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## Public Service Commission

July 15, 2011

VIA ELECTRONIC MAIL

Administrator Lisa P. Jackson  
U.S. Environmental Protection Agency  
Mail Code 2822T  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

ATTN: Docket ID No. EPA-HQ-OAR-2009-0234

Dear Administrator Jackson:

The Florida Public Service Commission authorized on June 29, 2011, the filing of the attached comments on EPA's recently proposed rule on national emission standards for hazardous air pollutants from coal- and oil-fired electric utility steam generating units under the Clean Air Act.

The staff contacts on these comments are Judy Harlow at 850-413-6842 and Cindy Miller at 850-413-6082.

Sincerely,

/ s /

Cindy B. Miller  
Senior Attorney

CBM:tf

cc: Art Graham, Chairman  
Lisa Polak Edgar, Commissioner  
Ronald A. Brisé, Commissioner  
Eduardo E. Balbis, Commissioner  
Julie I. Brown, Commissioner

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

Electric Utility Air Toxics Rule )

Docket ID No. EPA-HQ-OAR-2009-0234

**COMMENTS OF THE FLORIDA PUBLIC SERVICE COMMISSION**

The Florida Public Service Commission (FPSC) appreciates the opportunity to comment on this rulemaking. The FPSC is charged with ensuring that Florida's electric utilities provide safe, reliable energy for Florida's consumers in a cost-effective manner. Section 366.015, Florida Statutes (F.S.), encourages the FPSC to participate in federal proceedings that impact the utilities we regulate.

The U. S. Environmental Protection Agency's (EPA) proposed Electric Utility Air Toxics rule has the potential for significant rate, and potentially reliability, impacts on Florida's energy consumers. EPA's final rules should avoid compromising electric system reliability and allow the maximum compliance flexibility for electric utilities provided for under the Clean Air Act. Electric utilities should be given the flexibility to choose the most efficient, least-cost compliance options to meet public health and environmental goals. State air permitting authorities are in the best position to review the compliance plans by electric utilities within their respective states, while public utilities commissions will be responsible for reviewing these plans for reliability and cost impacts.

**Background**

The proposed Utility Air Toxics rule is of direct concern to the FPSC. The FPSC has authority pursuant to Section 366.04(5), F.S., over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes. The FPSC has full regulatory authority under Chapter 366, F.S., over Florida's five investor-owned electric utilities, including aspects of rates, operations, and safety. The statute provides the FPSC with more limited authority over Florida's 35 municipally-owned and 18 rural electric cooperatives, which includes safety, rate structure, and operations and planning. Pursuant to Section 403.519, F.S., the FPSC is charged with determining the need for all new steam electric generating facilities over 75 megawatts (MW).

Florida has a total generating capacity of 58,420 MW (summer). Transmission capability to import energy into peninsular Florida from other states is approximately 3,600 MW. Given Florida’s peninsular geography and this existing capacity of transmission interconnections to other states, the opportunity for Florida to import energy from generating units outside Florida for which compliance costs are low will be limited relative to other states.

Approximately 27 percent of Florida’s electricity needs are currently met with coal- and oil-fired generation, the generation resources subject to the proposed Air Toxics rule. This energy is produced by 21,641 MW of capacity for which Florida’s electric utilities must evaluate and implement compliance strategies, including 11,387 MW of coal-fired capacity and 10,254 MW of oil-fired capacity.

Pursuant to Section 366.8255, F.S., Florida’s investor-owned electric utilities have the opportunity to petition the FPSC for rate relief for prudently incurred costs to comply with new environmental requirements. The FPSC has implemented this statute through an annual Environmental Cost Recovery Clause. Between base rate proceedings, Florida’s investor-owned electric utilities will have the opportunity to recover the costs associated with the proposed Air Toxics rule through this cost recovery clause, subject to FPSC review. As discussed further in Appendix B, preliminary compliance cost estimates associated with the rule by Florida’s investor-owned electric utilities are significant. Recovery of these compliance costs through a cost recovery clause, as required by Florida statutes, will have a near immediate rate impact on Florida’s consumers.

For a reference point, the following table illustrates the expected monthly bill increase for a residential customer for each additional \$100 million in environmental compliance costs that are recovered by these investor-owned utilities through the clause. It is assumed that the residential customer uses 1,200 kilowatt-hours per month, which is the average monthly electrical energy usage for Florida’s residential consumers.

<b>Utility</b>	<b>Estimated Monthly Bill Increase per \$100 Million in Compliance Costs</b>
Florida Power & Light Company	\$1.27
Progress Energy, Florida	\$3.38
Gulf Power Company	\$10.90
Tampa Electric Company	\$6.38

The FPSC is concerned about the impact of these potentially substantial compliance costs on Florida's consumers, particularly in this time of economic distress and high unemployment. Increases to the cost of electricity are of particular concern in Florida due to the state's unique weather, customer base, and high reliance on electricity for cooling and heating. Florida has the highest number of cooling degree days of any state in the continental U.S., indicating the greatest need for air conditioning in the summer months. Our state's high proportion of residential customers comprises almost 89 percent of Florida's electricity customers, and includes a large portion of senior citizens on fixed incomes. Compared to other states, Florida's customers rely more heavily on electricity to meet their energy needs, rather than the direct use of natural gas or other fuels for cooling and heating. Approximately 85 percent of Florida's residential customers' energy needs are met with electricity.

### **Key Principles**

The FPSC supports the general principles for federal environmental regulations as established in the National Association of Regulatory Utility Commissioners' (NARUC) resolution, entitled "Resolution on the Role of State Regulatory Policies in the Development of Federal Environmental Regulations." The resolution was approved by the Board of Directors of NARUC at its 2011 Winter Committee Meetings in February 2011, and is included as Appendix A. In accordance with these principles, the final rules should:

- ***Avoid compromising system reliability*** – The final rules should allow sufficient time for utilities to evaluate and implement the best compliance options and integrate these options into their systems in order to ensure reliability of operations. Utilities need sufficient time to complete a fully integrated resource plan, and for permitting and installation of the least cost compliance options. The proposed rule, as written, allows for a three year compliance time period, with a potential one year extension by state air permitting agencies; yet wet flue gas desulfurization systems (wet scrubbers) can take two to four years from the design stage to completion, with a one to two month outage during installation. Dry scrubbers can take between two to three years to complete.<sup>1</sup> It appears

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<sup>1</sup> Macedonia, Jennifer; Bipartisan Policy Center, Presentation during NARUC webinar, "Power Sector Transition and Impacts of EPA Regulations," May 25, 2011. See also: URS Report: Lipinski, G., J. Leonard, C. Richardson. *Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants*. URS Corporation. April 2011.

that some generating units may reach the required emissions standards by installing compliance options with shorter installation times, such as dry sorbent injection systems (DSI), with a nine to twelve month installation time. DSI and other control systems with relatively short installation times, however, may not be sufficient for all generating units as a utility strives to meet multiple air regulations. Utilities should not be placed in a position of choosing less efficient or more costly control technologies in order to meet the proposed rule's stringent compliance deadlines. State air permitting authorities, with input from state public utilities commissions, should have the authority to approve requests for additional compliance time (if justified) beyond the potential one year extension in cases where meeting the compliance deadlines would compromise electric system reliability or add unnecessary costs to Florida's consumers.

- **Minimize cost impacts to consumers** – In order to minimize costs, each utility should have the flexibility to choose compliance options to meet air emissions standards that best fit the utility's unique system and customer base. The FPSC commends EPA for allowing utilities to deploy various control technologies in order to meet the proposed rule's air emissions standards. In the final rule, the EPA should avoid one-size-fits-all mandates that would unnecessarily increase utility costs.
- **Provide an appropriate degree of flexibility and timeframes for compliance** – EPA should recognize the cost and potential reliability impact if the majority of coal- and oil-fired electric generators nationwide are required to install control technologies within the proposed rules' short compliance window. With many utilities vying for the same equipment and specialized labor, it is to be expected that there will be price pressure, and potentially shortages, on compliance technologies and skilled labor. EPA should fully analyze whether there will be a sufficient supply of control technologies for U.S. utilities to meet the rule's air emission standards. EPA's final rules should allow flexibility if the supply of compliance technologies or specialized labor is unavailable, or if price increases are excessive, to the extent allowed by law. Further, state air permitting authorities, with input from public utilities commissions, are in the best position to determine if a utility merits additional time due to insufficient supply or excessive price increases of compliance options.

- **Recognize the needs of each state and region to deploy a portfolio of cost-effective supply- and demand-side resources based on unique circumstances** – Over the past twenty years, the vast majority of new capacity additions in Florida have been natural gas-fired. The proposed Air Toxics rule, the recent Cross-State Air Pollution rule, potential greenhouse gas regulations, and currently low gas prices may further encourage utilities to install natural gas-fired generation or repower existing oil- or coal-fired capacity to natural gas as a compliance strategy. In order to provide Florida’s consumers with the benefits of a balanced fuel mix, utilities should be allowed to retain existing coal capacity without installing costly air compliance measures, if the utility commits to retire or repower the unit in the near future. Further, EPA should retain the limited use provision that appears to allow utilities to avoid installing costly controls on units that are rarely dispatched.

### **Conclusion**

The EPA’s proposed Utility Air Toxics rule has the potential for significant rate, and potentially reliability, impacts on Florida’s energy consumers. It appears that significant controls would be necessary at many of Florida’s coal- and oil-fired generating units, and some units would be at risk of retirement. EPA’s final rules should avoid compromising electric system reliability and allow the maximum compliance flexibility for electric utilities provided for under the Clean Air Act. Electric utilities should be given the flexibility to choose the most efficient, least-cost compliance options to meet public health and environmental goals.

The FPSC is particularly concerned about the limited compliance time line in the proposed rule. Some of the control technologies that would allow utilities to comply would take two to four years for design and installation. With many utilities vying for the same equipment and specialized labor, it is to be expected that there will be price pressure, and potentially shortages, on compliance technologies and labor. Utilities should not be placed in a position of choosing less efficient or more costly control technologies in order to meet the proposed rule’s stringent compliance deadlines. EPA’s final rules should allow flexibility if the supply of compliance technologies or skilled labor is unavailable, or if price increases are excessive, to the extent allowed by law. State air permitting authorities should have the authority to approve requests for additional compliance time (if justified) beyond the potential one year extension in cases where meeting the compliance deadlines would compromise electric system reliability or add unnecessary costs to Florida’s consumers. State air

permitting authorities are in the best position to review the compliance plans by electric utilities within their respective states, while public utilities commissions will be responsible for reviewing these plans for reliability and cost impacts.

Attachments: Appendix A - NARUC Resolution

Appendix B – Preliminary Investor-Owned Utility Cost and Reliability Estimates

*Resolution on the Role of State Regulatory Policies in the Development of Federal Environmental Regulations<sup>1</sup>*

**WHEREAS**, The National Association of Regulatory Utility Commissioners (NARUC) recognizes that the U.S. Environmental Protection Agency (EPA) is engaged in the development of public health and environmental regulations that will directly affect the electric power sector; *and*

**WHEREAS**, EPA is expected to promulgate regulations to be implemented by State environmental regulators concerning the interstate transport of sulfur dioxide and nitrogen oxides, cooling water intake, emissions of hazardous air pollutants and greenhouse gases, release of toxic and thermal pollution into waterways, and management of coal combustion solid waste; *and*

**WHEREAS**, NARUC at this time takes no position regarding the merits of these EPA rulemakings; *and*

**WHEREAS**, Such regulations under consideration by EPA could pose significant challenges for the electric power sector, with respect to the economic burden, the feasibility of implementation by the contemplated deadlines and the maintenance of system reliability; *and*

**WHEREAS**, EPA is expected to provide opportunities for public comment and input with respect to forthcoming regulations; *and*

**WHEREAS**, Compliance with forthcoming environmental regulations will affect consumers differently depending upon each State's electricity market and the nature of the decisions made by State regulators; *and*

**WHEREAS**, Addressing compliance with multiple regulatory requirements at the same time may help to reduce overall compliance costs and minimize risk assuming reasonable flexibility with respect to deadlines; *and*

**WHEREAS**, State utility regulators are well positioned to evaluate risks and benefits of various resource options through policies that appropriately account for and mitigate the risks arising from compliance with pending regulations; *and*

**WHEREAS**, Cooperation between utility commissions and environmental regulators can promote greater policy coordination and integration and improve the quality and effectiveness of electricity sector regulation; *and*

**WHEREAS**, State utility regulators, by working with the power sector and State and federal environmental regulators, can help to facilitate least-cost compliance with public health and environmental goals; *and*

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<sup>1</sup> Based upon Resolution on *Implications of Climate Policy for Ratepayers and Public Utilities*, adopted by NARUC Board of Directors on July 18, 2007.



**WHEREAS**, State utility regulators can help to minimize environmental risk as well as uncertainty regarding reliability and customer rate impacts by requesting regulated utilities with fossil generation to develop plans that evaluate all relevant environmental rulemakings at U.S. EPA; *now, therefore, be it*

**RESOLVED**, That the Board of Directors of the National Association of Regulatory Utility Commissioners, convened at its 2011 Winter Committee Meetings in Washington D.C., urges the EPA to ensure that, as it develops public health and environmental programs, it will:

- Avoid compromising energy system reliability;
- Seek ways to minimize cost impacts to consumers;
- Ensure that its actions do not impair the availability of adequate electricity and natural gas resources;
- Consider cumulative economic and reliability impacts in the process of developing multiple environmental rulemakings that impact the electricity sector;
- Recognize the needs of States and regions to deploy a diverse portfolio of cost-effective supply-side and demand-side resources based on the unique circumstances of each State and region;
- Encourage the development of innovative, multi-pollutant solutions to emissions challenges as well as collaborative research and development efforts in conjunction with the U.S. Department of Energy;
- Employ rigorous cost-benefit analyses consistent with federal law, in order to ensure sound public policy outcomes;
- Provide an appropriate degree of flexibility and timeframes for compliance that recognizes the highly localized and regional nature of the provision of electricity services in the U.S.;
- Engage in timely and meaningful dialog with State energy regulators in pursuit of these objectives; *and*
- Recognize and account for, where possible, State or regional efforts already undertaken to address environmental challenges; *and be it further*

**RESOLVED**, That NARUC urges State utility regulators to actively engage with State and federal environmental regulators and to take other appropriate actions in furtherance of the goals of this resolution.

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*Sponsored by the Committees on Electricity and Energy Resources and the Environment  
Adopted by the NARUC Board of Directors February 16, 2011*

**Florida's Investor-Owned Utilities' Preliminary Cost and Reliability Impact Estimates**  
**Associated with the Proposed Air Toxics Rule**

On April 27, 2011, four of Florida's five investor-owned utilities made presentations to the FPSC on the estimated impact of complying with EPA's current rulemaking proceedings, including the proposed Air Toxics rule. These estimates are preliminary in nature, as more certain cost and reliability impacts cannot be projected until EPA finalizes the Air Toxics rule, along with several other air emissions-related rules, and the utilities perform an integrated system analysis to determine the compliance strategy for each unit. The FPSC has also requested more detailed information on the costs and needed control technologies from the investor-owned utilities. The following is a brief summary of the preliminary estimates provided to the FPSC by the utilities. The four largest investor-owned utilities intend to file written comments with EPA on the proposed rule.

*Gulf Power Company (Gulf)* – Gulf performed a preliminary unit viability analysis to determine which units are at risk of retirement if additional controls are necessary to comply with several proposed EPA rules, including rules on Air Toxics, Cooling Water Intake Structures, Coal Ash Disposal, and Ozone. Gulf also projected the specific controls needed to comply with each of these rules. Gulf contends that four units, with a total capacity of 495 MW, are at high risk of early retirement if the rules are finalized as proposed, including Scholz 1 and 2, and Smith 1 and 2. Gulf is also considering the need for additional transmission facilities if any of these units are retired. If these units are retired, Gulf would have costs associated with installing additional capacity sooner than anticipated in Gulf's current long-term plan. Gulf is also considering the possibility of repowering some coal units to natural gas. Four units at the Crist facility would require baghouses and activated carbon injection systems. Six units, located at the Scholz, Smith, and Daniel facilities, would require scrubbers, baghouses, and activated carbon injection systems. All coal units would require additional continuous monitoring equipment.

Gulf did not break out the preliminary estimated costs per proposed rule. Based on Gulf's initial review, the combined compliance costs for the proposed Air Toxics rule and Cooling Water Intake Structures rule are expected to be within the following ranges:

- Plant Crist - \$280 million to \$350 million.
- Plant Scholz - \$110 million to \$170 million.
- Plant Smith - \$300 million to \$450 million.
- Plant Daniel - \$510 million to \$570 million. Gulf owns 50 percent of Plant Daniel and would incur 50 percent of these costs.

Florida Power and Light Company (FPL) – FPL believes its efforts to install control technologies at its facilities and to retire, older, less efficient plants will mitigate the impacts of the proposed rule. FPL has partial ownership in one of the four coal-fired units at the Scherer facility with JEA. FPL believes the wet scrubber that is being installed at coal-fired Scherer Unit 4 will be sufficient for compliance, with the possibility of using fuel additives to increase mercury capture by the scrubber. FPL also has partial ownership in the Saint Johns River Power Park coal-fired facility with JEA. The proposed sulfur limits appear to require added control technology or fuel switching for Units 1 and 2 at the facility. The mercury and particulate requirements will likely require installation of an activated carbon injection system and baghouse. FPL and JEA have not yet estimated the compliance costs for these controls. Two FPL oil-fired units, Martin 1 and 2, will require electrostatic precipitators, and potentially hydrated lime injection systems. It is likely that two additional oil-fired units, Turkey Point 1 and 2, that are seldom dispatched may be eligible for an exemption due to the limited use provisions of the proposed rule. These units may require electrostatic precipitators if they are dispatched more frequently.

FPL's preliminary cost estimates for compliance with the proposed Air Toxics rule include:

- Manatee Units 1 and 2 - \$154 million.
- Martin Units 1 and 2 - \$149 million.
- Turkey Point Unit 1 - \$77 million to \$100 million.
- St. Johns River – Unknown.

Progress Energy, Florida, Inc. (PEF) – PEF has two dual-fuel units classified as oil-fired at the Anclote and Suwannee facilities. These units would require sorbent injection systems and

electrostatic precipitators if the units burn primarily oil. PEF has been fueling the Suwannee facility primarily with natural gas recently and could continue to do so if natural gas costs remain low and supplies are available. The Anclote facility would require modifications to increase natural gas usage. PEF expects that the coal-fired Crystal River Units 1 and 2 would require the addition of a scrubber and activated carbon injection system. In 2010, PEF added scrubbers and other controls to the coal-fired Crystal River Units 4 and 5, with approximately \$1.1 billion in capital costs. PEF believes costs to add scrubbers to Crystal River Units 1 and 2 would be in this same order of magnitude. PEF also believes controls, in addition to the existing scrubbers, may be necessary on Crystal River Units 4 and 5 to meet the proposed standards on a continuous basis, including activated carbon/sorbent injection and a fabric filter. Meeting the proposed rule's standards on a 30-day rolling average will also require additional monitoring equipment, which could cost hundreds of thousands of dollars per installation.

PEF's preliminary cost estimates for compliance with the proposed Air Toxics rule include:

- Anclote - \$10 million to \$15 million to convert to natural gas, or \$100 million to \$125 million to install controls.
- Crystal River Units 1 and 2 - \$850 million to \$1,100 million to install controls; or \$100 million to \$150 million to retire and \$800 million to \$1,100 million to repower one Anclote Unit as a replacement for Crystal River Units 1 and 2.
- Crystal River Units 4 and 5 - \$24 million to \$104 million to install controls.
- Suwannee - \$100 million to \$120 million to install controls.

Tampa Electric Company (TECO) – TECO has four coal-fired units at the Big Bend facility and an integrated gasification combined cycle unit at the Polk facility that would be subject to the proposed Air Toxics rule. TECO is still evaluating compliance options for these units. The plant modifications that TECO has implemented pursuant to the 10-year, \$1.2 billion environmental investment plan developed in 1999 with EPA and the Florida Department of Environmental Protection will help mitigate compliance costs for the proposed Air Toxics rule. TECO's compliance strategies could require upgrades to the existing scrubber and electrostatic precipitator systems at the Big Bend Station and additional mercury controls at the Polk Power Station. TECO will perform additional stack testing and engineering studies to evaluate the baseline emissions and determine the optimum compliance strategy. TECO's preliminary estimate of the costs for upgrades to existing control

equipment and new emission monitoring systems is in excess of \$30 million. TECO may also need to evaluate alternative coal supplies that have lower chloride content in order to meet the proposed hydrochloric acid standard. At this time, TECO does not expect to retire any generating units as a direct result of the proposed rule. TECO is concerned, however, that the operating limits proposed in the rule, along with the installation of new control equipment and retrofits, may result in increased unit outages.

TECO's preliminary cost estimates for compliance with the proposed Air Toxics rule include:

- Big Bend and Polk – In excess of \$30 million for upgrades to existing control equipment and new emission monitoring systems. Potential additional costs to switch to a lower chloride coal supply.