

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: July 2, 2008

TO: Office of Commission Clerk (Cole)

FROM: Division of Economic Regulation (McNulty, Trapp, Wu)
Office of the General Counsel (Brown)

RE: Docket No. 080281-EI – Petition for approval of Solar Energy Projects for Recovery through Environmental Cost Recovery Clause, by Florida Power & Light Company.

AGENDA: 07/15/08 – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\080281.RCM.DOC

Case Background

On May 16, 2008, Florida Power and Light Company (FPL, or the Company) petitioned this Commission for approval of the eligibility of three solar energy projects for recovery through the Environmental Cost Recovery Clause (ECRC). In support of its petition, FPL filed the direct testimony and exhibits of Witness Eric Silagy. FPL petitioned the Commission under the authority of amendments to Section 366.92, Florida Statutes (F.S.) which was enrolled by the legislature on April 30, 2008 under House Bill 7135 (HB 7135). Governor Crist signed HB 7135 into law on June 25, 2008. The relevant statutory amendments appearing in Section 366.92(4), F.S., are:

In order to demonstrate the feasibility and viability of clean energy systems, the commission shall provide for full cost recovery under the environmental cost-recovery clause of all reasonable and prudent costs incurred by a provider for renewable energy projects that are zero greenhouse gas emitting at the point of generation, up to a total of 110 megawatts statewide, and for which the provider has secured necessary land, zoning permits, and transmission rights within the state. Such costs shall be deemed reasonable and prudent for purposes of cost recovery so long as the provider has used reasonable and customary industry practices in the design, procurement, and construction of the project in a cost-effective manner appropriate to the location of the facility. The provider shall report to the commission as part of the cost-recovery proceedings the construction costs, in-service costs, operating and maintenance costs, hourly energy production of the renewable energy project, and any other information deemed relevant by the commission. Any provider constructing a clean energy facility pursuant to this section shall file for cost recovery no later than July 1, 2009.

FPL's petition seeks Commission approval of the eligibility of the following three proposed renewable energy projects for recovery through the ECRC pursuant to Section 366.92, F.S. (the Statute) : (1) The Martin Next Generation Solar Energy Center (Martin Solar), providing up to 75 megawatts (MW) of alternative steam generation at the existing Martin combined cycle units (fuel substitution); (2) The DeSoto Next Generation Solar Energy Center (DeSoto Solar), providing 25 MW of new photovoltaic generation at the existing DeSoto site; and (3) The Space Coast Next Generation Solar Energy Center (Space Coast Solar), providing 10 MW of new photovoltaic generation at the NASA-Kennedy Space Center (NASA-KSC). FPL indicates that the net cost of the projects in cumulative present value of revenue requirements in 2008 dollars is \$558 million. If approved by the Commission as eligible for cost recovery, the combination of the three units would match the total statewide allowance specified in the Statute (110 MW) for cost recovery through the ECRC. At the time of the filing of this recommendation, no other utility has filed a request for eligibility of recovery of costs for renewable energy projects under the Statute. If FPL's request of eligibility is granted by the Commission, the prudence of the costs of the projects and project performance reporting requirements will be the subject of separate cost recovery filings in the ECRC docket.

The Commission has authority under Section 366.92(4), F.S.

Discussion of Issues

Issue 1: Should the Commission approve FPL's petition for approval of the eligibility of the Martin Next Generation Solar Energy Center, the DeSoto Next Generation Solar Energy Center, and the Space Coast Next Generation Solar Energy Center for recovery through the Environmental Cost Recovery Clause (ECRC) pursuant to section 366.92(4), F.S.?

Recommendation: Yes. As proposed, FPL's Martin Solar, DeSoto Solar, and Space Coast Solar comply with the statutory requirements specified in the section 366.92(4), F.S., for eligibility for cost recovery through the ECRC. (McNulty, Brown)

Staff Analysis:

Statutory Requirements

FPL's petition requests that the Commission approve each of the three proposed renewable energy projects as eligible for cost recovery under the ECRC. The Statute identifies the following requirements for eligibility:

1. The project costs must be incurred by a provider of the renewable energy project as defined by the Statute;
2. The project must be zero greenhouse gas emitting at the point of generation, up to a total of 110 megawatts statewide;
3. The provider of the renewable energy project must have secured the necessary:
 - A. land,
 - B. zoning permits, and
 - C. transmission rights within the state.

The statute also requires the provider of the project to file for cost recovery no later than July 1, 2009.

A general description of the three projects proposed by FPL appears in Table 1 below. FPL's proposed construction and in-service timelines for the projects appear in Table 2 below.

Table 1 General Description of FPL's Renewable Energy Projects					
<u>Name of Project</u>	<u>Type of Project</u>	<u>MWs</u>	<u>Type of Generation</u>	<u>MWHs/Year</u>	<u>Capacity Factor</u>
Martin Solar	Thermal	75	Fuel Substitution, Non-firm	155,000	23.6%
Desoto Solar	PV	25	Added MW, Non-firm (but may supply firm in practice)	42,000	19.4% (if stationary) >19.4% (if tracking)
Space Coast Solar	PV	10	Added MW, Non-firm (but may supply firm in practice)	16,000	18% (stationary)

Table 2 Timeline for FPL's Renewable Energy Projects			
<u>Project Name</u>	<u>Construction Begins</u>	<u>First Solar On Line</u>	<u>Construction Ends</u>
Martin Solar	End of 2008	End of 2009	End of 2010
DeSoto Solar	End of 2008	Mid 2009	2 nd Quarter of 2010
Space Coast Solar	End of 2008	Mid 2009	4 th Quarter of 2010

Review of Cost Recovery Eligibility of FPL's Renewable Energy Projects

1. FPL as a "Provider" of Renewable Energy Projects

The first requirement is that the project costs must be incurred by a provider of renewable energy projects as defined by the Statute. Section 366.92, F.S., states that a provider means a utility as defined in Section 366.8255(1)(a):

any investor owned electric utility that owns, maintains, or operates an electric generation, transmission, or distribution system within the State of Florida and that is regulated under this chapter.

FPL is a provider as referenced in the Statute.

2. Zero Greenhouse Gas Emitting

FPL states that its proposed renewable energy projects are all designed to be zero greenhouse gas emitting at the point of generation, and the combined capacity of the projects does not exceed 110 megawatts statewide.

Martin Solar: FPL's largest proposed project, Martin Solar, is designed to be a 75 MW solar thermal steam generating facility at the existing Martin Power Plant Site in Martin County, Florida. Martin Solar involves the installation of solar thermal technology integrated into the existing steam cycle for the currently operating Martin Power Plant Unit 8 (Unit 8), a natural gas fired combined cycle plant. The supplemental steam to be supplied by Martin Solar for the Unit 8 heat recovery steam generators will be generated from the concentration of solar radiation via parabolic trough solar collectors. The collectors will concentrate the sun's energy on heat collection elements containing a heat transfer fluid which is circulated to heat exchangers that produce the steam. The steam is routed to the Unit 8 heat recovery steam generators, thus providing the mechanical power to turn the generator and produce electricity. No greenhouse gases are emitted using this technology.

DeSoto Solar: FPL's second largest proposed project, DeSoto Solar, is designed to be a 25 MW solar PV greenfield project in DeSoto County, Florida. FPL proposes to construct either a fixed array or tracking array of solar PV panels. At the time of FPL's petition, the design parameters of the project had not yet been finalized. DeSoto Solar is designed to convert energy from sunlight directly into electricity, thus emitting no greenhouse gases.

Space Coast Solar: FPL's third proposed project, Space Coast Solar, is designed to be a 10 MW solar PV project at NASA's Kennedy Space Center, Florida. As with the proposed DeSoto Solar project, Space Coast Solar will be designed to turn energy from sunlight directly into electricity, thus emitting no greenhouse gases.

Based on the description of the projects as presented by FPL in its petition and testimony, each of FPL's three projects will be zero greenhouse gas emitting at the point of generation.

3. Provider has Secured the Necessary Land, Zoning Permits, and Transmission Rights

Martin Solar:

- *Land:* FPL intends to build its proposed Martin Solar Project at its Martin Power Plant site in Martin County. The project will be constructed on a 600-acre site fully contained within FPL's existing 11,300-acre Martin Plant site on property acquired by FPL by January 12, 1979.
- *Zoning Permits:* Martin Solar's proposed location has been zoned for power generation facilities since August 1989, and FPL received a Planned Unit Development (PUD) Amendment on June 3, 2008 for Martin Solar and filed it with the Martin County Clerk of Court on June 17, 2008.

- *Transmission Rights:* Since Martin Solar involves no incremental increase in electrical output of Martin Unit 8, the existing transmission rights are sufficient for the project.

DeSoto Solar:

- *Land:* FPL intends to build its proposed DeSoto Solar Project on a 1,525-acre property in DeSoto County that it fully acquired by December 18, 1998.
- *Zoning Permits:* FPL's property proposed for the 180-acre DeSoto Solar Project is zoned "Agricultural Ten" by the DeSoto County Development Department. Per the county, FPL's property does not require rezoning. On May 8, 2008, the DeSoto County Board of County Commissioners unanimously approved a Final Order granting a Special Exception for Photovoltaic Power Generation Facility to FPL for the property in question. Certain conditions and requirements for approval of the Special Exception include, among other things, adherence to buffers and setbacks as set forth in the Final Order. Staff notes that the Special Exception expires in one year from the date granted (May 8, 2008) if the use for which the special exception was granted has not commenced or one year following the discontinuance of the use for which the special exception was granted. The Final Order provides that FPL must submit a complete improvement plan by November 8, 2008, receive a notice to proceed from DeSoto County staff by May 8, 2009, and must have Phase 1, or a portion of the facility operational by November 8, 2009, or the Special Exception becomes null and void. Extensions to the operational timeline may be administratively extended up to 12 months, based on permitting by other agencies.
- *Transmission Rights:* FPL has followed Federal Energy Regulatory Commission (FERC) procedures in reserving transmission rights within the state for the 25 MW DeSoto Solar Project. Transmission rights for DeSoto Solar are reserved through October 1, 2039, as indicated by the FRCC transmission reservation details published on its OASIS website.

Space Coast Solar:

- *Land:* FPL intends to build its proposed Space Coast Solar Project on federal land owned by NASA-Kennedy Space Center (NASA-KSC) at Kennedy Space Center, Florida. On June 25, 2008, FPL entered into an Enhanced Use Lease (lease) with NASA-KSC for the land FPL proposes for Space Coast Solar. The lease includes two phases. Phase 1 encompasses 60 acres, sufficient for the purposes of the 10 MW facility FPL proposes, commencing August 1, 2008, for a period of 30 years. The lease includes both monetary and non-monetary considerations, including

the development and construction of a NASA PV Facility. The second phase is a lease option extended to FPL by NASA-KSC, effective on a date to be mutually agreed to, but not later than August 20, 2020. Phase 2 encompasses 48 additional acres, and is contingent upon FPL proposing, and NASA-KSC accepting, a proposed expansion of the NASA PV Facility.

- *Zoning Permits:* Space Coast Solar requires no local zoning permits since it will be located on federal land.
- *Transmission Rights:* Transmission rights for Space Coast Solar are reserved through September 1, 2029, as transmission reservation details confirmed by the FRCC indicate.

Status of Other Permitting

In addition to the statutory eligibility requirements, staff also reviewed the status of other local, state, and federal permitting requirements for the proposed renewable energy projects. While not directly required for eligibility, receipt of these permits is important because, if the projects are not constructed, the associated in-service date costs of the projects cannot be recovered through the ECRC.

Martin Solar

FPL filed a site certification modification with the Florida Department of Environmental Protection (FDEP) with respect to the construction of Martin Solar at its existing Martin Plant site. FPL filed its application with the FDEP and other applicable agencies on May 1, 2008, and the application was deemed to be complete on June 2, 2008. As of this filing, FPL expects FDEP to issue its notice of intent to grant the site certification modification by July 3, 2008, and its final modification order during the month of September 1, 2008.

FPL also filed a letter requesting an Army Corp of Engineers (ACOE) Fill Permit Modification to include renewable energy facilities within an area currently permitted for the filling of jurisdictional wetlands. FPL expects the issuance of the ACOE issuance of modification during September 2008.

DeSoto

FPL is not required to file for a site certification modification with FDEP for Space Coast Solar under the Power Plant Siting Act. However, local environmental permitting is required. FPL filed its application with the FDEP for a Florida Department of Environmental Resource Permit (ERP) for DeSoto Solar on June 18, 2008. FPL expects to receive a permit for this project in early November 2008.

Docket No. 080281-EI

Date: July 2, 2008

Space Coast Solar

FPL is not required to file for a site certification modification with the FDEP for Space Coast Solar under the Power Plant Siting Act. However, local environmental permitting is required. FPL expects to file its application with the FDEP for a Florida Department of Environmental Resource Permit (ERP) for Space Coast Solar on July 16, and expects to receive its permit by December 1, 2008.

Conclusion

Based on the foregoing review, staff believes that FPL's three proposed renewable energy projects are eligible for cost recovery through the ECRC pursuant to the requirements of section 366.92(4), F.S. FPL has secured the necessary land, zoning permits, and transmission rights for each of the proposed renewable energy projects.

Docket No. 080281-EI

Date: July 2, 2008

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. (Brown)

Staff Analysis: If no timely protest to the proposed agency action is filed within 21 days, this docket should be closed upon the issuance of a Consummating Order.