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May 16, 2008

HAND DELIVERED

Ms. Ann Cole, Director Division of Commission Clerk And Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Docket No. 08

Florida Power & Light Company's Petition for Approval of Solar Energy Projects for Recovery through Environmental Cost Recovery Clause.

Dear Ms. Cole:

an FPL Group company

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the original and fifteen (15) copies of (i) FPL's Petition for Approval of Solar Energy Projects for Recovery through Environmental Cost Recovery Clause; and, (ii) Testimony and Exhibits for Eric Silagy.

Also included in this submittal is a computer diskette containing FPL's Petition in Word format. Please contact me if you or your staff has any questions regarding this filing.

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FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's)	Docket No.	080 (8)	-EJ
Petition for Approval of Solar Energy)			
Projects for Recovery through Environmental)			
Cost Recovery Clause)			
·		Dated: May 1	6, 2008	

PETITION

Pursuant to Sections 366.04, 366.825 and 366.92, Florida Statutes, Florida Power & Light Company ("FPL" or the "Company") petitions this Commission for approval of three solar energy projects such that prudently incurred project costs may be recovered through the Environmental Cost Recovery Clause ("ECRC").

Introduction and Summary

Florida's Legislature recently passed amendments to Section 366.92, Florida Statutes, which enhances the feasibility of developing clean, zero greenhouse gas emitting renewable generation to serve a portion of the electricity needs of FPL's customers. These changes are provided for in House Bill 7135 ("HB 7135"), which Florida's Governor Crist has announced that he will sign. HB 7135 states in relevant part:

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.

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FPSC-COMMISSION CLERK

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FPL has reviewed HB 7135 and considered how it can support the Florida Legislature's policy. Consistent with HB 7135's emphasis on demonstrating the feasibility and viability of clean, zero greenhouse gas emitting energy systems in Florida, FPL is proposing to construct and operate three discrete solar energy projects totaling 110 megawatts ("MW") with different characteristics, at diverse locations. These projects will not only generate clean, renewable energy, but will also provide significant information and experience regarding key aspects of siting, constructing and operating different solar technologies at various locations in Florida.

In this proceeding, FPL requests that the Commission find that the following three proposed solar energy center projects are eligible for ECRC cost recovery pursuant to HB 7135:

- The Martin Next Generation Solar Energy Center ("Martin Solar"). Planned for construction to commence by year end 2008 at FPL's existing Martin Plant site, Martin Solar will provide up to 75 MW of solar thermal capacity in an innovative way that directly displaces fossil fuel usage in an existing FPL generating unit. Martin Solar will be the second largest solar thermal facility in the world and the largest solar plant of any kind outside of California;
- The DeSoto Next Generation Solar Energy Center ("DeSoto Solar"). Planned for construction to commence by year end 2008 on FPL owned property located in DeSoto County, Florida, DeSoto Solar will provide 25 MW of solar photovoltaic ("PV") capacity, making it the world's largest solar PV facility; and
- The Space Coast Next Generation Solar Energy Center ("Space Coast Solar").
 Planned for construction to commence by year end 2008 at the Kennedy Space Center, Space Coast Solar will provide 10 MW of solar PV capacity. This innovative public/private partnership will allow both entities to leverage engineering, design and

operational expertise and provide unparalleled opportunities to develop and refine solar technology.

Each one of these facilities is a significant and innovative renewable generating plant in its own right, but collectively these Next Generation Solar Energy Centers will be a landmark achievement. These facilities are expected to produce an annual total of 213,000 megawatt hours ("MWh") of electricity, and at peak production provide enough power and energy to serve the requirements of more than 15,000 homes and 35,600 people.

Taken together, using solar energy to provide customers with renewable energy from these projects will substantially reduce greenhouse gas emissions and decrease fossil fuel usage. Over the life of the projects, FPL's proposed solar energy centers will prevent emission of more than 3.5 million tons of greenhouses gases, as well as other pollutants, while decreasing fossil fuel usage by more than one million barrels of oil and by about 51 million MMBtu of natural gas, resulting in system fuel savings of about \$262 million.

In addition to providing electricity for customers with tangible environmental and fuel usage benefits, these projects will constitute significant steps forward for Florida renewable energy and for the energy industry. Construction of these three Next Generation Solar Energy Centers will result in Florida becoming the second largest supplier of utility-scale solar power in the nation. Operating solar resources on this large utility scale will provide a strong platform from which Florida can build in becoming a global leader in solar power, and will further advance Florida's efforts and leadership in the fight against climate change.

FPL estimates that the combined total capital cost of the projects is approximately \$688 million, not including interest during construction. There are uncertainties with respect to the costs of the projects that will continue to be addressed during project development. Necessarily,

FPL will have more information with respect to these uncertainties and their potential effects on costs, either positively or negatively, at the time that FPL makes its ECRC filings with respect to the projects.

Based on the \$688 million estimate, the net cost of the projects in cumulative present value of revenue requirements in 2008 dollars ("CPVRR") is approximately \$558 million. In 2011, the first year when all three projects are in service for the full year, the system average bill impact is projected to be an increase of 83 cents per 1,000 kWh. Over the first 25 years of operations (2009-2033) the system average bill impact is projected to be an increase of 31 cents for a typical customer bill of 1,000 kWh per month.

FPL requests that the Commission find that these three zero greenhouse gas-emitting renewable energy projects are eligible for cost recovery under the ECRC, as provided for in HB 7135, which was recently passed by the Florida Legislature and which Governor Crist has indicated he plans to sign. FPL recognizes that the prudence of actual expenditures for each of the projects will be subject to review in annual ECRC proceedings pursuant to the standard stated in HB 7135.

I. <u>Jurisdiction and Notices</u>

1. FPL is a public utility subject to the regulatory jurisdiction of the Commission under Chapter 366, Florida Statutes. FPL is a "provider" within the meaning of HB 7135's provisions amending Section 366.92, Florida Statutes. The Company's principal offices are located at 700 Universe Boulevard, Juno Beach, Florida.

2. All notices, pleadings and other communications required to be served on the petitioner should be directed to:

Jeffrey S. Bartel Vice President, Regulatory Affairs Florida Power & Light Company 215 South Monroe Street Suite 810 Tallahassee, FL 32301 Telephone: (850) 521-3910

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II. FPL's Renewable Energy Background and Qualifications

- 3. Since 1980, a portion of FPL's customers' electricity requirements has been produced from renewable resources. At present, FPL annually provides more than 280 MW of firm and non-firm capacity and energy from renewable resources. This energy is mainly purchased from owners of waste-to-energy, biomass and landfill gas power plants located in Florida. From 2002 to 2007, FPL has provided customers with about 1.4% of net energy for load from renewable resources. During 2007, FPL provided its customers with a total of about 1.5 million MWh of electricity from renewable sources.
- 4. FPL has a multi-pronged approach to encouraging and supporting the development of renewable resources in Florida. For example, FPL's Product Management and Operations department supports the development of renewable energy projects and the management of renewable energy programs offered to FPL's customers. FPL's Resource Assessment and Planning organization supports the negotiation of renewable purchase power agreements. FPL's Project Development organization supports the development of renewable supply side generation projects. The projects discussed in this petition are being developed by

FPL's Project Development organization. FPL has submitted in support of this petition testimony and exhibits prepared by its Vice President and Chief Development Officer, Eric Silagy.

- 5. With over \$7.5 billion invested in renewable energy facilities, FPL Group is the nation's leading provider of clean, renewable energy utilizing wind, hydroelectric and solar technologies. FPL's development of the projects described in this petition will access the extensive renewable energy background and experience of FPL's sister companies. FPL Energy, LLC ("FPL Energy"), a wholly-owned subsidiary of FPL Group, has more than 60 renewable facilities in operation across 17 states. FPL Energy has a proven track record, spanning many years, of being a global leader in developing, owning and operating clean, renewable generating plants.
- 6. Along with largest wind fleet in the United States, FPL Energy operates and is an owner of the world's largest solar facility, the 310 MW Solar Electric Generating System ("SEGS") located in the Mojave Desert in California. This facility recently completed a major plant and equipment upgrade. FPL Energy also announced in early 2008 the development of a new 250 MW solar thermal facility to be located in Southern California. With such in-depth solar experience of its affiliate that is available for FPL to draw upon, FPL is in the unique position of being able access industry leading skills and experience to develop three pioneering solar facilities in Florida.

III. Recent Developments in Florida's Renewable Energy Policy

7. Several recent developments have emphasized Florida's strong interest in promoting increased production of clean, zero greenhouse gas emitting renewable energy to

serve a portion of customers' needs. On July 13, 2007, Florida's Governor Charlie Crist issued Executive Order No. 07-127 which requested that the Commission take actions "to open the market to clean, renewable energy technologies, thus avoiding future greenhouse gas emissions." This included a request that the Commission initiate rulemaking with respect to establishing a Renewable Portfolio Standard "with a strong focus on solar and wind energy."

- 8. Consistent with Executive Order No. 07-127, the Commission conducted several workshop sessions that drew extensive participation exploring many renewable energy considerations. The workshops included considerable discussion of the prospects for and ways to place greater weight on zero greenhouse gas emitting solar and wind energy generation.
- 9. Then, during the 2008 legislative session, the Florida Legislature enacted HB 7135 which, in addition to many other features, provides for cost recovery, through the ECRC of the prudent costs of up to 110 MW of clean, zero greenhouse gas emitting renewable projects.

IV. Provisions of HB 7135 Amending Section 366.92, Florida Statutes

10. Section 366.92, Florida Statutes, expresses the Florida Legislature's support for renewable energy. Part of HB 7135 extends this support by amending Section 366.92 to promote development of up to 110 MW of zero greenhouse gas emitting renewable generation by permitting full cost recovery for qualifying projects through the ECRC. HB 7135 states in relevant part:

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.

approve, respectively, substantial new production of renewable energy that is "zero greenhouse gas emitting at the point of generation." HB 7135 does this by providing for full cost recovery under the ECRC of all reasonable and prudent costs (as defined in HB 7135) incurred for renewable energy projects that are zero greenhouse gas emitting at the point of generation, up to a total of 110 MW megawatts statewide, and for which the provider has secured necessary land, zoning permits and transmission rights within the state.

V. FPL's Study of Zero Greenhouse Gas Emitting Renewable Energy

12. FPL has conducted extensive due diligence with respect to possible development of zero greenhouse gas emitting renewable projects in Florida. For example, FPL conducted solar and wind studies to assess in detail the availability of these zero greenhouse gas emitting resources in Florida. FPL studied typical weather patterns and performed engineering analyses of wind loading, including storm wind loading, which is an important design consideration both for solar and wind facilities in Florida. FPL also analyzed the details of transmission system access to ensure that energy from prospective zero greenhouse gas emitting renewable sites would be able to be transmitted to serve FPL's customers. FPL also supports development and is studying other potential zero greenhouse gas emitting technologies such as ocean current energy.

13. From its work, FPL determined that the principal zero greenhouse gas emitting renewable energy resources reasonably available to the Company, based upon resource availability, technology development and other factors, are solar and wind energy. FPL then assessed possible sites for development of solar and wind resources, taking into account factors including availability and land use regulation. Based upon these assessments, FPL identified several promising sites and began developing suitable projects. While FPL continues to pursue development of wind energy projects in Florida, these are not at a stage of development sufficient to satisfy the requirements of HB 7135. Three solar energy projects are at a sufficient stage of development as to satisfy the requirements of HB 7135, and are proposed by FPL in this proceeding for a Commission determination of eligibility for ECRC recovery pursuant to the provisions of HB 7135 discussed above.

VI. Description of the Solar Energy Projects and Eligibility for ECRC Recovery

14. FPL requests that the Martin Solar, DeSoto Solar and Space Coast Solar projects each be found eligible for ECRC recovery consistent with the provisions of HB 7135, after the new law is signed and its scheduled effective date of July 1, 2008. The projects and their qualifications for ECRC recovery pursuant to HB 7135 are set forth below.

A. The Martin Next Generation Solar Energy Center

15. FPL proposes to construct an approximately 75 MW solar thermal steam generating facility at the existing Martin Power Plant site in Martin County, Florida, thereby creating the world's first hybrid energy center. Martin Solar will be the second largest solar thermal generating facility in the world. This ground-breaking generation plant will be constructed on an approximately 600-acre site which is fully contained within FPL's existing

- 11,300-acre Martin Plant site and will be the first of its kind to integrate solar technology with a combined-cycle natural gas plant.
- 16. Martin Solar will involve the installation of solar thermal technology that will be integrated into the existing steam cycle for the currently operating Martin Power Plant Unit 8 natural gas-fired combined cycle plant. The steam to be supplied by Martin Solar will be used to supplement the steam currently utilized in the heat recovery steam generators. Parabolic trough solar collectors will be installed to concentrate solar radiation. The collectors will concentrate the sun's energy on heat collection elements located in the focal line of the parabolic reflectors. These heat collection elements contain a heat transfer fluid which is heated by the concentrated solar radiation to approximately 750 degrees Fahrenheit. The heat transfer fluid is then circulated to heat exchangers that will produce the steam that will be routed to the existing natural gas-fired combined cycle Unit 8 heat recovery steam generators, thus providing mechanical power to turn the generator and produce electricity.
- 17. Martin Solar is sized to generate approximately 75 MW (nominal). Based on the initial conceptual designs, the project will consist of up to approximately 180,000 mirrors over about 500 acres at the Martin Plant site. The maximum steam generation will be about one million pounds per hour. Over an annual period, the project is expected to have an average capacity factor of about 24%, producing about 155,000 MWh of electricity annually. At its peak, this is enough power to serve the requirements of 11,000 homes or 26,000 people.
- 18. Martin Solar is optimally sized at approximately 75 MW. This matches the steam generation capacity in the existing Unit 8 heat recovery steam generators and steam turbine that has been sized for the existing duct burners. Because Martin Solar is a substitute source of steam for an existing electric generator, and there is not an increase in total steam generation at the site,

FPL's existing Power Plant Siting Act site certification is being modified, but no new site certification application is required. Integrating the solar field into the existing power plant and creating a hybrid energy center means that additional capital infrastructure such as a new steam turbine, transmission lines and high voltage transformers, are not required. The project will operate within the existing permitted water supply amounts.

- 19. Martin Solar will be the second largest solar project in the world and will be the first large utility-scale solar thermal project in Florida and the Eastern United States. It is the world's first project to integrate solar thermal steam generation into an existing high efficiency steam turbine. This project results in reduced system-wide fuel usage, as well as reduced CO₂ and other emissions, with no incremental capital expenditures on a steam turbine generator and transmission rights-of-way.
- 20. The electricity generated as a result of the steam generated directly by the solar field will be zero greenhouse gas emitting at the point of generation. Solar energy is created by the sun's heat, not any other fuel. The point of generation is, therefore, the solar thermal heat collection elements. The heat is carried in specialized fluid through tubing to heat exchangers, wherein the heat is transferred to water to create steam that flows to the steam turbine generator.
- 21. Martin Solar will be located at the existing 11,300-acre FPL Martin Power Plant site. This land is owned by FPL. FPL also has all necessary transmission rights. This site is certified by the State of Florida to generate power. Accordingly, FPL "has secured the necessary land, zoning permits and transmission rights within the state" as required for eligibility for ECRC recovery pursuant to HB 7135.

- 22. Construction will commence by the end of 2008. The first solar generation is expected to come on-line in the fourth quarter of 2009. Construction is expected to be completed by the end of 2010.
- 23. FPL is using reasonable and customary industry practices in the design, procurement and construction of Martin Solar in a cost-effective manner appropriate to the location of the facility. FPL is highly experienced in designing, procuring and constructing a wide variety of utility facilities in the Florida environment. FPL is using trained and qualified employees following well-established practices and procedures to develop the design, procurement and construction requirements for the project.
- 24. FPL is also calling upon the expertise and experience of its sister company, FPL Energy, which is the operator and an owner of the world's largest solar thermal facility, the 310 MW SEGS located in the Mojave Desert in California. Martin Solar will use very similar, albeit updated, solar collection technology that has produced reliable renewable solar power and energy for about 20 years at SEGS. FPL Energy recently conducted a major SEGS plant upgrade, for which it did a global assessment of potential suppliers of tubing, which is at the heart of solar thermal energy collection. FPL Energy is also in the process of developing a 250 MW solar thermal facility in California. FPL is drawing upon the expertise, international relationships and experience of FPL Energy in order to achieve design, procurement and construction efficiencies for the benefit of its customers.
- 25. Operation of Martin Solar will result in reduced fossil fuel usage. Over the 30-year life of the project, the Martin Solar project will reduce fossil fuel usage by approximately 41 million MMBtu of natural gas, 591,000 barrels of residual oil and 20,000 barrels of distillate oil.

- 26. Operation of Martin Solar will reduce FPL's greenhouse gas emissions. The expected reduction of system-wide CO₂ emissions as a result of Martin Solar is approximately 2.75 million tons reduced over a 30-year period. According to the U.S. Environmental Protection Agency ("EPA") this is the equivalent of removing more than 18,700 cars from the road every year for the entire life of the project.
- 27. Operation of Martin Solar will reduce other air emissions as well. The expected reduction of system-wide emissions as a result of Martin Solar operations is estimated to be approximately 2,000 tons of NO_x and 1,900 tons of SO₂, over a 30-year period.

B. <u>DeSoto Next Generation Solar Energy Center</u>

- 28. DeSoto Solar will generate electricity using solar PV technology, which turns energy from sunlight directly into electricity. With an installed capacity of 25 MW, DeSoto Solar will be the largest solar PV facility in the world. DeSoto Solar will produce approximately 42,000 MWh of electricity per year. At its peak DeSoto Solar should provide enough electricity to serve the requirements of more than 3,000 homes or over 7,000 people.
- Operation of DeSoto Solar over its life is expected to reduce FPL's use of fossil fuels by about 7 million MMBtu of natural gas, 266,000 barrels of residual oil and 11,000 barrels of distillate oil. DeSoto Solar is also expected to prevent more than 575,000 tons of CO₂ from entering the air. DeSoto Solar will also avoid the release in the atmosphere of approximately 780 tons of NO_x and more than 800 tons of SO₂ into the atmosphere. According to the U.S. EPA this is equivalent to avoiding the emissions from over 4,500 cars per year.

- 30. DeSoto Solar will be zero greenhouse gas emitting at the point of generation. FPL owns the land on which DeSoto Solar will be constructed, and has arranged the necessary electric transmission rights. FPL has secured zoning permits required to build the proposed facility. Accordingly, the facility satisfies the requirements of HB 7135 for qualification for recovery through the ECRC.
- 31. FPL is also using reasonable and customary industry practices in the design, procurement and construction of DeSoto Solar in a cost-effective manner appropriate to the location of the facility. FPL is highly experienced in designing, procuring and constructing a wide variety of utility facilities in the Florida environment. In this case, FPL has secured bids from several leading solar PV manufacturers and contractors who have experience in utility-scale projects. FPL's design specifications also take into account the specific location of the facility by requiring compliance with applicable building code requirements. DeSoto Solar will be designed and constructed to meet or exceed all wind loading requirements. Construction of DeSoto Solar could begin as early as December 2008 with an in-service date of the completed project during the second quarter of 2010. Portions of DeSoto Solar may be placed into service earlier as major sections of solar panels are installed and commissioned.

C. The Space Coast Next Generation Solar Energy

32. Space Coast Solar will utilize solar PV technology and will be located at NASA's Kennedy Space Center, Florida. Space Coast Solar is planned to have 10 MW of installed capacity, producing approximately 16,000 MWh of electricity annually, enough at peak production to serve the electricity requirements of more than 1,100 homes or 2,600 people. Construction of the project is planned to begin fourth quarter of 2008 with construction

completed during the fourth quarter 2009. Portions of Space Coast Solar may be placed into service earlier as major sections of solar panels are installed and commissioned.

- 33. Space Coast Solar will be one of the first large scale solar PV facilities located near the coastline and will be located on federally owned property. Like DeSoto Solar, the project will utilize one of the newest and most advanced technologies available on the market. Thus, Space Coast Solar will provide a platform to examine the technical and economic attributes of a large scale solar PV facility near Florida's east coast.
- 34. Operation of Space Coast Solar will reduce FPL's use of fossil fuels. Space Coast Solar is expected to decrease fossil fuel consumption over its life by 2.8 million MMBtu of natural gas, 117,000 barrels of residual oil and 5,000 barrels of distillate oil.
- 35. Space Coast Solar will prevent more than 227,000 tons of CO₂ over the life of the project. It will also avoid the release of 343 tons of NO_x, as well as the release of 356 tons of SO₂ into the atmosphere. This is equivalent to avoiding emissions from over 1,800 cars per year.
- Space Coast Solar will be zero greenhouse gas emitting at the point of generation. FPL has acquired necessary transmission rights to deliver electricity from the plant. No zoning approvals are required for the project due to its proposed location on federal land. FPL and NASA have executed an access and indemnification agreement which grants FPL an option to lease the property in accordance with terms and conditions agreed upon by the parties in the lease and a right of access to the property to determine the suitability of constructing the PV facility on the property. FPL expects to exercise its option to lease the property by entering into a binding agreement by June 30, 2008, prior to the effective date of HB 7135. Accordingly, all of the requirements for ECRC eligibility for Space Coast Solar are expected to be satisfied not later than July 1, 2008, the anticipated effective date of HB 7135.

37. FPL is using reasonable and customary industry practices in the design, procurement and construction of Space Coast Solar in a cost-effective manner appropriate to the location of the facility. As with Martin Solar and DeSoto Solar, FPL is using trained and qualified employees following well-established practices and procedures to develop the design, procurement and construction requirements for the project. As with DeSoto Solar project, FPL followed a well-defined request for information and request for proposals process to identify qualified suppliers of PV panels necessary for the project. FPL has issued a request for proposals to take advantage of competition in order to obtain the best pricing and has received a number of responses from qualified, internationally recognized firms. The companies have demonstrated engineering design and construction capabilities and final agreements are being structured to contain provisions which will ensure that strict performance and schedule commitments are met. FPL's design specifications also require compliance with applicable building code requirements, including wind loading standards.

VII. Recovery of Project Costs through the ECRC

- 38. In addition to providing electricity for customers with tangible environmental and fuel usage benefits, these projects will constitute significant steps forward for Florida renewable energy and for the energy industry. Construction of these three Next Generation Solar Energy Centers will result in Florida becoming the second largest supplier of utility-scale solar power in the nation.
- 39. Operating solar resources on this large utility scale will provide a strong platform from which Florida can build in becoming a global leader in solar power, and will further advance Florida's efforts and leadership in the fight against climate change. Solar power can act

as a hedge in scenarios where fossil fuel prices continue to escalate and carbon costs are higher than currently modeled. FPL's proposed projects also position FPL to meet likely federal or state renewable portfolio standards.

- 40. Based upon the information available at the time of this filing, FPL estimates that the total capital cost of the projects is about \$688 million, not including interest during construction. There are uncertainties with respect to the costs of the projects that will continue to be addressed during project development, discussed below. Necessarily, FPL will have more information with respect to these uncertainties and their potential effects on costs, either positively or negatively, at the time that FPL makes its ECRC filings with respect to the projects.
- 41. Based on the \$688 million estimate, the net cost of the projects in cumulative present value of revenue requirements in 2008 dollars ("CPVRR") is approximately \$558 million. In 2011, the first year when all three projects are in service for the full year, the system average bill impact is projected to be an increase of 83 cents per 1000 kWh. Over the first 25 years of operations (2009-2033) the system average bill impact is projected to be an increase of 31 cents for the average customer.
- 42. FPL is in the process of selecting vendors and negotiating contracts to cost-effectively implement the projects. FPL is stating total cost information for all three projects, rather than each separate project, to help maintain its bargaining position in relation to prospective vendors. This assists FPL in cost-effectively implementing the projects, and benefits its customers.
- 43. In addition, there are uncertainties with respect to the costs of the projects that have not been resolved at this stage of development, as described in supporting testimony. All of the projects are subject to pricing changes, to the benefit or otherwise, due to global volatility of

key commodities such as steel, copper, concrete and silicone. Additionally, fluctuations in the value of the U.S. dollar could impact, either positively or negatively, final project pricing since many key components are currently manufactured overseas. In addition, for example, important aspects of Martin Solar are novel in the industry (i.e., integrating solar thermal steam production with the existing steam cycle of a combined cycle generating unit). Designing and implementing new technology is less certain from a cost and technical perspective than designing and implementing projects using well-established technology, such as gas-fired combined cycle plants. FPL is using thorough due diligence, careful contract negotiation and other appropriate measures to manage such risks.

44. The Commission has a continuing series of dockets for the review and approval of costs to be recovered by electric utilities through the ECRC; for 2008 this is Docket No. 080007-EI. After formal enactment of HB 7135 and approval of the projects for ECRC recovery, FPL intends to file for recovery of the costs it has incurred and expects to incur for the renewable energy projects as part of the estimated/actual true-up filing that will be made on August 4, 2008. FPL will then file its projection of costs to be incurred for the renewable energy projects in 2009, as part of the projection filing that will be made on August 29, 2008. As with its other costs for ECRC projects, FPL will ask that the 2008 estimated/actual and 2009 projected costs for the renewable energy projects be included in the ECRC factor that will be applied to customer bills during 2009. FPL will continue to follow the procedures for ECRC recovery of the renewable energy project costs in the subsequent years' ECRC dockets. The ECRC currently provides for recovery of operating and maintenance expenses and for a return both on and of capital expenditures on qualifying projects. FPL expects that both forms of recovery will be utilized with respect to the renewable energy projects.

45. As required by HB 7135, FPL will report to the Commission in ongoing ECRC proceedings the construction costs, in-service costs, operating and maintenance costs, hourly energy production and any other information required by the Commission with respect to each of the projects. FPL is currently in the process of finalizing vendor selection and negotiation of contracts for the projects. FPL plans to provide the Commission with a cost estimate for each project prior to the time of approval of qualification for ECRC recovery. Upon approval of the projects, FPL also expects to provide additional cost information beginning with its August 2008 ECRC filing.

VIII. Disputed <u>Issues of Material Fact</u>

46. FPL is presently unaware of any disputed issues of material fact affecting this proceeding. In any event, FPL will demonstrate that Martin Solar, DeSoto Solar and the Space Coast Solar energy centers each will satisfy the requirements for inclusion for ECRC purposes no later than July 1, 2008, which is the expected effective date of HB 7135, which will provide the Commission with authority to grant the relief requested in this petition.

CONCLUSION

Martin Next Generation Solar Energy Center, DeSoto Next Generation Solar Energy Center, and Space Coast Next Generation Solar Energy Center will constitute zero greenhouse gas emitting renewable energy projects that will help demonstrate the feasibility and viability of clean energy projects in Florida, as provided for in HB 7135's amendments to Section 366.92, Florida Statutes. In addition, the projects will benefit FPL's customers by substantially

increasing the availability of clean, zero greenhouse gas emitting renewable energy and, as a result, decreasing greenhouse gas emissions and usage of oil and natural gas.

Based upon the foregoing and the more detailed information in the pre-filed testimony and exhibits submitted contemporaneously with this petition, FPL requests that the Commission approve each of the projects as eligible for cost recovery under the ECRC.

Respectfully submitted this 16th day of May, 2008.

R. Wade Litchfield Vice President and Associate General Counsel Bryan S. Anderson Attorneys for Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408-0420

By: R. Anderson

Fla. Authorized House Counsel No. 219511