
ON THE IMPORTANCE OF COAL  
FOR THE RELIABILITY OF OUR NATION'S  
POWER GRID**

Chairman Willie Phillips

Q: If you pulled it [coal] off right now, would it give you the certainty that the system would give you the reliability needed?

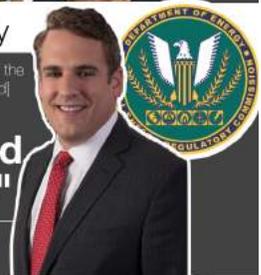
**"It would not."**



Commissioner James Danly

Q: Do you think it's possible to eliminate coal today or in the near future and be able to maintain a reliable [electric grid] system — is coal irreplaceable at this time?

**"No, as things stand — coal is required."**



Commissioner Allison Clements

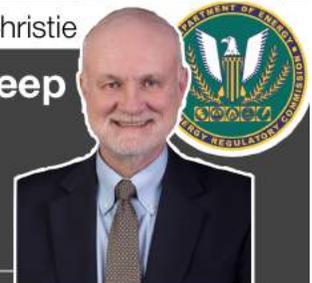
Q: Do you think it's possible to eliminate coal today or in the near future and be able to maintain a reliable [electric grid] system — is coal irreplaceable at this time?

**"Right now, today — no."**



Commissioner Mark Christie

**"...we need to keep coal generation available for the foreseeable future"**



Senate Committee Energy & Natural Resources  
Oversight Hearing on FERC | May 4, 2023

**Watch the the responses:**



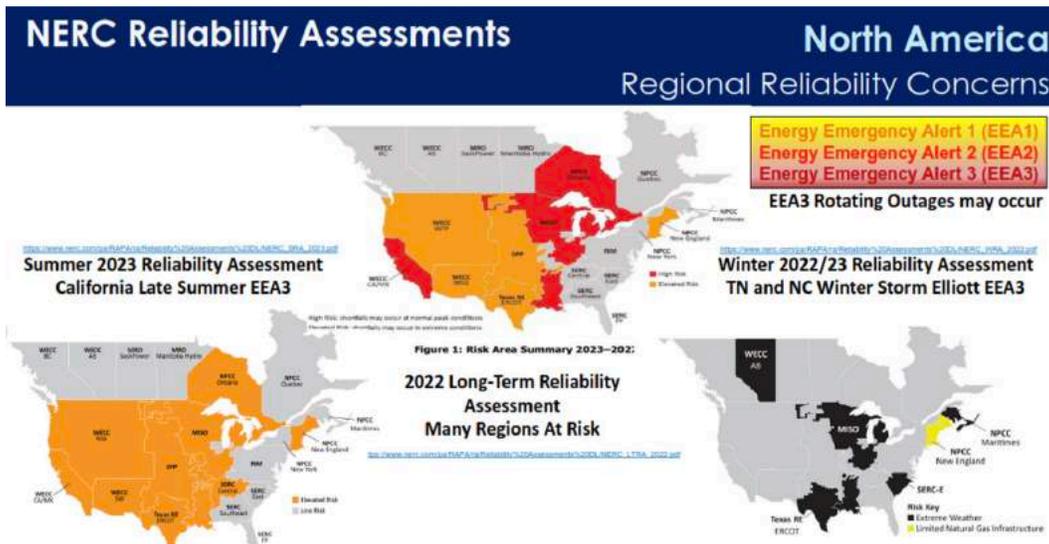
<sup>50</sup> *Id.*

<sup>51</sup> *Id.*



“By overreaching its authority, the Environmental Protection Agency is jeopardizing the reliability of our grid,” said Congressman Dan Meuser (R-PA). “The EPA’s regulations imposed on our energy infrastructure, specifically coal-fired power plants, undermine grid stability and reliability, particularly as we face energy uncertainty thanks to the Biden Administration’s policies. Allowing ideology that is blind to reality to force a transition away from natural resources and toward unproven energy alternatives that on their own cannot produce enough electricity to sustain our usage needs is reckless. We must promote the most responsible all-of-the-above and all-of-the-below energy independence solutions and stop the EPA’s overreach to safeguard the reliability of our energy system and ensure an uninterrupted and affordable power supply for American households and businesses. That means responsibly supporting American natural resources that have the lowest carbon emissions in the world, like coal, natural gas, oil, and thermal.”

## Additional Grid Expert Concern



NERC has warned EPA about the increased reliability risks from the pace of the grid transformation away from traditional sources of electricity and the need to evaluate EPA’s policies on reliability, stating in March of 2023:

*“As federal and state policies continue to advance rapid transformation of the electric grid, NERC’s annual reliability assessments have shown a steady increase in reliability risk associated with the pace at which the transformation of the grid is occurring. We believe that the energy transition that is occurring can work reliably but the pace of change needs to be*

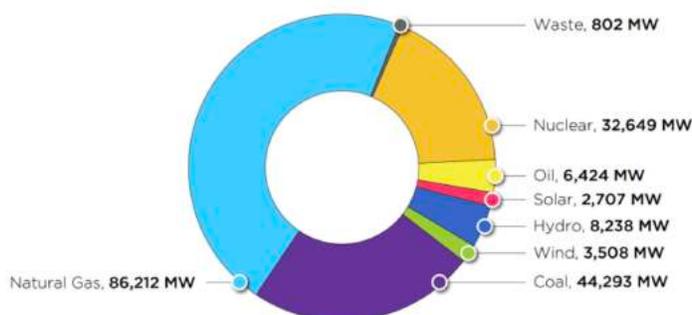
*managed and we have stressed the critical need to evaluate the impacts of the policies on reliability.”<sup>52</sup>*

NERC also recently released its [2023 Summer Reliability Assessment](#), which found that two-thirds of the country is at elevated risk of outages should we see widespread heat waves this summer. The assessment specifically pointed to EPA’s Good Neighbor Plan as restricting the operation of coal and gas plants in 23 states:



*“New environmental rules that restrict power plant emissions will limit the operation of coal-fired generators in 23 states, including Nevada, Utah, and several states in the Gulf Coast, mid-Atlantic, and Midwest. Coal and natural-gas-fired generators in states affected by the Good Neighbor Plan will likely meet tighter emissions restrictions primarily by limiting hours of operation in this first year of implementation rather than through adding emissions control equipment. RCs in summer-peaking areas typically are not able to authorize extended outages to upgrade systems during this summer season in order to ensure sufficient resources for high demand.”<sup>53</sup>*

Figure 3. PJM Existing Installed Capacity (Nameplate as of Dec. 31, 2022)



Mr. Manu Asthana | President & CEO



**“We will need to slow down the retirement or restriction of existing generation until replacement capacity is deployed... frankly, we see this as the single largest risk in the energy transition.”**

Senate Committee Energy & Natural Resources  
Oversight Hearing Electric Service Reliability | June 1, 2023



In his presentation to the Congressional Coal Caucus, Mr. Caravaggio referenced NERC’s reliability assessment and presented the slide depicting just how much of the U.S. faces regional reliability concerns in the short and long term due to the loss of dispatchable resources.

To add to the growing list of industry experts raising the alarm, PJM Interconnection, in its report titled “Energy Transition in PJM: Resource Retirements, Replacements & Risks” released on February 24, 2023, has warned of a significant capacity shortfall by 2030.<sup>54</sup> This projection is primarily due to the closure of coal plants driven by EPA regulations and state clean energy targets. However, the planned additions to capacity mainly consist of intermittent renewable sources, which may not provide reliable

<sup>52</sup> <https://www.nerc.com/news/Pages/Statement-on-EPA,-DOE-Agreement-Supporting-Electric-Reliability.aspx>.

<sup>53</sup> [https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC\\_SRA\\_2023.pdf](https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_2023.pdf) at 6.

<sup>54</sup> <https://insidelines.pjm.com/pjm-details-resource-retirements-replacements-and-risks/>

power when needed.

The report emphasizes the uncertainty surrounding the timely arrival of replacement generation resources.<sup>55</sup> While the retirement of existing generation is well-defined by policy objectives, external factors such as the pace of new entry under the Inflation Reduction Act, post-pandemic supply chain

Figure 1. Total Forecast Retirement by Year (2022-2030)



**EPA Coal Combustion Residuals (CCR):** The U.S. Environmental Protection Agency (EPA) promulgated national minimum criteria for existing and new coal combustion residuals (CCR) landfills and existing and new CCR surface impoundments. This led to a number of facilities, approximately 2,700 MW in capacity, indicating their intent to comply with the rule by ceasing coal-firing operations, which is reflected in this study.



**EPA Effluent Limitation Guidelines (ELG):** The EPA updated these guidelines in 2020, which triggered the announcement by Keystone and Conemaugh facilities (about 3,400 MW) to retire their coal units by the end of 2028.<sup>14</sup> Importantly, but not included in this study, the EPA is planning to propose a rule to strengthen and possibly broaden the guidelines applicable to waste (in particular water) discharges from steam electric generating units. The EPA is expecting this to impact coal units by potentially requiring investments when plants renew their discharge permits, and extending the time that plants can operate if they agree to a retirement date.



**EPA Good Neighbor Rule (GNR):** This proposal requires units in certain states to meet stringent limits on emissions of nitrogen oxides (NOx), which, for certain units, will require investment in selective catalytic reduction to reduce NOx. For purposes of this study, it is assumed that unit owners will not make that investment and will retire approximately 4,400 MW of units instead. Please note that the EPA plans on finalizing the GNR in March, which may necessitate reevaluation of this assumption.



**“More than any administration in history, the Biden administration has used a combination of executive orders, rulemaking, and agency guidance as de facto lawmaking to bypass Congress and enact crippling, and often unconstitutional, policies. The energy sector has been a prime target in this process, as Biden pushes his “green bad deal” agenda that forces more of our citizens into energy poverty conditions and attempts to eliminate coal and oil production. America will always need fossil fuels to provide continuous and reliable electricity – something that wind and solar cannot do.”**

Congressional Coal Caucus Co-Chair Harriet Hageman (R-Wyo.)

issues, and other unknowns could impact the replacement process. PJM acknowledges that the retirement of generation is more certain than the availability of suitable alternatives.<sup>56</sup>

This warning from PJM highlights a broader crisis unfolding in the energy transition, with various regions already experiencing blackouts, price spikes, and capacity losses. Despite the crucial role that the coal fleet has traditionally played in ensuring grid reliability, its significance is being downplayed. Policymakers and regulators have received long-standing warnings about the impending loss of dependable capacity, necessitating urgent action to bridge the growing gap between demand and available supply.

PJM President and CEO Manu Asthana reiterated many points raised in the report during his testimony before a Senate Energy and Natural Resources Committee [hearing](#). He emphasized the rapid shift towards intermittent renewable energy sources in the U.S., driven by climate change concerns and government policies.<sup>57</sup>

The frequent and resolute warnings from industry experts call attention to the sheer magnitude of the threats to electricity reliability that will surely become reality without action taken to prevent EPA’s damaging regulations targeting the fossil fuel industry.

55 *Id.*

56 *Id.*

57 <https://www.energy.senate.gov/hearings/2023/6/full-committee-hearing-to-examine-the-reliability-and-resiliency-of-electric-services-in-the-u-s-in-light-of-recent-reliability-assessments-and-alerts>.

## Looking Ahead:

# What Actions Should Congress Take to Address the Electricity Reliability Crisis?

The electricity grid is one of our most important infrastructure assets. It is critical to all Americans' economic well-being, health and security. Protection and enhancement of the grid must be given the same level of focus as environmental goals. There is a critical need to analyze the impact of EPA regulations affecting the electric grid's reliability before promulgating those policies.

The EPA's regulations have been met with skepticism and have revived concerns about the agency's regulatory approach. The recent Supreme Court ruling in *West Virginia v. EPA* limited the EPA's authority to dictate fuel use at power plants under the Clean Air Act.<sup>58</sup>

However, on top of questions raised over EPA ignoring the restrictions imposed against it under *West Virginia v. EPA*, electricity grid experts and utilities have spoken: EPA's onslaught of regulations threatens the reliability of the electric grid. The debate surrounding these regulations underscores the importance of striking a balance between environmental goals and the stability of the power sector.

**Mandatory Coordination to Protect Grid Reliability:** To stop EPA from further exacerbating the electricity reliability crisis, it is necessary for Congress to intervene. Congress should mandate coordination through the FPA among electricity experts like NERC, FERC, and EPA to ensure that EPA actions do not compromise electricity reliability.

**Good Neighbor Plan for 2015 Ozone NAAQS:** Prevent implementation of the rule through the appropriations process and support the [House](#) and [Senate](#) Congressional Review Act (CRA) joint resolutions of disapproval. Final Rule June 5, 2023.

**New Greenhouse Gas Regulations for Fossil Fuel-Fired Power Plants – Or New Clean Power Plan 2.0:** Prevent finalization of the rule through the appropriations process, support legislation that would require FERC, NERC, or RTOs/ISOs, in consultation with the states, to analyze the electricity reliability implications of the rule before finalization and urge Members of Congress to conduct oversight of the proposed rule or additionally introduce CRA resolutions of disapproval against the proposed rule. Proposed Rule May 23, 2023; Comment deadline July 24, 2023; Estimated Final Rule Apr. 2024.

**Steam Electric Power Generating Effluent Guidelines:** Prevent finalization of the rule through the appropriations process and support legislation that would require FERC, NERC, or RTOs/ISOs, in consultations with the states, to analyze the electricity reliability implications of the rule before finalization and urge Members of Congress to conduct oversight of the proposed rule or additionally introduce CRA resolutions of disapproval against the proposed rule. Proposed Rule Jan. EPA, 2023; Estimated Final Rule Apr. 2024.

**Coal Combustion Residuals:** Prohibit funding through the appropriations process for denying Closure Part A extension requests and Closure Part B alternate liner demonstrations until FERC, NERC, or RTOs/ISOs, in consultation with the states, completes comprehensive resource assessment to ensure grid reliability is protected.

**FERC Technical Conferences:** Strongly advocate for the FERC to hold Technical Conferences to assess the negative impact of EPA's "Suite of Regulations" on grid reliability, allowing stakeholders to provide feedback and insights on the reliability implications. This approach was suc-

cessfully used in 2015 to evaluate the potential impacts of the Clean Power Plan proposed by the EPA, which was later stayed by the Supreme Court of the United States in *West Virginia v. EPA*. On June 30<sup>th</sup>, 2023, Senators John Barrasso (R-Wyo.) and Shelley Moore Capito (R-W.Va.) urged FERC, in a [letter](#), to hold Technical Conferences on the EPA’s “Clean Power Plan 2.0.”

Considering the numerous hearings and expert testimonies, it is evident that grid reliability is at a critical juncture. As the EPA continues to promulgate regulations affecting baseload dispatchable power plants, the risks to the stability of our electricity grid are only becoming more alarming. The growing reliance on the FPA’s Section 202(c) to address emergency situations highlights the urgency of the moment. The delicate balance between environmental concerns and grid reliability requires careful consideration and collaboration between the EPA, States, DOE, FERC, NERC, and other stakeholders.

As we move forward, it is imperative for the 118th Congress to take decisive action to stand against EPA’s regulatory onslaught against the fossil fuel industry by pursuing the necessary policies and Congressional oversight to safeguard our electricity grid’s reliability.