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December 1, 2014

Via Electronic Submission to A-and-R-Docket@epa.gov
Attn: Docket No. EPA-HQ-OAR-2013-0602

The Honorable Gina McCarthy
Administrator, U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: Proposed Clean Power Plan: 79 Fed. Reg. 34830 (June 18, 2014); 79 Fed. Reg. 64543 (Oct. 30, 2014); and 79 Fed. Reg. 67406 (Nov. 13, 2014)

Dear Administrator McCarthy:

The Florida Department of Environmental Protection ("Department") offers the following on the U.S. Environmental Protection Agency's (EPA) proposed *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*.

EPA's stated goals for the proposed rule include: more efficient power production; reduced consumer electric bills; and a competitive, growing economy. As Florida's lead environmental agency and primarily responsible for implementing clean air requirements, we share these goals. Although it was not credited in the proposed rule, Florida's power plants already have reduced their carbon intensity rate by 21% since 2005, and 11% since 2010, resulting in one of the lowest rates in the United States. Today, every megawatt-hour of electricity produced in the state generates, on average, 330 pounds less CO_2 than in 2005. These same plants have reduced nitrogen oxides and sulfur dioxide emissions—key to the formation of fine particle and ozone pollution—by over 75% since 2005, including 37% since 2010. In fact, air emissions from industrial facilities generally are declining. Emissions hit their lowest levels since the Department began tracking them in 1985, declining by 22% since 2010. These reductions largely were driven by ratepayer-funded investments of nearly 20 billion dollars in new, very efficient power plants, and air pollution control equipment required by Department-issued permits.

As a result, Florida has been widely recognized for its air quality. The American Lung Association recently reported that Florida had zero unhealthy days for ozone pollution in the last three years, and 23 Florida cities made its "cleanest cities" list. Moreover, according to EPA's own performance standards, the Department's air compliance and enforcement program ranks first among southeastern states and second nationwide. This

year, the Department trained 200 compliance inspectors statewide that ensures this progress continues. These successes reflect the Department's continued commitment to clean air.

EPA's proposed rule has the potential for broad ranging effects on Florida's energy generation and transmission system, a system that has traditionally been an area regulated by the states and the type of expansion the Supreme Court has cautioned against.[1 2 3]

The proposed rule places a higher burden on some states to achieve the required reductions vis a vis other states. Florida's "state goal" under the proposed rule is one of the most demanding in the country while other states that have done relatively little in the way of reducing greenhouse gas emissions have far less demanding "state goals."[4] Oddly,

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[1] See U.S. Const. amend. X (reserving powers to the states or the people that are "not delegated to the United States by the Constitution, nor prohibited by it to the states…"); see also 16 U.S.C § 824(b)(1) (limiting the jurisdiction of Federal Power Act to the transmission of electric energy in interstate commerce, and not applying to facilities engaged in intrastate commerce); 42 U.S.C. § 7113 (requiring the Department of Energy, including the Federal Regulatory Commission, to work with states when conflicts arise between its proposed agency actions with the energy plan of any state).

[2] See Utility Air Regulatory Group v. EPA, 134 S.Ct. 2427, 2444 (2014) (Finding EPA interpretations of the Clean Air Act unreasonable if there is an "enormous and transformative expansion in EPA's regulatory authority without clear congressional authorization").

[3] If the Department properly interprets the proposed rule, it seems to treat an entire state as the "source," as opposed to individual facilities, as is contemplated by the definitions and structure of Section 111. See CAA § 111(a)(3) & (6), 42 U.S.C. § 7411(a)(3) & (6); 40 C.F.R. 60.20 - 60.29. The proposed rule does not sufficiently identify the statutory basis for EPA's determination and application of "best system of emission reductions" (BSER), especially the inclusion of beyond-the-unit measures. EPA's use of beyond-the-unit measurements appears to be outside the scope of Section 111(d). For example, the rule would regulate renewable energy sources and energy efficiency although neither are a source category nor meet the definition of "stationary source" because they do not emit any air pollutant. Accordingly, EPA should address these questions regarding the use of beyond-the-unit measures.

[4] Furthermore, the Department has identified other legal issues raised by the Clean Power Plan that EPA should consider. Specifically, the regulation of existing sources through the Clean Power Plan seems to be premature. See CAA § 111(d)(1)(A), 42 U.S.C. § 7411(d)(1)(A). Section 111(d)(1)(A)(ii) requires EPA to first finalize standards of performance for new sources before developing procedures for the submission of state plans for existing sources. Id. Moreover, EPA has not yet made an endangerment finding as required by Section 111(b)(1)(A) to support the proposed Clean Power Plan. See CAA § 111(b)(1)(A); 42 U.S.C. § 7411(b)(1)(A). Lastly, Section 111(d) prohibits EPA from utilizing Section 111(d) where the existing stationary source is regulated under Section 112, related to Hazardous Air Pollutants. See CAA § 111(d)(1); 42 U.S.C. § 7411(d)(1); see also American Electric Power v. Connecticut, 131 S.Ct. 2,527, 2,537 n.7 (2011) (stating that "[t]here is an exception: EPA may not employ §7411(d) [111(d)] if existing stationary sources of the pollutant in question are regulated under the national ambient air quality standards program, §§ 7408-7410, or the 'hazardous air pollutants' program, § 7412"). EGUs are already subject to regulation under

the proposed rule punishes instead of rewards states such as Florida, that have proactively moved energy production, prior to this proposed rule, to energy sources that generate less greenhouse gas emissions, such as Natural Gas Combined Cycle ("NGCC") facilities, that EPA now promotes. For these reasons, EPA's inequitable treatment of Floridians in its creation of varying burdens for different states seems arbitrary.[5]

As Florida has worked to become a national leader in air quality, we have simultaneously remained committed to ensuring Florida's families have an affordable and secure source of energy. A key factor in maintaining affordable utility prices is ensuring new rules and regulations have been fully discussed and vetted before asking families to pay for new requirements. To that end, it appears virtually certain that this rule will be contested in the courts once it is finalized. As with EPA's relatively recent Clean Air Interstate Rule (CAIR) and the Cross-State Air Pollution Rule (CSAPR) challenges, there will be significant uncertainty for states and potentially a huge state investment being put at risk. Given these concerns, EPA should consider voluntarily suspending the aggressive implementation deadlines pending the outcome of the challenges to avoid the incredible inefficiencies that could result if the rule is not upheld.

The Department appreciates the opportunity to comment on the rule and reiterates its commitment to clean air, efficient power production, reduced consumer electric bills, and a competitive, growing economy. Administrator McCarthy has stated that EPA intended to meet these goals through an "absolute collaboration between the federal and state government."[6] The Department respectfully requests that EPA give due consideration to strengthening those commitments by continuing to evaluate the cost and benefits of the proposed rule to ensure that the carbon emissions reductions accomplished through this proposal are achieved through the most efficient, transparent, and legally sound means.

Section 112, therefore cannot now be subject to regulation under Section 111(d). See 77 Fed. Reg. 9,304 (Feb. 16, 2012).

[5] See County of Los Angeles v. Shalala, 192 F.3d 1005, 1022 (D.C. Cir. 1999) ("[A]n agency action is arbitrary when the agency offer[s] insufficient reasons for treating similar situations differently." (quoting Transactive Corp. v. U.S., 91 F.3d 232, 237 (D.C. Cir. 1996)).

[6] McCarthy, Gina. "State, Regional and Company Approaches to Reduce Power Sector GHG Emissions." Bipartisan Policy Center. Grand Hyatt Washington Constitution Ballroom, Washington D.C. April 7, 2014 *available at*: https://archive.org/details/CSPAN2_20140415_203000_Key_Capitol_Hill_Hearings#start/6420/end/6480.

The Department also provides the following attached technical comments in the form of data corrections and clarifications. If you have any questions, please contact Paula Cobb, Director of Air Resource Management, at (850) 717-9000 or Paula.Cobb@dep.state.fl.us.

Sincerely,

Clifford D. Wilson III, P.E.
Interim Secretary

Florida Department of Environmental Protection
Data Corrections and Clarifications

A. Unit Characterization

1. EPA's eGRID dataset classifies FPL's Cape Canaveral NGCC plant in the existing NGCC category. EPA's Goal Computation TSD states, however, that "NGCC capacity that was not operating in 2012" should be classified as 'under construction NGCC.'[7] EPA's eGRID data for the Cape Canaveral NGCC shows that this unit did not send any power to the grid in 2012; therefore, this unit should be categorized as an "under construction NGCC" unit for goal setting purposes. When a NGCC unit is listed as an "under construction NGCC" unit, EPA's goal setting methodology states that the NEEDS database is used to determine that unit's capacity.[8] Florida's existing NGCC capacity should be reduced by 1,295 MW (nameplate capacity of Cape Canaveral) and Florida's under construction NGCC capacity should be increased by the capacity of Cape Canaveral according to the NEEDS database.

2. The NEEDS database does not identify specific "Under Construction NGCC" units in Florida. However, the Department believes that the listed 1,157 MW of "Under Construction NGCC" capacity represents the summer capacity of FPL's Riviera NGCC facility. If this is the case, it appears EPA has not included the under construction capacity from FPL's Port Everglades NGCC. The Department believes this unit commenced construction prior to January 8, 2014 and therefore should be classified as an "Under Construction NGCC." If this is accurate, Florida's "Under Construction NGCC" capacity should be increased by the capacity of Port Everglades according to the NEEDS database.

3. The City of Tallahassee's Arvah B. Hopkins Unit 2 is characterized in the 2012 eGRID database as having a nameplate capacity of 259.2 MW. This unit's true capacity is, however, significantly lower. Unit 2 was originally a 230 MW (summer net rating) gas/oil steam EGU. The steam unit was repowered for use as a heat recovery boiler and as a result of the reduced heat input, now has a summer net rating of 140 MW. The facility is physically unable to generate 259.2 MW; therefore, its potential generation capacity should be identified as 140 MW.

B. Baseline Considerations

4. Has EPA considered whether its use of nuclear uprates completed in 2012 or post-2012 in calculating the at-risk nuclear generation goal is consistent with its use of a 2012 baseline? Would EPA consider using a different baseline date that allows recently completed nuclear uprates to be excluded from the goal-setting calculation but be included in the compliance calculation?

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[7] Goal Computation TSD, p. 6.
[8] Goal Computation TSD, p. 6.

C. Mass-Based Considerations

5. EPA performed modeling using the Integrated Planning Model to project future generation and CO_2 emissions for the compliance period. EPA has provided unit-specific data for both a "business-as-usual" scenario and a "Clean Power Plan" scenario for the years 2020 and 2025 (i.e., unit-specific "parsed files" that reflect both existing and projected new units).[9] EPA has not, however, provided a "parsed file" for any other years. Has EPA considered whether the parsed files for each year of the compliance period (i.e. 2020-2029) would be helpful or necessary to determine CO_2 emissions from 111(d) affected units during the compliance period, and whether states could use these files as a proxy to determine a mass-based goal comparable to the rate-based goal set by EPA?

D. Affected Units

6. EPA's proposed applicability criteria exclude new units and "those subject to subpart TTTT as a result of commencing modification or reconstruction prior to becoming subject to an applicable state plan." If an EGU that is currently "affected" under 111(d) were to commence modification or reconstruction prior to becoming subject to an applicable state plan, would EPA recalculate the state-specific goal to reflect the absence of this no-longer "affected" EGU?

7. EPA has delineated units that are classified as "affected EGUs."[10] There are a number of existing electrical generators in Florida that are not "affected EGUs." Many of these units are not subject to 111(d) because of the type of fuel combusted (i.e., biomass, waste-to-energy, and landfill gas), but these units do sell power to the grid. Will EPA provide clarification as to whether states have the discretion to determine whether to include CO_2 emissions from these facilities in calculating the state rate for compliance purposes?

8. In the GHG Abatement Measures TSD, EPA states that Florida's renewable energy generation for 2012 was 4,523,798 MWh.[11] After reviewing the U.S. EIA Detailed 1990-2012 Annual Generation State Historical Tables, which are included as appendices to the proposal, it appears that EPA arrived at Florida's 2012 renewable energy generation total by adding the megawatt hours produced by "Other Biomass," "Solar Thermal and Photovoltaic," and "Wood and Wood

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[9] EPA's "Parsed File: Base Case, 2020," "Parsed File: Base Case, 2025," "Parsed File: Option 1 State 2020," "Parsed File: Option 1 State 2025," are available at: http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2013-0602

[10] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, 79 FR 34830, 34954 (June 18, 2014) (specifying in proposed 40 CFR 60.5800 that EGUs "subject to subpart TTTT as a result of commencing construction or reconstruction after the subpart TTTT applicability date" are exempt from state plans).

[11] *GHG Abatement Measures TSD*, pp. 4-6

Derived Fuels."[12] EPA has stated that it will finalize the CO_2 accounting framework for biogenic CO_2 emissions at a later date.[13] Has EPA considered the effects of the accounting framework on the calculation of state goals and compliance demonstrations? Will EPA revisit the calculation of state goals if it determines that biomass cannot be treated as a zero carbon source?

9. EPA has not included generation from waste-to-energy facilities in Florida when calculating the 2012 renewable energy generation totals. Do states have flexibility to include waste-to-energy facilities in calculating generation from renewable energy sources for compliance purposes?

10. EPA appears to include among affected EGUs units that co-fire landfill gas together with fossil fuels. Has EPA considered whether states could credit the landfill gas component as "carbon neutral" for purposes of determining compliance with state goals?

11. The definition of "affected EGUs" excludes most simple cycle combustion turbines (SCCT) due to the limited amount of time that they operate.[14] Has EPA considered whether a non-affected unit could become an affected unit (i.e., by operating above the 33% capacity factor making it subject to the 111(d) plan applicability criteria)? In the event that such a unit were re-designated as affected, would EPA recalculate the state-specific goal?

D. "Building Block 2" Considerations

12. Much of Florida has a climate that is humid sub-tropical or tropical. EPA determined the BSER for re-dispatch by ascertaining the top 10% of highest utilized NGCC facilities, which resulted in the setting of the BSER at 70% of nameplate capacity. Has EPA considered whether summer capacity better reflects the actual generating capacity of affected facilities, and whether a determination of the 90th percentile of NGCC capacity factors should be based upon net summer capacity?

13. For existing NGCC facilities, EPA uses "nameplate capacity" to determine the potential electricity generation capacity factors.[15] For under construction NGCC facilities, however, EPA uses data from the NEEDS database, which the Department believes uses expected summer capacity.[16] In determining the BSER,

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[12] U.S. EIA Detailed 1990-2012 Annual Generation State Historical Tables (specifying that in 2012, Florida generated 2,272,621 MWh from "Other Biomass," 193,616 MWh from "Solar Thermal and Photovoltaic," and 2,057,561 MWh from "Wood and Wood Derived Fuels").
[13] *See* 79 FR 34927.
[14] 79 FR 34954 (specifying in proposed 40 CFR 60.5795(2) that stationary combustion turbines that have base load ratings "greater than 73 MW (250 MMBtu/h), was constructed for the purpose of supplying, and supplies, one-third or more of its potential electric output and more than 219,000 MWh net-electrical output to a utility distribution system on a 3-year rolling average basis," are not affected EGUs).
[15] *GHG Abatement Measures TSD*, pp. 3-6
[16] *Goal Computation TSD*, p. 6.

has EPA considered the effect of using expected summer capacity to select the capacity of under construction NGCC units while using nameplate capacity for existing units?

14. In order to determine the 70% dispatch threshold for NGCC facilities, EPA compared 2012 NGCC facility generation to nameplate capacity and calculated capacity factors for each NGCC facility. Using this data, EPA determined that the top 10% of highest utilized NGCC plants operated at an annual capacity factor (in terms of nameplate capacity) at or above 70%.[17] In order to validate the feasibility of a 70% NGCC capacity in a compliance scenario, EPA used the Integrated Planning Model, which uses the NEEDS database as its primary input for information on generating units.[18] Has EPA considered the fact that the NEEDS database does not rely on "nameplate capacity" as its principle data input, but rather summer capacity?[19]

15. Has EPA considered that discrepancies may exist between nameplate and summer capacities as a result of repurposed equipment? For example, Florida has identified at least one heat recovery unit that was repurposed, and, as a result, now operates well below its nameplate capacity because of insufficient waste heat from the combustion turbine (see number 3 above). Has EPA considered whether use of the NEEDS database or summer capacity might eliminate such discrepancies?[20]

16. EPA's IPM modeling accounts for transmission limitations between NERC regions. This modeling assumes, however, that transmission capability within each NERC region is unrestrained (i.e., there are no technological or logistical barriers preventing the movement of electricity within the region). Given Florida's unique peninsular geography, has EPA considered whether this assumption unrealistically assumes that Florida's transmission capabilities are adequate to meet the modeled assumptions of 70% dispatch?

17. EPA used the Integrated Planning Model to estimate costs associated with the Clean Power Plan. Has EPA considered the extent to which the model incorporates data that account for the expenses associated with decommissioning units prior to the recovery of their capital costs?

18. As EPA stated in its Notice of Data Availability, stakeholders have expressed that states with large amounts of excess NGCC capacity are required to make significant CO_2 reductions early in the compliance period in order to meet their interim goals, defeating the intended purpose of providing states flexibility. Given that the interim goals reduce states' (with high NGCC capacity) options for

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[17] *GHG Abatement Measures TSD*, pp. 3-5 – 3-9
[18] *GHG Abatement Measures TSD*, pp. 3-20 – 3-25
[19] *NEEDS User's Guide*, p. 4-4.
[20] 2012 summer capacity can be found in EIA form 860, available at: http://www.eia.gov/electricity/data/eia860/.

meeting compliance, has EPA considered altering or removing the interim goals or phasing in Building Block 2 in order to provide states with implementation flexibility?

E. "Building Block 3" Considerations

19. States in the southeastern region were given a renewable energy target of 10% of statewide electrical generation.[21] This regional approach was based on the assumption that the potential to expand renewable energy resources varied by region.[22] The figure for the southeastern region is based upon the average of all renewable portfolio standards of all states in that region. For the southeastern region, however, North Carolina is the only state to have such a standard. As such, North Carolina became the standard for the region. It is, however, a combined renewable energy/efficiency standard that allows utilities to meet a portion of their targets through efficiency measures, rather than the deployment of new renewable energy generation.[23] Has EPA considered the effect of this on its Building Block 3 calculations?

20. EPA has proposed an alternative methodology to determine regional renewable energy potential based upon a technical and economic analysis of a given region and apportion the targets between each state in a given region. It would appear this option better aligns with EPA's focus on best available data.

21. EPA questioned whether it is appropriate to have incremental energy efficiency and renewable energy displace fossil-fuel generation in a manner similar to Building Block 2. As EPA observed in its Notice of Data Availability, states with large NGCC capacity and lower NGCC utilization must reduce the use of coal, oil, and gas steam EGUs to a significantly greater extent than states with lower NGCC capacity and/or higher NGCC utilization. It appears this approach would further exacerbate issues that stakeholders have raised concerning stranded assets, remaining useful life, and grid reliability.

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[21] 79 FR 34866.
[22] *Id.*
[23] *See* North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS) at http://www.ncga.state.nc.us/Sessions/2007/Bills/Senate/PDF/S3v6.pdf