

STATE OF FLORIDA

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CHAIRMAN



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Public Service Commission

August 3, 2023

Via eRulemaking Portal: www.regulations.gov

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

RE: Docket ID No. EPA-HQ-OAR-2023-0072: New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 88 Fed. Reg. 33,240 (May 23, 2023)

Administrator Regan:

The Florida Public Service Commission authorized on August 1, 2023, the filing of the attached comments on EPA's May 23, 2023 proposed rule on greenhouse gas standards and emissions guidelines for fossil fuel-fired power plants. The staff contact on these comments is Mr. Cayce Hinton, Director, Office of Industry Development and Market Analysis, who may be reached at 850-413-6950.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew Giles Fay".

Andrew Giles Fay
Chairman

AGF/mh

cc: Commissioner Art Graham
Commissioner Gary F. Clark
Commissioner Mike La Rosa
Commissioner Gabriella Passidomo

**UNITED STATES OF AMERICA
BEFORE THE
ENVIRONMENTAL PROTECTION AGENCY**

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

Docket ID No. EPA-HQ-OAR-2023-0072

COMMENTS OF THE FLORIDA PUBLIC SERVICE COMMISSION

The Florida Public Service Commission (FPSC) respectfully requests consideration of the comments provided herein on the U.S. Environmental Protection Agency's (EPA) proposed 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 (Proposed Rule).¹ The FPSC is concerned that the Proposed Rule, in its current form, lacks the clarity and compliance flexibility necessary to avoid adverse impacts on the reliability, safety, and cost of electric service upon which the citizens of the state of Florida rely. Furthermore, given the complexity of the technical and economic issues addressed in the Proposed Rule and the EPA's supporting documents, the FPSC believes that more time is needed for the electric generating units (EGUs) in Florida that would be subject to the Proposed Rule to ascertain the achievability of the proposed greenhouse gas (GHG) emissions standards and for the FPSC to understand the potential scope of the regulatory impact on the energy marketplace. Therefore, in addition to the more specific concerns discussed below,

¹ 88 Fed. Reg. 33,240 (proposed May 23, 2023) (to be codified at 40 C.F.R. pt. 60).

the FPSC supports the requests filed by other stakeholders urging the EPA to extend the comment period.

As the economic regulator for electric utilities in the state of Florida, the FPSC has an important perspective that it urges the EPA to consider in its rulemaking process. The FPSC's comments below assume that the EPA will adopt carbon emission rules in some form in accordance with the Proposed Rule notice. These comments highlight the unique circumstances and attributes of the state of Florida that affect EGUs in their ability to comply with the EPA's Proposed Rule.

FPSC Concerns and Recommendations to the EPA:

I. FPSC Jurisdiction

- Do not bypass or preempt the FPSC's exclusive jurisdiction under Florida Statutes.

II. Clarity on Which EGUs are Regulated

- Clarify methodology for calculating EGU megawatt (MW) capacity and capacity factors.
- Establish explicit and transparent thresholds for MW capacity and capacity factors to determine whether an EGU is subject to the Proposed Rule.

III. Time and Flexibility for Compliance

- Lack of time and flexibility for compliance could result in higher costs than otherwise required to meet emissions targets.
- Extend the compliance schedule to allow EGUs more time to determine and choose the emissions control system best suited to their unique circumstances.
- Provide greater flexibility to allow EGUs to change emissions control systems if a chosen system proves unfeasible.

IV. Proposed BSER and Performance Standards

- Carbon Capture and Sequestration/Storage (CCS) and Low-GHG Hydrogen Co-firing technologies have not been adequately demonstrated in Florida.
- Performance standards based upon un-proven technologies are not achievable in Florida.

I. FPSC Jurisdiction

The Proposed Rule is of direct concern to the FPSC. The FPSC is charged with ensuring that Florida's electric utilities provide safe and reliable energy for Florida's consumers in a cost-effective manner. The FPSC regulates four investor-owned electric utilities, including aspects of rate setting, operations, and safety. The FPSC additionally regulates thirty-three municipal electric utilities and eighteen rural electric cooperative utilities regarding the safety, rate structure, and oversight of their generation and transmission planning. As of 2021, nearly 70% of Florida's electricity generation came from natural gas and nearly 10% from coal.² In 2031, the combined share of natural gas- and coal-fired electricity is currently estimated to be close to 70%.³ Therefore, a significant percentage of the generation in Florida could be impacted by the Proposed Rule. The FPSC has concerns that the Proposed Rule will adversely affect the reliability and cost of electricity service in Florida.

Adverse impacts to the reliability of the grid and economic dispatch should be carefully considered when implementing new emission reduction technologies that result in significant changes to the energy generation landscape in order to ensure the delivery of electricity to consumers without interruptions or disruptions. In Florida, the FPSC has exclusive jurisdiction to require electric power conservation and reliability measures within the coordinated electric power grid for operational and emergency purposes.⁴ The FPSC's jurisdiction includes the planning, development, and maintenance of the state's coordinated electric power grid to assure an adequate and reliable source of energy and to avoid uneconomic duplication of generation,

² See FLA. PUB. SERV. COMM'N, 2023 Facts and Figures of the Florida Utility Industry, p. 2, <https://www.floridapsc.com/pscfiles/website-files/PDF/Publications/Reports/General/FactsAndFigures/April%202023.pdf>.

³ *Id.*

⁴ Section 366.04(2)(c), Florida Statutes.

transmission, and distribution facilities.⁵ The FPSC is charged with determining the need for all new steam or solar electrical generating facilities with a capacity of 75 megawatts (MW) or greater.⁶

Reliability, resilience, and fuel diversity are vital in states like Florida that regularly experience hurricanes and other storms. In 2021, nearly two-thirds of Florida's natural gas EGUs were capable of switching to other fuels in the event of disruptions to the natural gas supply.⁷ The Proposed Rule will likely necessitate substantial planning for and investment in new electricity generation and transmission infrastructure in Florida to facilitate the transition to EGU operation that complies with the Proposed Rule.

The EPA states in its Regulatory Impact Analysis of the Proposed Rule that the model used to assess the impact of hydrogen production did not consider "any incremental upstream electricity demand associated with its production."⁸ The FPSC believes it is critical that the EPA consider the adverse impact on the electricity landscape that could result from the additional upstream electricity required to produce hydrogen, particularly in light of the high percentage of EGUs in Florida that could be impacted by the Proposed Rule. The FPSC urges the EPA to consider the full range of potentially adverse impacts, including upstream and cascading effects to electricity demand, that could result in Florida and similarly situated states due to any dramatic changes to the statewide electricity generation and transmission landscape.

⁵ Section 366.04(5), Florida Statutes.

⁶ Sections 403.503(14) and 403.519, Florida Statutes.

⁷ See U.S. ENERGY AND INFORMATION ADMINISTRATION, *Florida: State Profile and Energy Estimates*, <https://www.eia.gov/state/analysis.php?sid=FL#26>, (last visited July 19, 2023).

⁸ See EPA, Regulatory Impact Analysis for the Proposed 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, p. 3-34 (May 2023), https://www.epa.gov/system/files/documents/2023-05/utilities_ria_proposal_2023-05.pdf.

Additionally, Florida law requires the FPSC to hold an annual proceeding to approve recovery of environmental compliance costs by investor-owned electric utilities, such as costs incurred in compliance with the Clean Air Act.⁹ The recovery of compliance costs through rates has consequences for consumers and businesses. Increased electricity rates strain household budgets, disproportionately affecting low-income households. Higher energy costs would reduce competitiveness for Florida's businesses, particularly those reliant upon affordable energy, and could potentially result in job losses. Utility recovery of compliance costs associated with the Proposed Rule, as required by Florida law, will therefore have a near-immediate impact on the retail rates of electric service paid by all ratepayers in Florida. However, due to some of the uncertainties surrounding the Proposed Rule, as discussed in more detail below, the FPSC is unable to accurately estimate the potential costs that would be passed on to customers. The FPSC urges the EPA to consider the adverse impacts to electricity rates in Florida, especially among low-income customers, that would result from the costs incurred by utilities to comply with the Proposed Rule.

II. Lack of Clarity on Which EGUs are Subject to Regulation under the Proposed Rule

It is unclear which EGUs in Florida would be affected by the Proposed Rule due to the lack of specificity in a method of calculating MW capacity and capacity factor, as well as a lack of explicit thresholds. These issues are crucial in assessing the potential environmental, regulatory, and economic impacts of the Proposed Rule in Florida.

The EPA's proposal did not provide explicit thresholds for MW capacity and capacity factor that would determine whether an EGU falls within the regulatory scope of the Proposed Rule. Seeking to address this ambiguity, the EPA issued additional guidance aimed at clarifying

⁹ Section 366.8255, Florida Statutes.

the calculation methodology to assist EGUs and stakeholders in understanding the potential scope of the Proposed Rule. Even with this additional guidance, however, the EPA's proposal still lacks the clarity and transparency that would allow the FPSC and Florida's utility operators to definitively identify the EGUs in Florida that would be regulated by the Proposed Rule.

To alleviate these concerns and provide much-needed clarity, the FPSC urges the EPA to establish in the final rule explicit and transparent thresholds in addition to a clearly defined calculation methodology for determining MW capacity and capacity factor. Defining these thresholds would enable Florida's EGUs and stakeholders to determine whether a source falls within the regulatory scope, facilitating better decision-making, more efficient planning, and more financially sound investments for all parties involved.

III. Insufficient Time and Flexibility for Compliance

The FPSC has concerns that the compliance schedules outlined in the Proposed Rule do not allow Florida EGU operators sufficient time and flexibility for compliance, which may result in excessive compliance costs being passed on to Florida's electricity customers through increased rates. The FPSC requests that the EPA thoroughly evaluate the Proposed Rule's impacts on customers, particularly in terms of the time and flexibility afforded to the EGUs for compliance.

Complying with the proposed regulations would involve significant investments in emission control technologies, infrastructure upgrades, and operational changes. These measures can be time-consuming and expensive for EGUs, especially if retrofitting existing facilities is necessary to meet the new standards. Without adequate time and flexibility, EGUs may face challenges in effectively and efficiently implementing these changes.

Flexibility in compliance options is crucial for EGUs. Florida's EGU facilities vary in characteristics such as age, size, remoteness, and technological capabilities, making a one-size-fits-all approach impractical and cost-ineffective. Allowing flexibility enables utilities to explore compliance strategies that suit their specific circumstances, such as investing in cleaner technologies, transitioning to alternative fuel sources, or participating in emissions trading programs. Flexibility encourages innovation and facilitates the identification of economically and technologically viable solutions for emissions reduction that fit the needs and constraints of individual EGU operators.

Tight timelines and limited flexibility for compliance may compel EGUs to choose quick but potentially less cost-effective or environmentally optimal solutions. Rushed decision-making can lead to higher compliance costs, including investments in expensive technologies, expedited construction or retrofitting, and operational disruptions. These additional costs are often passed on to customers through increased electricity rates. The FPSC desires to avoid such adverse outcomes in Florida.

To address these concerns, the EPA should consider providing EGUs with adequate timeframes and flexibility in the final rule. For instance, a longer glide path for implementation would provide EGUs with adequate time to plan, invest, and optimize compliance measures, and it would facilitate a smoother integration of new technologies while enabling necessary infrastructure upgrades and a phased retirement or retrofitting of existing assets if required. This approach also avoids premature retirements that could result in stranded investments and potential reliability concerns. Moreover, a longer transition period would allow for additional development and deployment of advanced technologies, avoiding potential grid instability and ensuring the viability, scalability, and cost-effectiveness of emerging technologies before

widespread implementation. The FPSC also recommends that the EPA provide a mechanism by which Florida's EGUs can change course without penalty if a chosen compliance path proves to be unviable or exorbitantly costly.

IV. Concerns about “Adequately Demonstrated” BSER & “Achievable” Standard regarding CCS and Low-GHG Hydrogen Technologies in Florida

The FPSC has concerns that the emission control systems identified by the EPA as the best system of emission reduction (BSER)—specifically CCS and low-GHG hydrogen co-firing—have not been “adequately demonstrated” for use in Florida, and that the performance standards proposed by the EPA are not “achievable” for Florida's EGU operators.¹⁰ When establishing a standard of performance under Section 111 of the CAA, the EPA must (1) determine the BSER that has been adequately demonstrated, (2) determine the degree of emission limitation achievable through the application of that system, and (3) impose an emissions limit on new stationary sources that reflects that amount.¹¹

Although neither the CAA nor the U.S. Supreme Court have defined the term “adequately demonstrated,” the U.S. Court of Appeals for the D.C. Circuit has stated that the EPA cannot base its determination on a “crystal ball inquiry,” but may “look toward what may fairly be projected” to be available “rather than the state of the art at present.”¹² The BSER must be shown to be reasonably “reliable,” “efficient,” and “expected to serve the interests of pollution control without becoming exorbitantly costly.”¹³ The EPA bears the burden to

¹⁰ *Nat'l Lime Ass'n v. EPA*, 627 F. 2d 416, 433 (D.C. Cir. 1980) (“Section 111 requires that the [BSER] considered able to meet the standard be ‘adequately demonstrated’ and the standard itself be ‘achievable.’”).

¹¹ *West Virginia, et al., v. EPA*, 142 S. Ct. 2587, 2601 (2022).

¹² *Portland Cement Ass'n v. Ruckelshaus*, 486 F. 2d 375, 391 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974).

¹³ *Essex Chem. Corp. v. Ruckelshaus*, 486 F. 2d 427, 433 (D.C. Cir. 1973), *cert. denied sub nom. Appalachian Power Co. v. EPA*, 416 U.S. 969 (1974). *See also Nat'l Lime Ass'n*, 627 F. 2d at 431 n.46 (stating that “a standard must be capable of being met under most adverse conditions which can reasonably be expected to recur and which are not or cannot be taken into account in determining the ‘costs’ of compliance”).

affirmatively demonstrate that standards proposed under Section 111 reflect “consideration of the range of relevant variables that may affect emissions in different plants.”¹⁴

While the EPA points to certain developers and utilities that have announced CCS and hydrogen co-firing projects, the FPSC is concerned that isolated implementation under controlled circumstances is not a sufficient basis upon which to establish performance standards for carbon emissions. No utility in Florida has yet demonstrated a cost-effective CCS project or co-fired the required volume of low-GHG hydrogen, and the FPSC is aware of very few operational plants anywhere operating such technologies at anything close to the emission levels the EPA is proposing to require. As such, the FPSC is concerned that Florida's EGUs will not be able to overcome the technological and economical challenges associated with grid-scale implementation of technologies that have yet to be proven feasible in Florida.

The absence of demonstrated CCS projects raises concerns about the scalability and economic viability of the technology in Florida. The specific geological characteristics required for safe and effective underground storage of carbon dioxide need to be assessed in Florida. The lack of proven CCS projects in Florida and the surrounding region suggests that there may be technical, economic, or regulatory challenges associated with its implementation—particularly implementing the technology at scale—in states that are geologically similar to Florida. The FPSC is concerned that these industry-wide challenges will not be sufficiently resolved in the compliance timeline set forth in the Proposed Rule.

Similar to CCS, no Florida utility has demonstrated the capability to co-fire the volume of low-GHG hydrogen required to comply with the Proposed Rule. Due to Florida's unique circumstances, the FPSC is concerned that Florida's EGUs will face substantial obstacles in

¹⁴ *Nat'l Lime Ass'n*, 627 F. 2d at 433.

implementing grid-scale hydrogen co-firing capabilities. Florida is a peninsular state, and as stated above, nearly 70% of Florida's electricity generation comes from natural gas-fired EGUs. These factors make any new regulations affecting natural gas EGUs in Florida especially challenging. Not only is the "state of the art" in hydrogen co-firing untested in Florida, the FPSC is concerned that the EPA has projected that an entirely new fuel source, along with the vast network of production and distribution infrastructure necessary to support its integration, can be established for reliable use before the 2032 and 2038 compliance dates set forth in the Proposed Rule. Even if safe and reliable grid-scale integration is possible, the FPSC is concerned that such rapid capital expenditures would be exorbitantly costly to both EGUs and electricity customers alike.

One significant aspect of the uncertainty surrounding the proposed hydrogen-based BSER is the availability and production capacity of low-GHG hydrogen sources. Producing hydrogen with minimal greenhouse gas emissions requires access to renewable energy or nuclear power, which may have limitations in terms of availability and scalability. The infrastructure required for large-scale production and distribution of low-GHG hydrogen, as well as the energy required to produce it, is still in the early stages of development in the industry and is unproven in the state of Florida.

While the FPSC appreciates that Florida will have its own state implementation plan that can account for some of its unique needs, the FPSC urges the EPA to consider the following issues: whether the identified BSERs involving CCS and low-GHG hydrogen co-firing are "adequately demonstrated" for use in Florida; whether it is fair to project that the technologies will be available, scalable, and deployable in Florida; whether the proposed performance standards based on these technologies are "achievable" in Florida given the relevant variables

specific to the state; and whether a grid-scale transition to the technologies according to EPA's proposed timeline can be accomplished "without becoming exorbitantly costly" for Florida's EGU operators and, consequently, its ratepayers.

V. Conclusion

As discussed throughout these comments, the FPSC is concerned that the regulations proposed by the EPA in its Proposed Rule do not reflect what is technically or economically feasible in Florida. There are at least four critical issues that require the EPA's clarification or revision before moving forward with the Proposed Rule. First, the EPA should consider the cascading effects the Proposed Rule will have upon reliability of electric service and the full impact on retail electricity rates that could occur due to dramatic shifts in supply and demand in the energy marketplace. Second, the EPA should clarify the methodology for calculating EGU MW capacity and capacity factor and establish explicit and transparent thresholds for MW capacity and capacity factor to determine whether an EGU is subject to the Proposed Rule. Third, the EPA should extend the compliance schedule to allow EGUs more time to determine and choose the emissions control system best suited to their unique circumstances and provide greater flexibility to allow EGUs to change emissions control systems if a chosen system proves unfeasible. Lastly, the EPA should consider whether the proposed BSERs of CCS and low-GHG hydrogen co-firing are "adequately demonstrated" for use in Florida and whether performance standards based upon those BSERs are "achievable" in Florida without becoming "exorbitantly costly."

The FPSC is concerned that the failure to consider and incorporate the concerns raised in these comments will result in unjust, unreasonable, and excessively costly carbon emissions

performance standards that would risk the safety, reliability, and affordability of electric service in Florida.