FECA

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VIA EMAIL

Kathryn Cowdery, Esq.
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

RE: Comments on EPA's proposed Clean Power Plan

Dear Ms. Cowdery:

The Florida Electric Cooperatives Association ("FECA") appreciates the opportunity to submit comments to the Florida Public Service Commission ("FPSC") on the U.S. Environmental Protection Agency's ("EPA") proposed "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units" ("Clean Power Plan" or "CPP") (79 FR 34829).

FECA has serious concerns about the impact that EPA's Clean Power Plan would have on the reliability of Florida's electric grid, and the increased costs ratepayers will be forced to pay for electricity. FECA's comments are based on the understanding that the CPP would require at least 90% of Florida's coal-based electric generating capacity to be retired, some units as early as 2020. Additionally, this baseload capacity would have to be replaced by a combination of intermittent renewables, demand-side efficiency, existing natural gas capacity, and new natural gas plants. Even if Florida's ratepayers are willing and able to pay significantly higher electric rates to implement the CPP, FECA believes the EPA's timelines will create an unrealistic, and likely unachievable, requirement for Florida's utilities to replace their existing coal facilities in a relatively short time period while maintaining grid reliability.

FECA's specific concerns are as follows:

- If Florida's coals plants are required to be retired as early as 2020, how can Florida's utilities replace this baseload power given the long lead times to plan, permit, and build new baseload generation?

- Increased costs to electric cooperatives and their members due to the CPP's mandate to dispatch generation based on environmental considerations, as opposed to dispatching units based on economics and system reliability.
- The emission targets are unfair to Florida as compared to targets for other states.
- There are fundamental flaws with the emission target methodology.
- The EPA lacks jurisdiction to adopt those portions of the targets that are derived from Building Blocks 2, 3, and 4.
- With coal no longer being a viable generation resource, it will be very difficult for the FPSC to "take into account the need for . . . fuel diversity and supply reliability" in need determination proceedings when fuel diversity is unnecessarily restricted.[1]

Reliability

Federal Energy Regulatory Commission ("FERC") Chairwoman Cheryl LaFleuer wrote, "FERC has closely followed the development of the Clean Power Plan because it is clear that such regulations and related state compliance plans could have implications for the operation of the grid." However, it is obvious from the FERC Commissioner's testimony on July 29, 2014, before the House Energy and Power Subcommittee[2] that the EPA has not formally consulted the FERC on the proposed rule, and that reliability is not a primary consideration for the EPA. Reliability must be fully vetted by the FPSC and the FERC before the EPA issues its final rule.

FECA believes the EPA's expedited timeline to replace Florida's baseload coal generation with natural gas and intermittent renewables has serious implications for the reliability of Florida's electric grid. First, under normal circumstances it takes more than 5 years to plan, permit, and construct a natural gas combined-cycle plant, which is the only new baseload that can be added within the CPP's timeline. However, for the foreseeable future the timeline for building new natural gas plants will almost certainly be much longer than normal given the demand for new natural gas plants that the CPP would create across the United States. Then there is the question of whether there will be enough pipeline capacity in Florida to supply natural gas to all of the new generators that would be required by the CPP. Even if we assume that the proposed Sabal Trail Transmission pipeline is approved and constructed on schedule, it still is not clear that Florida would have enough natural gas to accommodate all of the new natural gas capacity that would be required by the CPP. Clearly, this and other reliability issues must be fully evaluated before the CPP can be adopted.

The EPA's apparent lack of concern regarding reliability is disturbing and is counter to the efforts that utilities, Congress, and various other federal agencies are taking to increase the reliability of the grid. The North American Electric Reliability Corporation and the FERC are in

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[1] Section 403.519(3), Florida Statutes.

[2] Hearing on "FERC Perspectives: Questions Concerning EPA's Proposed Clean Power Plan and other Grid Reliability Challenges".

the process of adopting standards for physical security of the grid, and already have adopted cyber security standards. Of course all of these efforts will be for naught if there is not enough generation capacity or enough fuel for the generators.

Cost

There is no doubt that the CPP will increase the electric rates of those utilities that are planning to use existing coal generation beyond 2020. For every coal plant that is retired prematurely because of the CPP, ratepayers will be forced to pay not only for the life that was remaining in the coal plant, but they also will pay for the replacement power plant. Thus, ratepayers will be paying roughly double for the same generation capacity.

Increases in costs for natural gas and for new infrastructure also are likely due to supply and demand constraints as a majority of the nation's coal plants are forced to shut down and be replaced with new natural gas plants in a relatively short time period. The price of natural gas has been historically volatile and could spike with a sudden increase in demand. The prices for new infrastructure most likely will increase significantly due to supply limitations. Vendors for new gas turbines, associated pipelines, solar equipment, and other ancillary infrastructure most likely would take advantage of the insatiable demand created by all of the utilities across the country trying to comply with the CPP goals and timelines. Those utilities that are able to obtain the infrastructure may be required to pay a significant premium, similar to the situation in the early 2000s when gas turbine manufacturers sold slots in the manufacturing queue that added to the cost of the turbine.

The Florida Goal is not Fair

On its face, the EPA's goals for Florida are unfair. The 2030 goal for Florida is 740 lb/MWh, which is more than a 56 percent carbon dioxide ("CO_2") reduction from 2005 levels. However, as explained on the attached Fact Sheet from the EPA, EPA's 2030 goal for the nation is "30 percent from 2005 levels." The EPA has not provided justification for Florida's goal to be significantly higher than the national average. It also is telling that the EPA's goals for Florida's existing fossil fuel generation are more stringent than the CO_2 goals recently established as Best Available Control Technology in the EPA's "Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units" (79 FR 1429). That should not be possible under the Clean Air Act. Florida also should be given credit for customer-owned renewable generation that is subsidized through net metering rates, tax exemptions, or rebates from the State or the local utility[3]. Florida and its ratepayers are directly and indirectly subsidizing these customer-owned low emission generators, and the EPA's goal should give Florida credit for its achievements.

[3] In addition to the federal tax credits.

The CPP's emission targets and timelines are flawed

If reducing CO_2 is the overarching goal of the CPP, utilities should be given a planning horizon that allows flexibility to utilize the lowest emitting baseload plants that are available. New nuclear facilities take approximately 20 years to plan, permit, and construct. The EPA's 2030 deadline eliminates the option of using new nuclear to significantly reduce a utility's carbon footprint. Instead, the CPP would require state-of-the-art coal plants to be shuttered and replaced with natural gas generation, which will only reduce CO_2 emissions by approximately 50 percent and will strand coal plant assets in Florida that are worth billions. The flawed logic of the CPP is apparent when the four Building Blocks are evaluated. The most glaring example is the portion of the goal that is derived from Building Block 1, which is based on heat rate improvements for coal plants. Obviously this portion of the goal cannot be achieved if in fact those plants are shut down as required by the CPP.

The EPA Lacks Jurisdiction to Mandate a Goal for Renewables or Demand-side Energy Efficiency

It is very doubtful that the EPA is authorized to adopt those portions of the goal that are derived from Building Blocks 2, 3, and 4, since they do not relate to standards for the regulated stationary source. The EPA standards for stationary sources under Section 111 should begin and end with the regulated source itself. A new source performance standard ("NSPS") or existing source guideline must apply to individual sources; must be based on reductions that an individual source can achieve; and must be based on the use of a system that is incorporated into the design of the source. FECA seriously doubts that Section 111(d) authorizes the EPA to force a utility to retire its existing state-of-the-art coal plant and replace that power by buying natural gas generation from another entity or build a new natural gas generator, which would be required by Building Block 2. Regarding Building Blocks 3 and 4, the EPA clearly has no authority to impose a standalone renewable mandate or a demand-side energy efficiency mandate for Florida's utilities, and it is extremely doubtful that the EPA can claim such authority under Section 111(d). Florida should be very reluctant to allow EPA to usurp Florida's jurisdiction over these areas, especially when EPA has little or no experience with (and apparently very little concern about) the reliability of the Grid or the cost of electricity.

Conclusion

FECA believes the CPP poses significant reliability, cost, and jurisdictional challenges that must be fully vetted before the proposed rule can be finalized. FECA does not believe the CPP is realistic or achievable given the emission reduction targets for Florida and the unnecessarily accelerated timeline. Forcing existing coal-fired power plants to retire early will lead to

increased costs for consumers, and will jeopardize the reliability of Florida's electric grid unless sufficient time is allowed to build new generation.

Please call me if you have any questions regarding our concerns with the EPA's proposed rule.

Sincerely,

William B. Willingham
Executive V.P. & General Manager

Attachment: EPA Fact Sheet

EPA FACT SHEET: Clean Power Plan

NATIONAL FRAMEWORK FOR STATES

SETTING STATE GOALS TO CUT CARBON POLLUTION

On June 2, 2014, the U.S. Environmental Protection Agency, under President Obama's Climate Action Plan, proposed a commonsense plan to cut carbon pollution from power plants. Nationwide, by 2030, the Clean Power Plan will help cut carbon emissions from the power sector by 30 percent from 2005 levels, while starting to make progress toward meaningful reductions in 2020.

- **Setting state goals**—To set state-specific goals, EPA analyzed the practical and affordable strategies that states and utilities are already using to lower carbon pollution from the power sector. These include improving energy efficiency, improving power plant operations, and encouraging reliance on low-carbon energy. Together, these make up the best system for reducing carbon pollution because they achieve meaningful reductions, and create jobs by driving clean energy investment and reducing energy waste to save families money.
- **Goals give states flexibility**—Each state has the flexibility to choose how to meet the goal using a combination of measures that reflect its particular circumstances and policy objectives. While EPA identified a mix of four "building blocks" that make up the best system of emission reductions under the Clean Air Act, a state does not have to put in place the same mix of strategies that EPA used to set the goal. States are in charge of these programs and can draw on a wide range of tools, many of which they are already using, to reduce carbon pollution from power plants and meet the goal, including renewable energy portfolios and demand-side energy efficiency measures.

SETTING STATE GOALS

- EPA is proposing state-specific emissions goals for reducing carbon dioxide (CO_2) emissions from the power sector.
- These state goals are <u>not</u> requirements on individual electric generating units. Rather, each state has broad flexibility to meet the rate by 2030 by lowering the overall carbon intensity of the power sector in the state.
- The basic formula for the state goal is a rate: CO2 emissions from fossil fuel-fired power plants in pounds (lbs) divided by state electricity generation from fossil-fuel fired power plants and certain low- or zero-emitting power sources in megawatt hours (MWh).
    - This approach factors in megawatt hours from fossil fuel power plants plus other types of power generation like renewables and nuclear, as well as megawatt-hour savings from energy efficiency in the state.
- State- and regional-specific information is plugged into the formula, and the result of the equation is the state-specific goal.
- Each state's goal is different, because each state has a unique mix of emissions and power sources to plug in to each part of the formula.

- EPA is proposing a two-part goal structure: an "interim goal" that a state must meet on average over the ten-year period from 2020-2029 and a "final goal" that a state must meet at the end of that period in 2030 and thereafter.

GOALS GIVE STATES FLEXIBILITY

- Each state will choose how to meet the goal through whatever combination of measures reflects its particular circumstances and policy objectives. A state does not have to put in place the same mix of strategies that EPA used to set the goal, and there are no specific requirements for specific plants.
- EPA is proposing the state goal approach under Section 111(d) of the Clean Air Act, which requires that EPA identify the "best system of emission reduction … adequately demonstrated" (BSER) that is available to limit pollution – and set guidelines for states to achieve reductions that reflect that system. States then make plans to get the reductions that would result from that system.
- In this case, EPA identified four sets of measures – or "building blocks" – that are in use today by many states and utilities and that together make up the best system for reducing carbon pollution.
- These building blocks recognize the interconnected nature of the power sector – looking broadly to find cost-effective and proven solutions.
    - For example, 47 states have utilities that run demand-side energy efficiency programs, 38 states have renewable portfolio standards or goals, and 10 states have market-based greenhouse gas programs.
- EPA analyzed historical data about emissions and the power sector to create a consistent national formula for reductions that reflects the building blocks. The formula applies the building blocks to each state's specific information, yielding a carbon intensity rate for each state.

Building Block	**Value Allocated in Goal-Setting Formula**
Make fossil fuel power plants more efficient • Improve equipment and processes to get as much electricity as possible from each unit of fuel • Using less fossil fuel to create the same amount of electricity means less carbon pollution.	Average heat rate improvement of 6% for coal steam electric generating units (EGUs)
Use low-emitting power sources more • Using lower-emitting power plants more frequently to meet demand means less carbon pollution.	Dispatch to existing and under-construction natural gas combined cycle (NGCC) units to up to 70% capacity factor
Use more zero- and low-emitting power sources • Expand renewable generating capacity, which is consistent with current trends. • Using more renewable sources, including solar and wind, and low-emitting nuclear facilities, means less carbon pollution.	Dispatch to new clean generation, including new nuclear generation under construction, moderate deployment of new renewable generation, and continued use of existing nuclear generation

Building Block	Value Allocated in Goal-Setting Formula
Use electricity more efficiently • Reducing demand on power plants is a proven, low-cost way to reduce emissions, which will save consumers and businesses money and mean less carbon pollution.	Increase demand-side energy efficiency to 1.5% annually

- EPA is also proposing to give states the option to convert the rate-based goal to a mass-based goal if they choose to in their state plans.
    - Adopting a mass-based goal would better allow a state or group of states to cap their tonnage of CO_2 emissions and set up a trading program if they choose that option.
- States can develop a state-only plan or collaborate with each other to develop plans on a multi-state basis to meet the goals outlined in the proposal.
- EPA is only proposing goals for states with fossil fuel-fired power plants. Vermont and Washington, DC are not included in this rule because they do not have fossil fuel-fired power plants.
- EPA is not proposing emission rate goals or guidelines for the four affected sources located in Indian country at this time. EPA will work with those tribes and sources to develop or adopt Clean Air Act programs.

FOR MORE INFORMATION

EPA will accept comment on the proposal for 120 days after publication in the Federal Register and will hold four public hearings on the proposed Clean Power Plan during the week of July 28 in the following cities: Denver, Atlanta, Washington, DC and Pittsburgh. The proposed rule, information about how to comment and supporting technical information are available online at: http://www.epa.gov/cleanpowerplan