DUKE ENERGY FLORIDA, INC.'S RESPONSES TO STAFF'S FIRST REQUEST FOR COMMENTS (NOS. 1 - 5)

1. Please provide comments you have on legal aspects of the Clean Power Plan or proposed standards of performance for Modified and Reconstructed Sources that you believe are important for the Commission to review.

RESPONSE:

In the proposal, EPA is asserting novel authority to determine how generation is dispatched, the amount of renewable resources to be built, and demand-side management of electricity use. Standards for stationary sources under section 111 of the Clean Air Act (CAA) 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 use of a system that is incorporated into the design of the source. Of the four "building blocks" EPA proposes as part of a "system of emission reduction" under its "Option 1" approach, only the first can be applied by individual sources subject to the rule. The other three measures are out of the control of any particular regulated source and are predicated on actions by others. This regulatory approach is incompatible with EPA's obligations under the CAA.

Further, if a state does not submit an "approvable" plan, EPA has no authority to promulgate a federal plan that includes the measures it would require of states. EPA cannot adopt a plan that imposes a federally-enforceable energy resource development and dispatch program upon states.

2. Please provide comments you have on technical aspects of the Clean Power Plan or proposed standards of performance for Modified and Reconstructed Sources that you believe are important for the Commission to review.

RESPONSE:

DEF is in the process of evaluating the technical aspects of the proposed rule. However, the following is an initial discussion of concerns the Company has.

• DEF is concerned with EPA's use of the 2012 baseline year. The EPA proposes to require Florida utilities to reduce their average CO₂ emission rate by an additional 38 percent from 2012 to 2030; however, Florida utilities already reduced their average rate by nearly 20 percent from 2005 to 2012. The EPA appears to have overlooked this progress and instead is proposing an additional very significant reduction in emissions that likely cannot be achieved. In fact, the 2020 to 2029 10-year average interim goal is set at a level of 794 lbs/MWh that requires emissions to

decrease dramatically from the current state average level of 1,200 lbs/MWh in only the next five years in order to comply with it, making it just as aggressive as – if not more so than – the 2030 goal.

- The level of reductions projected by the EPA in Florida is unreasonably burdensome and potentially costly to Florida consumers, given the resource mix and the balance of cost, fuel diversity and practical limitations for use of renewable resources.
- The 6 percent heat rate improvement contained in Building Block 1 is unachievable. In order to produce electricity as efficiently as possible, utilities have already implemented some of the higher return efficiency improvements for their units to reduce operating costs and rate impacts to customers. In addition, EPA's analysis for Florida predicts the shutdown of nearly all coal-fired generation in the state, making any heat rate improvements for those units moot.
- The 70 percent capacity factor goal for the use of natural gas-fired combined-cycle units in Building Block 2 may be achievable at times, but may not be sustainable, as discussed in more detail in the questions that follow. It is not just the type of unit and the fuel it uses that are important but also the location of each unit on the electric grid and the bulk electric system operating reliability and stability requirements that may affect how much of a shift in generation dispatch the transmission system can accommodate. The EPA ignored these critical considerations in its analysis.
- DEF is evaluating the EPA's proposed five-fold increase in renewable generation for Florida in Building Block 3. EPA must take into account that renewable resources are intermittent and often unreliable and conventional generation resources must be maintained and operated in order to fill the gaps left when renewable generation resources are not available.
- In Building Block 4, EPA predicts that Florida utilities will increase demand-side energy efficiency by 1.5 percent per year. This goal is higher than what is achievable. Florida utilities have implemented aggressive demand-side programs for over 30 years, reducing electricity use and avoiding the construction of additional generating units. Through promotion of energy-saving measures, rebates, and the savings that are being obtained due to more stringent federal and state standards for appliances and building construction, most of our customers have implemented and benefitted from increased efficiency. In addition, adoption of these measures ultimately is up to the customer, and neither the EPA, the state agencies, nor the utilities can mandate or force energy efficiency measures to be implemented.
- "Generation" appears to exclude industrial and commercial producers, but renewables baseline appears to include all production sectors.
- 3. Please provide input on the assumptions EPA employed in setting the Florida-specific interim and final emission targets in the Clean Power Plan.

RESPONSE:

Please refer to the comments in the response to Question 2 above regarding the assumptions used to establish the four "building blocks."

4. Should the effects of actions implemented after 2005, which resulted in lower CO_2 footprint, be included in the EPA'S Clean Power Plan, and if so, explain how and why?

RESPONSE:

Credit should be incorporated for the significant reductions in CO_2 emissions that have occurred since 2005 (a 20 percent decrease in emission rate). EPA is proposing that Florida utilities reduce emissions by an additional 38 percent by 2030, which is a much higher percentage than many other states. Rather than using 2012 as the baseline year, EPA should instead establish 2005 as the baseline, providing credit for the reductions achieved between 2005 and 2012. EPA has stated that the proposal will achieve a 30 percent reduction in emissions from 2005 levels by 2030; therefore, the emission rate goals should be established on that basis and should be implemented more uniformly across the country.

5. Please discuss the achievability of meeting EPA's proposed Florida-specific interim and final emission targets in the Clean Power Plan.

RESPONSE:

DEF is working with the FCG to better understand the potential feasibility of these targets at a state level, and is in the process of evaluating whether there are interim and/or final emission rate goals that would be technically achievable at the utility level, and if so, at what cost. The feasibility of achieving these targets ultimately depends on how Florida decides to leverage the 4 building blocks and combinations proposed to meet the proposal. The heat rate assumptions for coal plants are unlikely to be achievable, especially when considering that under EPA's proposal, the capacity factor of coal units would need to decline substantially in order to meet the goals.