State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE:

August 2, 2012

TO:

Office of Commission Clerk (Cole)

FROM:

Office of Industry Development and Market Analysis (Dowds)

Division of Economics (Wu)

Office of the General Counsel (Murphy)

RE:

Docket No. 120103-EI - Petition of Progress Energy Florida, Inc. to modify scope

of existing environmental program.

AGENDA: 08/14/12 - Regular Agenda - Proposed Agency Action - Interested Persons May

Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER:

Edgar

CRITICAL DATES:

None

SPECIAL INSTRUCTIONS:

None

FILE NAME AND LOCATION:

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Case Background

On March 29, 2012, Progress Energy Florida, Inc. (Progress or the Company) filed a petition with the Commission to modify its previously approved Integrated Clean Air Compliance Program to include additional activities (Petition), and whose costs of these activities would be recoverable through the Environmental Cost Recovery Clause (ECRC). The

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Company's Petition was filed pursuant to Section 366.8255, Florida Statutes (F.S.), and Commission Order Nos. PSC 94-0044-FOF-EI and PSC-99-2513-FOF-EI.¹

In its Petition, Progress notes that the Environmental Protection Agency (EPA) has recently issued new air emission standards for coal and oil-fired electric generating units. In particular, the EPA's successor to the Clean Air Mercury Rule (CAMR), the Mercury Air Toxics Standards (MATS), became effective in February 2012. The Company's Anclote Units 1 and 2 burn a mixture of heavy fuel oil and natural gas, as currently configured, and thus will be subject to the MATS. Progress proposes to convert these two units to operate on 100% natural gas, and seeks recovery of the conversion costs through the ECRC.

Pursuant to Section 366.8255(2), electric utilities may petition the Commission to recover projected environmental compliance costs required by environmental laws or regulations. According to Section 366.8255(1)(c), F.S., environmental laws or regulations include "all federal, state or local statutes, administrative regulations, orders, ordinances, resolutions, or other requirements that apply to electric utilities and are designed to protect the environment." If the Commission approves the utility's petition for cost recovery through this clause, only prudently incurred costs may be recovered.² The Commission has jurisdiction over this matter pursuant to Section 366. 8255(2), F.S.

¹ Order No. PSC-94-0044-FOF-EI, issued January 12, 1994, in Docket No. 930613-EI, <u>In re: Petition to establish an environmental cost recovery clause pursuant to Section 366.0825</u>, F.S., by <u>Gulf Power Company</u>; Order No. PSC 99-2513-FOF-EI, issued December 22, 1999, in Docket No. 990007-EI, <u>In re: Environmental Cost Recovery Clause</u>.

² See Order No. PSC 11-0080-PAA-EI, issued January 31,2011, in Docket No. 100404-EI, recounting history of ECRC eligibility criteria pursuant to Section 366.8255, F.S.

Discussion of Issues

<u>Issue 1:</u> Should the Commission approve Progress' Petition to recover the costs of converting its Anclote units to burn 100 percent natural gas through the ECRC pursuant to Section 366.8255, F.S.?

Recommendation: Yes. Staff recommends that the Commission approve the Anclote fuel conversion project for ECRC recovery. (Dowds, Wu)

<u>Staff Analysis</u>: The Company's Integrated Clean Air Compliance Plan (Compliance Plan) was approved by the Commission in the 2007 ECRC proceeding as a means to satisfy the requirements associated with the Clean Air Interstate Rule (CAIR), the Clean Air Mercury Rule (CAMR), the Clean Air Visibility Rule (CAVR), and related regulatory requirements. In every subsequent year's ECRC proceeding, the Commission has reiterated its approval of Progress' Compliance Plan.

In February 2008, the U.S. Circuit Court of Appeals for the District of Columbia vacated the CAMR rule and rejected the EPA's elimination of coal-fired electric generating units (EGUs) from the list of emission sources that are subject to Section 112 of the Clean Air Act. The EPA was thus required to adopt new emission standards applicable to hazardous air pollutant emissions from coal-fired EGUs. The EPA issued a proposed CAMR replacement rule in March 2011; this rule was published in the Federal Register in May 2011 and public comment sought. A final rule was released in December 2011 and became effective upon publication in the Federal Register in February 2012.³

The MATS sets emission limits for metals and gases emitted from coal and oil-fired EGUs.⁴ These emission standards apply to continued operation of oil-fired EGUs as defined by the regulation.⁵ Progress indicates that the CAMR replacement, the MATS rule, may apply to its Crystal River Units 1, 2, 4 and 5, Anclote Units 1 and 2, and Suwannee Units 1, 2 and 3. The Company asserts that compliance is required by 2015, but an additional year may be allowed by the permitting agency, and the President is authorized to allow an additional two years.

Progress' instant Petition pertains only to its Anclote Units 1 and 2. The maximum summer rating of the Company's Anclote Units 1 and 2 are 500 MW and 510 MW, respectively. As presently engineered, each unit currently is limited to a maximum of 40 percent of its total heat input being from natural gas, with the remaining heat input from heavy fuel oil. By using a heavy fuel oil percentage that exceeds the thresholds established by the rule, the units are thus

³ National Emission Standards for Hazardous Air Pollutants, 77 Fed. Reg. 9304 (Feb.16, 2012) (codified at 40 C.F.R. pt. 63, subpart UUUUU .

⁴ The new standards are found at Table 2 to 40 C.F.R. Part 63, Subpart UUUUU.

⁵ See 40 CFR 63.9981 (applying the regulation to operators of oil-fired EGUs); 40 CFR 63.9982 (describing sources affected by the new regulation including oil-fired EGUs); 40 CFR 63.10042 (defining an oil-fired EGU as "an electric utility steam generating unit meeting the definition of 'fossil fuel-fired' that is not a coal-fired electric utility steam generating unit and that burns oil for more than 10.0 percent of the average annual heat input during any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year" and providing that "fossil fuel-fired" means, in part, "an electric utility steam generating unit that is capable of combusting more than 25 MW of fossil fuels.")

subject to the MATS for oil-fired EGUs. The Company has indicated it basically has two options to comply with the new standards: either install emissions controls on the Anclote units, or maintain oil-firing below the heat input thresholds in the regulations.⁶

Progress evaluated two compliance options for the Anclote units. Option 1 would achieve compliance with MATS by the installation of emission controls – low NOx burners and an electrostatic precipitator (ESP). Option 2 would convert the Anclote units to operate solely on natural gas (the Anclote fuel conversion project). The Company compared the capital costs and resulting unit performance of each of the two options, and concluded that Option 2 would be the most cost-effective compliance option. Progress' analysis estimated that the capital costs of converting the two units to 100 percent natural gas would be \$12 million less than installing emissions controls.

Moreover, the Company's analysis indicates that conversion to 100% natural gas yields significant fuel cost savings. Over the period 2013-2018, Progress estimates the Anclote units will save approximately \$57 million in fuel costs. However, the impact on overall system fuel costs is much greater. For the period 2013-2018, system fuel cost savings are projected to be in excess of \$268 million. This larger savings arises from being able to operate the Anclote units more efficiently, which reduces the need to operate other units that are less efficient, or that would otherwise be operated in a less efficient manner (such as running them at partial load or with multiple starts). The Company noted in particular that the Anclote fuel conversion project would allow for more efficient operation of its simple cycle combustion turbines.

The bulk of the facilities to be converted are associated with major boiler plant equipment, and upgrades to the gas supply measurement and regulation facilities. Progress estimates that it will incur approximately \$79 million in capital costs associated with converting the Anclote units to fire 100% natural gas. The Company projects it will incur approximately \$26 million in 2012 and about \$53 million in 2013. Progress expects that both converted units will be in service in late 2013.

The Company asserts that conversion of the Anclote units to burn 100 percent natural gas constitutes environmental compliance activities that satisfy the Commission's criteria for cost recovery through the environmental cost recovery clause. Pursuant to Order No. PSC-94-0044-FOF-EI, these criteria are:

- (a) all expenditures will be prudently incurred after April 13, 1993;
- (b) the activities are legally required to comply with a governmentally imposed environmental regulation that was created, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and

⁶ A third option, shutting down the units was considered but rejected, due to its resulting impact on system reliability.

⁷ The Company indicated in response to staff discovery that it conducted its analysis over a five-year period because it had identified in its 10-year site plan the Anclote units as candidates for repowering with combined cycle technology later in this decade. However, absent such repowering, Progress expects there would continue to be fuel savings over the remaining period the units are in service.

(c) none of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

Analysis and Recommendation

At the outset, staff believes that the proposed Anclote fuel conversion project will yield benefits to the Company's customers -- notably from significant system fuel cost savings -- and should be pursued. However, staff questioned whether this fuel conversion project should be recovered through the ECRC or through the fuel adjustment clause (or the capacity cost recovery clause). Progress' proposal is unique in certain ways. First, in discovery the Company was asked to identify any projects that they were aware of involving recovery through the ECRC of the costs of a generating unit conversion. Progress replied that it "... is not aware of any instances in which Florida utilities have pursued an environmental compliance strategy involving a fuel conversion." Second, the Company's proposal achieves compliance with the MATS rule by converting the Anclote units to fire 100 percent natural gas; once this conversion is completed, the MATS rule no longer applies to these units. According to criterion (b) in Order No. PSC-94-0044-EI, costs recoverable through the ECRC are those that are "legally required to comply with a governmentally imposed environmental regulation." Thus, the question arises: does taking steps to render an environmental regulation inapplicable constitute complying with an environmental regulation?

Based on the specific facts in this proceeding and the representations made by the Company, staff believes in this instance that the fuel conversion of the Anclote units is being made first and foremost to comply with the MATS rule. In response to a staff data request regarding why Progress is seeking recovery through the ECRC as opposed to the fuel clause, the Company stated:

PEF is undertaking the project for the specific purpose of complying with EPA's new MATS rule, which unquestionably constitutes an "environmental law or regulation" as that term is defined in Section 366.8255, F.S. Like many, if not most, environmental regulations involving air emissions, the MATS rule imposes emissions limits, but does not dictate how to comply. . . . In this case, PEF essentially has two options to comply with MATS at the Anclote Plant: install emission controls to meet the new emission limits for oil-fired units or discontinue oil-firing. As explained in PEF's petition, converting the Anclote units to fire 100% natural gas is the most reasonable and cost-effective compliance option. While the potential to generate fuel savings is an added benefit, it does not detract from [sic] project's purpose — to comply with MATS. Nor does the fact that compliance will be achieved by removing the units from the scope of the MATS emission limits. To conclude otherwise would be an exercise in semantics . . .

Staff agrees that the Company's affirmation that its decision to convert the Anclote units to burn 100 percent natural gas was to arrive at the most cost-effective option to comply with the MATS, is reasonable and amounts to an "innovative compliance strategy." Staff recommends that the Anclote fuel conversion project complies with the criteria which are enumerated in Order No. PSC-94-0044-FOF-EI, and set forth above. Accordingly, we recommend that the Commission approve the Anclote fuel conversion for ECRC recovery.

Issue 2: Should this docket be closed?

Recommendation: Yes. This docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (Murphy)

<u>Staff Analysis</u>: This docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action.