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July 18, 2023

U.S. Environmental Protection Agency EPA Docket Center Docket ID No. EPA-HQ-OAR-2023-0072 Mail Code 28221T 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

Submitted Electronically at: https://www.regulations.gov

Re: Comments by the Florida Reliability Coordinating Council, Inc. Docket ID No. EPA-HQ-OAR-2023-0072

Dear Sir or Madam,

On May 23, 2023, the Environmental Protection Agency (EPA) published proposed Greenhouse Gas Standards and Emission Guidelines for Fossil Fuel-fired Power Plants¹ (Proposed Rules). The Florida Reliability Coordinating Council, Inc. (FRCC) appreciates the opportunity to submit the following comments.

(1) Introduction and Summary

FRCC is a Florida not-for-profit company with a mission to coordinate a safe, reliable, and secure bulk power system in Florida. FRCC's members include electric utilities from multiple sectors. FRCC participates in a variety of functions such as serving as a North American Electric Reliability Corporation registered Reliability Coordinator and Planning Authority; interfacing with the Florida Public Service Commission in acting as the State Capacity Emergency Coordinator, compiling State Load and Resource Data, preparing reliability assessments, and annually presenting the FRCC Ten Year Site Plan; serving as a Federal Energy Regulatory Commission Transmission Planning Region under Order 1000; and representing and supporting its members' data and coordination requirements at SERC Reliability Corporation.

In sum, EPA's Proposed Rules create reliability risks in Florida, in part due to Florida's heavy reliance on natural gas for power generation, its unique peninsular geography and limited interconnects with other states, and its ongoing significant shift to renewable energy. More specifically, in 2022, seventy-five percent of Florida's electricity was produced with natural gas,

¹ "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.

most of which would be subject to the Proposed Rules. EPA must consider Florida's unique situation as this rulemaking proceeds and allow states maximum flexibility during implementation. Further, EPA needs to re-propose the rules, with appropriate revisions, to allow for a better understanding of and opportunity to manage the reliability risks, particularly in light of EPA's continuing release of relevant information, confusing applicability criteria, and inadequate comment period.

(2) EPA Must Adequately Consider the Reliability Impacts of Its Proposal

As EPA recognizes, federal law requires it to consider reliability impacts when promulgating these Proposed Rules. Specifically, Clean Air Act (CAA) \$111(a)(1), requires EPA, in setting a "standard of performance," to take "into account the cost of achieving such reduction and any non-air quality health and environmental impact and *energy requirements*" The Supreme Court and the D.C. Circuit have held that \$111(a)(1)'s reference to "energy requirements" means that EPA must consider reliability impacts when it promulgates rules under this provision. The courts have also recognized that, since EPA is not an expert on grid reliability, it should consult with other agencies with such expertise and responsibility, such as the Federal Energy Regulatory Commission and the U.S. Department of Energy.

Further, Executive Order 12866 requires EPA to assess reliability impacts when it promulgates "significant actions," such as the Proposed Rules. Specifically, this Order requires EPA to prepare a cost-benefit analysis of its intended action, which includes an assessment of the consequences, and a mandate to "design its regulations in the most cost-effective manner to achieve the regulatory objectives." Where, as here, EPA's Proposed Rules will have far-reaching impacts on the electric utility industry, grid reliability must be addressed through thorough inter-agency consultation,² and complete and representative regulatory impact modeling.

(a) EPA's Reliability Assessment is Confusing and Incomplete. In the Proposed Rules, EPA's reliability assessment falls short of the legal requirements described above, for several reasons. First, EPA's documentation pertaining to the Proposed Rules is confusing and incomplete. EPA initially relied on a "spreadsheet-based" model of impacts to existing baseload combustion turbines (CTs). EPA's description of this lesser "spreadsheet-based" approach was not clear³ and did not allow for replication. Initial questions that EPA did not address include: where is the spreadsheet; what is a "model" plant; what is meant by "average unit size"; why use the 2035-year run; what data set, and specific data within that data set, did EPA use to evaluate the 300MW threshold; for a combined-cycle power block, did EPA look only at the CT MWs or apportion the steam turbine MWs to each CT; and why assume CTs would only utilize carbon capture and sequestration (CCS) and not hydrogen co-firing. Around July 7, forty-five days after publishing the Proposed Rules, EPA released a "memo to the docket" purporting to provide an Integrated Planning Model (IPM)-based analysis for these units.⁴ The IPM Memo is not included in the RIA or Proposed

² As NERC CEO, Jim Robb, testified to Congress on June 1, 2023 (p. 8): "Interagency coordination is absolutely needed for policies that impact generation, especially coal resources, to keep reliability at the forefront of the policy table."

³ EPA summarily stated that it selected "model plants with average unit size greater than 300 MW that are projected to operate at greater than 50% capacity factor in the 2035-year run." Regulatory Impact Analysis at ES-22.

⁴ Integrated Proposal Modeling and Updated Baseline Analysis, page 4 (July 7, 2023) (IPM Memo).

Rule preamble and, thus, arguably not part of the rulemaking record. Further, its belated release, without an accompanying extension of the comment period, deprives the public of a meaningful opportunity to review and comment on this information.

Second, in the preamble to the Proposed Rules, EPA states that "[a]ny potential impact of these proposed actions is dependent upon a myriad of decisions and compliance choices source owners and operators may pursue." 88 FR 33415. This acknowledgement amounts to saying that the reliability impacts cannot be predicted. It also substantially increases the uncertainty and unreasonableness of EPA's approach to assessing reliability impacts, particularly regarding EPA's choice to only examine a single compliance pathway in its spreadsheet-based approach. Therefore, EPA's conclusion that the Proposed Rules will have "limited to no impact on the resource adequacy of the power system" carries little weight. Resource Adequacy TSD, p. 7.

Third, EPA must consider the cumulative impact on reliability of its current rulemakings regarding EGUs, including this GHG proposal, Effluent Limitation Guidelines, Coal Combustion Residuals, Mercury and Air Toxics Standards Residual Risk and Technology Review, the National Ambient Air Quality Standards for PM_{2.5} and ozone, etc. While EPA's Proposed Rules, on their own, impose a significant burden on the electric utility industry, the combined effects of recent and impending regulations will have more significant consequences than EPA is accounting for. Companies and system operators must account for all relevant actions in making resource decisions, ⁵ and so must EPA in evaluating reliability impacts.

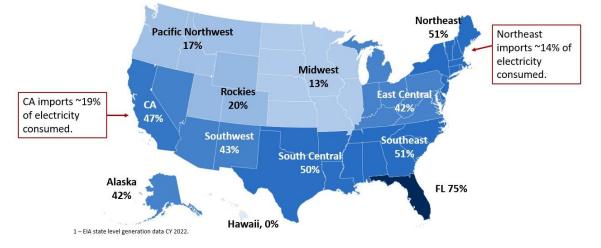
And fourth, EPA's statement that it "consulted" with the Department of Energy (DOE) and the North American Electric Reliability Corporation (NERC) in the development of the Proposed Rules is insufficient and does not resolve the significant problems described above. 88 Fed. Reg. 33246. Importantly, EPA fails to provide DOE's and NERC's reaction to the impact of the Proposed Rules on national reliability. Additionally, as explained below, EPA's initial modeling and assumptions were so deficient that DOE and NERC could not have provided any meaningful input, and there is no indication that DOE or NERC were aware of EPA's IPM analysis before July 7.

(3) Florida's Unique Reliability-Based Considerations

There are a variety of factors that make ensuring reliability in Florida unique, and EPA must account for these factors when assessing the impacts of its Proposed Rules. Such factors include a heavy reliance on natural gas generation, a rapid and ongoing shift to renewable energy, its peninsular geography, limited interconnects with other states and accompanying limited imports of power, and continuing population/load growth.

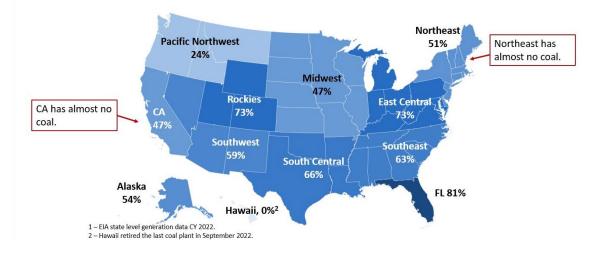
EPA's Proposed Rules will have a disproportionate impact in Florida. As shown in the maps below based on EIA data, in 2022, 75 percent of Florida's generation came from gas-fired EGUs, making it the most gas-dependent state in the country. Further, Florida's percentage of fossil-fuel fired generation is over 80 percent, substantially higher than any other area in the country.

⁵ See similar comment from the ISO/RTO Council in the docket, dated June 8, 2023, page 2.

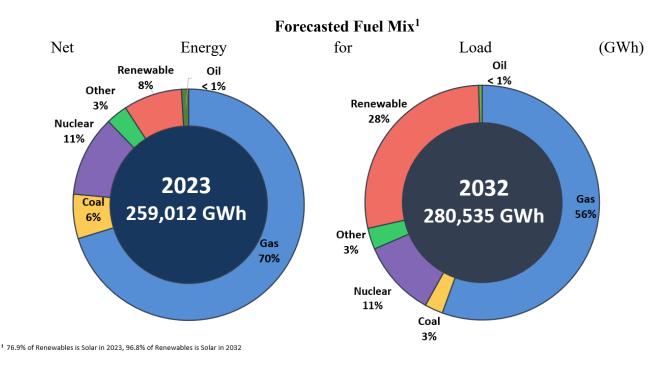


Regional Electricity Generation from Natural Gas as a Percentage of Total Generation (2022¹)

Regional Electricity Generation from Natural Gas and Coal as a Percentage of Total Generation (2022¹)



Florida is also in the process of a significant and rapid shift to renewable energy, the only viable source of which is solar, as part of Florida utilities' push to lower GHG emissions. This shift requires considerable work to manage reliability, and FRCC is concerned about the Proposed Rule's impact on these efforts. The percentage of this renewable capacity is expected to double in the next ten years, while overall capacity is expected to increase by almost 10 percent. As shown in the pie charts below, Florida's Net Energy for Load from renewables is expected to increase from 8 percent in 2023 to 28 percent in 2032 (96.8 percent of which is solar). From a reliability perspective, to support this shift to renewables, combined-cycle and simple-cycle CTs provide the majority of required ancillary services such as voltage support, frequency response as a result of system disturbances, regulation and ramping, system restoration, etc. However, the timeline imposed by the Proposed Rules could undermine reliability by removing dispatchable generation when it is needed the most, particularly when considering the time needed to permit, study, and interconnect replacement capacity reliably.



Further, Florida's peninsular geography and limited interconnects with other states essentially means that Florida must be able to depend on its own resources to reliably provide power. In 2032, for example, Florida is only projected to import about 281 MWs, which is about .4 percent of the total projected 2032 capacity,⁶ and Florida's total transfer capability is limited to about 5 percent.

(4) EPA's Rulemaking Process is Not Adequate to Fully Assess Reliability Impacts in Florida

EPA has neither provided sufficient time to comment on its Proposed Rules nor specified applicability criteria for existing "baseload" CTs. But also, EPA belatedly released additional IPM analysis without an accompanying extension of the comment period, thus depriving the public of a meaningful opportunity to review and comment on this information. Thus, in addition to EPA not completing and presenting its reliability assessment, as described above, the rulemaking process for the Proposed Rules is not adequate to allow the public to fully assess the reliability impacts.

FRCC requested that EPA extend the comment deadline by 60 days, as did the Florida Electric Power Coordinating Group, Inc., several states, and many other entities around the country. The deadline of August 8 is not sufficient, particularly when the Proposed Rules do not specify the applicability criteria for existing, baseload CTs.

Further, EPA did not include proposed regulatory text in the *Federal Register*, and discrepancies exist between the language in the *Federal Register* and the proposed regulatory text EPA posted on its website. As just one example, the exclusion of non-baseload CTs in 60.5850b(a) does not specify how to determine the 300 MW and 50 percent capacity-factor thresholds.⁷ As a result, FRCC must consider multiple scenarios to assess reliability impacts under multiple readings

⁶ FRCC 2023 Load and Resource Plan.

⁷ EPA's FAQ document, dated June 12, 2023, purports to clarify how to account for the steam portion of a combinedcycle unit, but does not specify which data or data set to use to select the MW value (for example, eGRID, NEEDS, air permits, etc.).

of the rule. This lack of clarity substantially broadens the range of impacts on reliability, and even small changes in our modeling can have myriad cascading changes to system operation and our ability to ensure reliable service to our load pockets. FRCC has thus not been given sufficient time, or clarity regarding applicability, to analyze the reliability impacts of the Proposed Rules.

Accordingly, FRCC requests that EPA re-propose its rule, particularly to clarify the applicability and impacts related to existing, baseload CTs. This would allow EPA to do a more complete impact assessment, as well as provide FRCC and others more time to properly assess, comment on, and manage reliability impacts.

(5) EPA's Proposed Rules Create Reliability Risks in Florida

Given the limited comment period for the Proposed Rules and the lack of clarity regarding applicability, any assessment regarding reliability at this point is necessarily high-level. Based on the information below, FRCC concludes that the Proposed Rules create a reliability risk in Florida.

Florida/FRCC has the most at stake regarding EPA's natural gas/hydrogen proposal of any state or reliability region in the country. In 2032, FRCC projects that Florida's gas-fired capacity (in MWs) will be 70 percent of the total, a large portion of which would be subject to the Proposed Rules. And as shown in the maps above, when combined with Florida's existing coal capacity, EPA's Proposed Rules will have a disproportionate and detrimental impact in Florida.

Reliability planning, by necessity, must account for reasonably foreseeable eventualities. Since the feasibility of converting to burning hydrogen (which must include the necessary infrastructure) is currently unknown and speculative, FRCC estimated the impacts of the Proposed Rules by assuming that all natural-gas CTs greater than 300 MWs will limit their capacity factor to 50 percent, to avoid being subject to the rule. This approach also assumes, of course, that the final rule retains the 300 MW and 50 percent capacity thresholds, and that EPA does not promulgate additional rules regulating non-baseload CTs; if either of the criteria change, or EPA imposes additional requirements on other Electric Generating Units, then the results will need to be updated. Further, since the feasibility of CCS in Florida is unknown and speculative, it is reasonable to assume the Proposed Rules will force the retirement of all coal-fired units in Florida before 2040. However, since FRCC's projection is for 2032, the results do not include the likely loss of coal-fired energy. Using this approach, FRCC estimates that in 2032 the Proposed Rules could require the replacement of 23 million MWh of annual energy supply needed to serve load. This shortfall represents about 8 percent of FRCC's total projected demand and is equivalent to blacking out about 1.8 million residential customers for the entire year, or all residential customers for about two months. This indicates a significant risk. While EPA's incomplete documentation requires FRCC to make the above-stated assumptions, a risk to electric reliability of even half this amount, which translates to risk to the health and safety of Floridians, is still alarming.

Timing is a key factor regarding reliability risk,⁸ both for State Plan development and compliance with the state standards. The FRCC is concerned about the availability of CCS and low-

⁸ "Managing the pace of change is the central challenge for reliability." Jim Robb, NERC CEO, June 1, 2023 (p. 8).

GHG hydrogen, especially in the timeframes required by the Proposed Rules.⁹ Moreover, this uncertainty means that there is a reliability risk in Florida regardless of the compliance deadline in the final rule. EPA's reference to "ample lead time" as the means to mitigate any reliability impact falls short. 88 Fed. Reg. 33415.

Regarding State Plan development, if EPA stays on its intended schedule,¹⁰ State plans will be due in mid-2026, and EPA's approval or disapproval would occur around mid-2027. Sources would thus need to elect a compliance path or paths sufficiently before mid-2026 to accommodate the state's Plan development process. It is not typically prudent to commit capital towards a compliance path until the exact obligations are known, which at the earliest would be upon EPA's approval of the State Plan in mid-2027. If EPA disapproves the State Plan, the requirements in a federal plan would not be known until about a year later (potentially mid-2028). While it is possible that extending the deadlines beyond the dates in the Proposed Rules could lower the reliability risk, due to advances in technology, more favorable economics, and/or infrastructure development, the expedited time frames in the Proposed Rules markedly increases the risk. As NERC CEO, Jim Robb, testified to Congress on June 1, 2023, "NERC is concerned that the pace of change is overtaking the reliability needs of the system. Unless reliability and resilience are appropriately prioritized, current trends indicate the potential for more frequent and more serious long duration reliability disruptions, including the possibility of national consequence events."

(6) To Address Reliability Risks, States Should Have Maximum Flexibility Regarding Implementation

Regardless of when EPA finalizes this rule, or which EGUs are ultimately subject to it, states must have maximum flexibility regarding implementation, particularly to consider and attempt to address reliability risks. This could include:

- Increased flexibility to consider a unit's remaining useful life and other factors in setting a standard or standards it should not be limited to "rare" circumstances (88 FR 33384),
- Listing multiple compliance paths for a single unit in the State Plan, with the actual selection occurring any time prior to the corresponding compliance deadline,
- Ability to alter a unit's selected compliance path or paths without the need to revise the State Plan,
- Ability to alter a unit's "increments of progress" or milestones without the need to revise the State Plan,
- Ability to opt out of the rule before or after the initial compliance period for example, a baseload CT that burned 30 percent hydrogen from 2032 to 2037 should be able to limit its capacity factor to 50 percent prior to 2038 and no longer be subject to the rule, and
- Use of averaging and trading programs (intra- and inter-state), including banking.

⁹ This concern was highlighted in a presentation by the Electric Power Research Institute to the Florida Public Service Commission on July 12, 2023. *See* https://www.floridapsc.com/watch-archive-psc-events.

¹⁰ EPA's Spring 2023 Regulatory Agenda lists a final rule date of April 2024.

(7) Conclusion

As described above, EPA's Proposed Rules create potential reliability risks in Florida, in part due to its unique peninsular geography and limited interconnects with other states, and its current and projected generation profile, which includes a significant shift to renewable energy. EPA must consider Florida's unique situation as this rulemaking proceeds. To better understand these reliability risks, and because of the iterative, confusing, and inadequate rulemaking process, EPA needs to re-propose the rules.

FRCC appreciates your consideration of these comments and looks forward to working with you as this rulemaking continues. If you have any questions regarding this information, please contact me at (850) 521-1738, or at rmanning@gunster.com.

Sincerely,

Robert Manning

Robert Manning Gunster, Yoakley & Stewart, P.A.

Counsel for FRCC

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