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February 1, 2007

HAND DELIVERED

Ms. Blanca S. Bayó, Director
Division of Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 07 0099 -EI
In re: Florida Power & Light Company's Petition to Determine Need for FPL Glades Power Park Units 1 and 2 Electrical Power Plant

Dear Ms. Bayó:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the original and fifteen (15) copies of (i) FPL's Petition to Determine Need for FPL Glades Power Park Units 1 and 2 Electrical Power Plant; (ii) Need Study for Electrical Power Plant; (iii) Appendices A-O to the Need Study; and (iv) testimony and exhibits.

Contemporaneous with this filing, FPL is submitting under separate cover confidential documents and a request for confidential classification. Also included in this submittal is a computer diskette containing FPL's Petition in Word format. Please contact me if you or your Staff have any questions regarding this filing.

DISKETTE FORWARDED TO ECR

Sincerely,

R. Wade Litchfield

RWL:kj
Enclosure

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's Petition to Determine Need for FPL Glades Power Park Units 1 and 2 Electrical Power Plant	)))	Docket No. 070098-EI Dated: February 1, 2007

PETITION

Pursuant to Sections 366.04 and 403.519, Florida Statutes, and Rules 25-22.080, 25-22.081, and 28-106.201, Florida Administrative Code ("F.A.C."), Florida Power & Light Company ("FPL") petitions the Florida Public Service Commission ("PSC" or the "Commission") for an affirmative determination of need for (i) the FPL Glades Power Park Units 1 and 2 ("FGPP") electrical power plants as well as (ii) associated transmission line and substation facilities needed to integrate, interconnect and transmit energy from FGPP to FPL's transmission network for delivery to customers. These facilities collectively are referred to herein as the "Project".

FGPP, using state-of-the-art technology, will provide for environmentally responsible use of coal and petroleum coke (collectively "solid fuel") to produce electricity to serve FPL's customers. FGPP is designed to meet customers' needs for nearly 2000 megawatts (MW) of electric generating capacity, beginning in about 2013. The solid fuel that FGPP is designed to use is plentiful and reliably available at a low cost from U.S. domestic sources. The solid fuel is readily stored in large amounts on-site, enhancing reliability. Because FGPP and its fuel supply will be less susceptible to disruption or interruption, FGPP will provide reliable and cost-effective power. In addition, the use of coal, a resource which the United States has in abundance, is consistent with the nation's goal and efforts to move towards greater energy independence.

FGPP is needed to maintain electric system reliability and integrity and to provide adequate power at reasonable cost. Constructing and operating the Project will help improve and maintain fuel diversity on FPL's system, help dampen volatility in fuel costs charged to customers, increase electric system reliability and integrity throughout Peninsular Florida, have a positive effect on the Southeast Florida load and generation imbalance, provide adequate power at reasonable cost, and is the most cost-effective alternative to meet the additional capacity needs of FPL's system that maintains solid fuel generation as an element of FPL's generating portfolio.

In light of the significant financial commitment that FPL and its customers will need to make to construct FGPP, FPL requests that the Commission, in its final order granting a determination of need for the Project, find that: (i) the decision to construct FGPP is prudent based on the estimated installed costs of FGPP and the associated facilities as well as the other relevant assumptions; and (ii) affirm that costs that are imposed pursuant to current or future environmental legislation or regulatory requirements will be deemed prudent and will be recovered on an incremental basis through the Environmental Cost Recovery Clause ("ECRC"), or similar means. FPL also requests that the Commission through its final order establish an annual review process, described more fully in this Petition, pursuant to which the costs and projections for the Project would be reviewed on an annual basis until the Project is completed.

In support of this Petition FPL states as follows:

I. Introduction

1. An investment in greater fuel diversity will help to mitigate the effects of delivery disruptions or price spikes of any one fuel, whether due to geo-political disturbances,

acts of terrorism, natural disaster or simply long-term market forces of supply and demand. The use of a more varied array of fuel sources thus enhances the reliability and reduces the cost volatility of electric power. The addition of a highly efficient, advanced technology coal-fired plant, equipped with state-of-the art environmental controls will improve FPL's energy reliability while maintaining FPL's commitment to environmental stewardship.

2. Florida's Energy Plan, issued on January 17, 2006, addresses the importance of fuel diversity and avoiding a reliance on any one fuel type such as natural gas. The Florida Legislature also recently highlighted the importance of fuel diversity in House Bill 888, which was signed into law on June 18, 2006. While this Commission has always taken fuel diversity into account in approving new generation in the state of Florida, the bill amended Section 403.519, Florida Statutes, which now requires this Commission to explicitly consider "the need for fuel diversity and supply reliability" when making its determination of need for new electric generating capacity, reflecting the increasing emphasis to be placed on fuel diversity.

3. This Commission itself on August 29, 2006 moved to facilitate FPL's fuel diversity efforts when it granted the Company an exemption from Rule 25-22.082, Florida Administrative Code (the "Bid Rule") with respect to FPL's proposal to construct an ultra-supercritical pulverized coal generating plant. In its Order No. PSC-06-0779-PAA-EI, issued September 19, 2006 (the "Exemption Order"), the Commission stated:

> [W]e grant FPL's petition for an exemption from Rule 25-22.082, Florida Administrative Code, for both its proposed 2012 and 2013 coal units. We find that the exemption will serve the public welfare and will likely result in reliability and cost benefits to the utility's general body of ratepayers. FPL should move forward

> with construction of the generating units as expeditiously as possible and has stated that a need determination filing could be made, for both units, no later than May 1, 2007.

Exemption Order, pp. 5-6. The Commission further directed that "as an incentive to preserve the time savings associated with this exemption, the exemption will expire on May 1, 2007, if FPL has not filed a need determination for the exempted units by that date." Exemption Order, p. 6. In its news release that day explaining its decision, this Commission specifically cited FPL's efforts to construct a coal-fired power plant, stating that "a diversified fuel portfolio insulates ratepayers from high-cost fuels and enhances long-term stability of Florida's economy." As directed by the Commission, FPL has continued to move forward as expeditiously as possible with the development of its coal-fired generating project, and hereby submits its request for a determination of need.

4. FGPP's role in maintaining fuel diversity and reducing Florida's dependence on fuel oil and natural gas is clear. With FGPP, the solid fuel percentage will be 18% in 2005 and 18% in 2016, thus helping maintain the solid fuel contribution percentage in FPL's fuel mix with the associated benefits for customers. In contrast, without FGPP, the solid fuel percentage in 2016 will have dropped to 7%. Moreover, over the first twenty full years of operation of both FGPP units, FPL will reduce the use of natural gas by about 2 billion MMBtu compared to the amount of natural gas it would use without FGPP. This decrease in natural gas use, which is a measure of the reduction in FPL's reliance on natural gas achieved by FGPP, is equivalent to the total quantity of natural gas FPL used during the last 6 years. On the other hand, if combined cycle natural gas plants were to be constructed instead of FGPP, the natural gas element of FPL's

portfolio would increase from 42% in 2005 to 71% in 2016, resulting in commensurate increases in the amount of natural gas burned on FPL's system.

5. FGPP consists of two solid fuel coal-fired generating units each having Summer net capacities of approximately 980 MW for a combined net capacity of 1,960 MW. If approved, they will be constructed on a 4,900-acre site property located in unincorporated Glades County. The site is located west of Lake Okeechobee, approximately four miles northeast of the town of Moore Haven in an unincorporated area of Glades County. The general area surrounding the site consists of undeveloped land currently owned by private landowners, generally to the north and west, and agricultural land to the east and south. The site has direct rail access which abuts the entire southern boundary of the site.

6. FPL's economic analyses in this proceeding utilize June 1, 2013 and June 1, 2014 in-service dates for FGPP, respectively. While this conservative assumption is used in FPL's analyses and for purposes of referring to Project dates in this Petition, the Need Study and supporting testimony, FPL's permitting schedule remains focused on enabling an overall Project schedule that allows earlier in-service dates. FPL believes that the earliest possible date that it can place the first FGPP unit into service is during the second half of 2012, and the second unit during the second half of 2013, assuming no significant permitting, construction or other delays.

7. FPL selected a state-of-the-art advanced coal technology, ultra-supercritical pulverized coal (sometimes hereinafter referred to as "advanced technology coal"), to meet its capacity and fuel diversity needs, based on its evaluation of various coal-based generating alternatives. These alternatives included sub-critical pulverized coal ("PC") units, circulating

fluidized bed ("CFB") units, integrated gasification combined cycle ("IGCC") units, and advanced technology coal units. FPL's evaluations included both qualitative and quantitative analyses of these four options. FPL concluded that the best way to meet its capacity and fuel diversity needs consists of adding two 980 MW advanced technology coal units, one in 2013 and one in 2014.

8. Granting the determination of need for the Project will permit FPL to meet customers' needs for additional reliable and fuel diverse capacity by constructing and operating what will be among the most efficient coal-fired electric generating facilities in the United States. Other federal and state agencies will fully review the environmental compliance of FGPP. However, in this filing, FPL has included information with respect to environmental compliance in order to provide assurance to the Commission that these requirements will be satisfied through FPL's construction of FGPP, and to inform the Commission concerning the expected costs of environmental compliance. Specifically, FPL will install and operate the environmental controls necessary to meet or exceed all applicable environmental laws and regulations. These technologies will incorporate proven state-of-the-art systems and processes to minimize emissions. FGPP's engineering design will also permit the addition of carbon-capture technology when such technology becomes commercially available. Significantly, even with the addition of FGPP, FPL will continue to be among the very cleanest generating utilities in the nation and will continue to have the lowest CO_2 emissions rate of any major utility in the state of Florida. Consistent with FPL's longstanding commitment to good environmental stewardship, the technology selected by FPL for the Project together with FPL's environmental

compliance plan constitute the best available environmental choice to maintain fuel source diversity for electric supply to FPL's customers.

9. The need for the Project is compelling. FPL requires FGPP to maintain FPL system reliability requirements arising in 2012 through 2015. Without FGPP, or an alternative arrangement to maintain its reliability criterion of a 20% reserve margin for those years, FPL's Summer reserve margins would decrease to 14.8% in 2013 and 13.0% in 2014. The Project is therefore needed to maintain the electric system reliability and integrity of FPL and Peninsular Florida.

10. In addition, the Project will add significant value as a new fuel diverse generating resource on FPL's system, helping to mitigate the effects of delivery disruptions or price spikes of any one fuel, enhancing the reliability of the electric system, and reducing the cost volatility of electric power. Specifically, the Project will permit FPL to: (i) use a lower cost solid fuel that is abundantly available in the United States, and is much less susceptible to the potential supply disruptions and price spikes of other fossil fuels; (ii) reduce the fuel cost-related volatility of the price of electricity for customers; (iii) increase the supply of reliable electricity; (iv) diversify its generating technologies, fuel delivery methods and fuel types used to serve FPL's customers; and (v) decrease reliance on natural gas as a relative percentage of FPL's fuel mix.

11. FGPP will permit efficient and environmentally compliant use of lower price solid fuel and will prove to be a cost effective alternative on a long term basis under many anticipated fuel-price and environmental compliance cost outcomes. When one takes into account the costs associated with developing a level of natural gas inventory comparable to the

coal inventory at FGPP, FPL's economic analysis shows that FGPP will result in overall savings to customers in the majority of the fuel price and environmental compliance cost scenarios analyzed. Moreover, several of the scenarios in which FGPP would not, on balance, result in overall savings to customers are comparatively less likely to occur – for example, scenarios where environmental compliance costs for FGPP are very high while natural gas prices remain very low.

12. In summary, FPL's economic analysis shows that adding FGPP to FPL's electric generating portfolio provides a substantial hedge or insurance for customers against high fuel costs, especially high natural gas costs, at a reasonable cost. In future periods when natural gas prices are high, all other things being equal, the lower cost of the solid fuel used by the Project will clearly benefit customers. If natural gas prices in the future are low, the comparative cost benefit of the Project diminishes but customers benefit from the low cost of gas used in natural gas-fired generating units. By the same token, factors like lower or higher carbon dioxide environmental compliance costs, which may be established by future laws and regulations, will affect the economic advantage or disadvantage of the Project compared with other generation sources. Such uncertainties arise for reasons outside of FPL's and this Commission's control. FGPP, for reasons explained in more detail in this Petition, the Need Study and supporting testimony, will help FPL manage and mitigate such risks on behalf of customers as part of a well-balanced and diversified FPL resource portfolio.

13. Holding aside the actual fuel price and environmental compliance cost outcomes, FPL is proposing to construct an advanced technology coal power plant primarily to establish a

more diversified fuel portfolio that in turn will enhance the reliability of FPL's power supply and help reduce volatility in customer bills. Likewise, in considering the factors set forth under the Florida Power Plant Siting Act ("PPSA"), the Commission should place particular emphasis and weight on the need for fuel diversity, an important addition to the statutory standard of review added to the PPSA in the most recent legislative session.

14. The particular circumstances and cost variables associated with the Project require a different approach and context in which to consider FPL's request for a determination of need, as compared to more recent proceedings. For example, in comparing the potential relative cost differences between a coal-fired plant and a gas-fired plant, one must consider potential price movements in both gas and coal. In contrast, in the past, where cost alone has played a larger role under the PPSA and in Commission determinations of need comparing gas-fired units against one another, the movement in gas prices had only modest impacts on the relative economics of competing units. Also, in this instance, FPL is proposing to construct a physically much larger and technologically more complex plant, compared to recently constructed natural gas combined cycle technology, which is subject to many more cost and scheduling uncertainties. In contrast, the gas-fired units that have been the subject of more recent proceedings are more easily sited, involve shorter construction lead times, and require smaller capital investments. Further, environmental compliance costs are much less certain with respect to any coal-fired unit as compared to natural-gas fired units. Finally, although the capital costs of any solid-fuel plant are higher than those for a natural gas-fired plant, the fuel costs (i.e., cost of coal per kilowatt-hour (kWh)) are projected to be substantially lower than the cost of natural

gas to generate the same kWh. Thus, upon its commercial operation FGPP will provide substantial fuel savings, resulting in a lower fuel charge on customer bills, one of the benefits of fuel diversity.

15. Given the significant variables involved in assessing the actual economics of FGPP, there is no one cost outcome that can be projected with any degree of certainty. Indeed, FPL is not recommending approval of FGPP based on any specific projected outcome. Rather, FPL's projected range of cost outcomes for the Project indicate a reasonable range of potential outcomes based on fuel and environmental compliance costs over an extended period of time. It is this range of potential outcomes that illustrates and underscores one of the principal reasons to maintain fuel diversity. Thus, FPL is requesting approval of FGPP to meet projected load on the basis of an interest in and need for fuel diversity, consistent with Section 403.519, Florida Statutes.

16. The expected installed cost for FGPP is $3,456 million (2013 dollars) for FGPP 1 and $2,244 million (2014 dollars) for FGPP 2, resulting in a total estimated cost of $5,700 million. For FGPP 1, this cost includes $2,396 million for the power plant, $125 million for land acquisition for the power plant, $73 million for land acquisition for the off-site transmission system, $201 million for the transmission interconnection and integration, and $661 million in allowance for funds used during construction ("AFUDC") to an in-service date of June, 2013. For FGPP 2, this cost includes $1,668 million for the power plant, $195 million for the transmission interconnection and integration, and $381 million in AFUDC to an in-service date of June, 2014. All land acquisition costs are included in the first unit's cost.

17. While the capital costs of FGPP are high relative to comparably sized gas-fired generating units, these capital costs are offset to a large extent by fuel cost savings. For example, the estimated net effect on a residential 1,000 kWh monthly bill for both FGPP units is $3.96 under a relatively conservative scenario using projections from the lower half of the range of fuel forecasts analyzed by FPL. The estimated increase in the 1,000 kWh residential bill for the first year revenue requirements for both FGPP units is $9.41, and the corresponding projected fuel savings for both units as described above, compared to not adding FGPP or any new generation, is $5.45 for a net effect of $3.96. This estimate is based upon charges beginning when both units are in service.

18. In light of the magnitude of the financial commitment that FPL and its customers will need to make to construct FGPP, and the significant public policy issues associated with the choice of fuel for this generating unit, prior to undertaking this Project and in connection with this request for a determination of need for FGPP, FPL requests that the Commission determine that FPL's decision to undertake the proposed Project is reasonable and prudent, and that the Commission establish an annual review process by which the prudence of actual costs incurred and the continued feasibility of the plant would be determined. Consistent with basic principles of utility regulation under which utilities are permitted recovery of prudently incurred costs, FPL also requests that the Commission in its order affirm that prudently incurred costs of the Project will be recovered whether or not the Project is completed in order to help maintain a more favorable credit risk profile for the Company and, all other things equal, help offset some of the negative impact that such a large, complex and uncertain project would otherwise have.

19. FPL submits that the Project satisfies all of the requirements contained in Section 403.519 and applicable Commission rules, and will be the most cost effective way to maintain solid fuel coal-fired generation as a major element of the generating portfolio serving FPL's customers beginning in the 2013-2014 time period in which customers need large amounts of additional capacity. If approved and constructed, the Project will maintain the balance of fuel diversity, reduce Florida's dependence on fuel oil and natural gas, and contribute to the long-term stability and reliability of the electric grid.

20. FPL submits in support of this Petition and incorporates by reference its detailed Need Study and appendices that develop more fully the information required by Rule 25-22.081, F.A.C. FPL is also submitting the testimony of fourteen witnesses supporting FPL's request that the Commission grant an affirmative finding of need for the Project.

II. The Primarily Affected Utility

21. The Petitioner's name and address are:

Florida Power & Light Company
9250 West Flagler Street
Miami, Florida 33102

22. The names and addresses of FPL's representatives to receive communications regarding this docket are:

William G. Walker, III Florida Power & Light Company Vice President 215 South Monroe Street Suite 810 Tallahassee, Florida 32301-1859	R. Wade Litchfield Associate General Counsel Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408 Telephone: 561-691-7101

23. FPL is a Florida corporation with principal offices at 9250 West Flagler Street, Miami, Florida 33102. FPL is a utility as defined in Section 366.82(1), Florida Statutes, and is an applicant as defined in Section 403.503(4), for purposes of Section 403.519, Florida Statutes. FPL is the primarily affected utility within the meaning of Rule 25-22.081, F.A.C.

24. FPL is the largest investor-owned electric utility in Florida and is among the largest in the United States. FPL currently serves more than 4.4 million customer accounts in 35 counties. FPL's service area contains approximately 27,650 square miles within which the population is approximately 8.5 million. Besides being one of the most populated states in the nation, Florida continues to be one of the fastest growing. Over the past decade, FPL added an average of about 85,000 new customers each year. In addition, electric usage per FPL customer has increased by approximately 30% over the past 20 years.

25. FPL is charged with serving its existing customers, as well as new customers that locate in its service territory. FPL forecasts continued growth of customers in its service territory. The Company is projecting an annual average increase of 88,217 new customers for the next ten years. FPL projects that its annualized retail customer growth will be 2.0% for 2007, 2.1% for 2008, and 2.0% for 2009. For the time period 2006 to 2015 annual growth in customers is expected to average 1.9%. In addition to significant projected customer growth, FPL forecasts significant increases in per-customer electrical load and energy usage. FPL projects that in 2007 FPL's energy use per customer will be 1.1% above 2006, with an increase of 1.7% in 2008 and 1.4% in 2009. The longer term compound annual average growth in use per customer is projected to be 1.2% annually after 2007. Combining the growth in customers and the growth in

energy use per customer yields a growth in energy sales estimated at 3.1% in 2007, 3.8% in 2008, and then an average of 3.0% for the next seven years.

26. In 2006, FPL experienced a coincident peak demand of 21,819 MW (Summer) which is 457 MW lower than the all time record peak for FPL's service territory of 22,276 MW experienced in 2005. The winter peak for 2005/2006 was 19,682 MW, well below the all time high winter peak of 2002/2003, which was 20,190 MW. These electric demands reflect the effect of mild weather in 2006 and the impact of the 2005 hurricanes. In forecasts prepared in connection with FPL's 2006 IRP process and the Need Study submitted in connection with the Project, FPL forecasted ten year Summer peak demand to grow from 21,819 MW in 2006 to 26,772 MW by the year 2015 or 4,953 MW in absolute terms. The winter peak is forecasted to grow from 19,682 MW in the winter of 2005/2006 to 26,048 MW in the winter of 2014/2015 or 6,366 MW in absolute terms.

27. FPL is part of a nationwide interconnected power network. FPL is interconnected directly with eight other electric utilities. Multiple points of interconnection enable power to be exchanged among utilities. FPL's interconnection points with other utilities are addressed in more detail in the Need Study. During 2005 the FPL bulk transmission system was comprised of a total of 6,470 circuit miles of transmission lines. Integration of the generation, transmission and distribution system was achieved through FPL's 542 substations.

28. FPL meets its resource needs through a mix of conventional and nuclear generating units, purchased power and Demand Side Management ("DSM"). FPL's existing generating resources are located at 14 generating sites distributed geographically throughout its

service territory, and they also include partial ownership of one unit located in Georgia and two units located in Jacksonville, Florida. By the Summer of 2007, FPL's generating facilities will total approximately 22,123 MW (Summer) of capacity and its generating units will consist of four nuclear steam units, three coal steam units, 12 combined cycle ("CC") units, 17 fossil fuel steam units, 48 combustion turbines and 5 diesel units. In 2005, FPL's fuel mix was as follows: natural gas (42%); nuclear (19%); coal (18%); fuel oil; (17%); and other sources (about 4%).

29. FPL has long-term Unit Power Sales contracts to purchase up to 931 MW of coal-fired generation from Southern Company. FPL also has long-term contracts with Jacksonville Electric Authority for the purchase of 381 MW (Summer) of coal-fired generation from St. John's River Power Park Units One and Two. In addition, FPL has a number of short-term, firm capacity purchased power contracts with a variety of suppliers totaling 943 MW (Summer) for 2007. FPL also has contracts to purchase firm capacity and energy from seven cogeneration and small power production facilities totaling 738 MW for 2007.

30. With respect to DSM, FPL's programs include both conservation initiatives and load management. FPL's DSM efforts through 2005 have resulted in a cumulative Summer peak reduction of approximately 3,519 MW at the generator and an estimated cumulative energy saving of approximately 33,981 Gigawatt Hours ("GWh") at the generator. Accounting for reserve margin requirements, FPL's DSM efforts have eliminated the need to construct the equivalent of more than 10 new 400 MW generating units.

31. The Commission recently approved FPL's proposal to modify seven existing DSM programs and to introduce two new DSM programs. These efforts will result in a

projected increase of 564 MW at the generator of additional DSM beyond FPL's Commission-approved DSM Goals. In total, over the time period 2006 to 2015, FPL expects to achieve an additional 1366 MW at the generator reduction in demand, which is the equivalent of avoiding the need for construction of approximately 1639 MW of new generation, taking into account reserve margin requirements. By 2015 the total DSM available is expected to be about 4885 MW (at the generator). This is the equivalent of avoiding more than 5800 MW of generating capacity, taking into account line losses and reserve margin. This avoided capacity is almost three times the size of FGPP. FPL has also factored into its load forecast an expected avoidance of as much as 1,256 MW of capacity needs for FPL by 2014 due to new energy efficiency standards mandated by the Energy Policy Act of 2005. Nevertheless, despite FPL's successful large-scale conservation achievements since the 1970s and its substantial increases in DSM projected into the future, and taking into account the energy efficiency improvements expected to be achieved due to the Energy Policy Act of 2005, there is not sufficient additional cost-effective DSM available to mitigate the need for FGPP.

32. FPL's reliability analyses show that with no additional resources beyond its existing generating units, existing purchases, and previously committed construction projects consisting of the new 1,144 MW combined cycle unit at FPL's existing Turkey Point plant site that will be placed into service in mid-2007 (Turkey Point 5), the new 1,219 MW CC unit (WCEC 1) that will be placed into service at West County Energy Center in mid-2009 and the new 1,219 MW CC unit (WCEC 2) that will be placed into service at West County Energy Center in mid-2010, FPL would not meet its Summer reserve margin criterion of 20% starting in

the Summer of 2011 and for each Summer thereafter. A minimum of 2,283 MW of additional supply resources is needed during the 2012 – 2015 timeframe for FPL to continue to meet it Summer reserve margin criterion of 20% for those years.

III. The Proposed Electrical Power Plants

33. FPL proposes to license, construct and operate two nominal 980 MW net solid fuel fired units on a 4900–acre site located in unincorporated Glades County, Florida. The site is located west of Lake Okeechobee, approximately four miles northeast of the town of Moore Haven in an unincorporated area of Glades County. The general area surrounding the site consists of undeveloped land currently owned by private landowners, generally to the north and west, and agricultural land to the east and south. The plant will be located essentially in the center of the proposed 4,900 acre site. This will provide the maximum separation distance from the power plant to the property boundaries, helping minimize impact on off-site land uses and plant visibility.

34. The FGPP site has direct rail access to the South Central Florida Express railway which is connected to two major rail carriers for the delivery of bituminous coal, petroleum coke and for other material transportation needs required to support operations. An existing rail line abuts the entire southern boundary of the FGPP site.

35. FPL evaluated various coal-based generating alternatives to meet its capacity and fuel diversity needs starting in 2013. These alternatives included sub-critical pulverized coal ("PC") units, circulating fluidized bed ("CFB") units, integrated gasification combined cycle ("IGCC") units, and ultra-supercritical pulverized coal ("advanced technology coal") units.

FPL's evaluations included both qualitative and quantitative analyses of these four options. FPL concluded that the best way to meet its capacity and fuel diversity needs starting in 2013 consisted of adding two 980 MW advanced technology coal units, one in 2013 and one in 2014, respectively, in Glades County at FPL's Glades Power Park.

36. Each unit will consist of an ultra-supercritical pulverized coal-fired boiler, steam turbine generator, and mechanical draft cooling tower. The term "ultra-supercritical" in the context of a boiler refers to higher steam operating pressures and temperatures (i.e., greater than 3600 pounds per square inch (psia) and 1,100 degrees Fahrenheit) than conventional subcritical boiler designs and results in much greater efficiency. FGPP will utilize eastern United States and imported bituminous coals and co-fire up to 20% petroleum coke. Onsite fuel storage will be able to accommodate up to 60 days of full-load operation for both units.

37. Each power boiler will have pulverizers capable of handling the design fuel feed rate of about 385 tons per hour or an equivalent heat input of approximately 8,700 million British thermal units per hour (MMBtu/hr). The steam generator will be capable of producing high-pressure superheated steam at an output rate of approximately 6.6 million pounds per hour (lb/hr). The steam will drive a 3,600 revolutions-per-minute (rpm) steam turbine with a hydrogen-cooled generator. The electric generator associated with the steam turbine is capable of converting the steam input rate into about 1,060 MW gross electrical power output per unit. A portion of this output will be utilized to operate the plant, resulting in the nominal net output of each unit of approximately 980 MW net.

38. While other federal and state governmental agencies have jurisdiction with respect to determining the environmental compliance characteristics of FGPP, the Commission can be assured that FPL will construct and operate all aspects of the plant in a manner that is fully compliant with applicable environmental laws and regulations, consistent with FPL's commitment to good environmental stewardship. FGPP will be among the lowest emitting solid fuel generating plants in the United States. Specifically, FGPP will incorporate state-of-the-art pollution control equipment including selective catalytic reduction, fabric filter for particulate control, wet limestone flue gas desulphurization, a wet electrostatic precipitator, and sorbent injection for enhanced mercury control.

39. The expected installed cost for FGPP is $3,456 million (2013 dollars) for FGPP 1 and $2,244 million (2014 dollars) for FGPP 2, resulting in a total estimated cost of $5,700 million. For FGPP 1, this cost includes $2,396 million for the power plant, $125 million for land acquisition for the power plant, $73 million for land acquisition for the off-site transmission system, $201 million for the transmission interconnection and integration, and $661 million in allowance for funds used during construction ("AFUDC") to an in-service date of June, 2013. For FGPP 2, this cost includes $1,668 million for the power plant, $195 million for the transmission interconnection and integration, and $381 million in AFUDC to an in-service date of June, 2014. All land acquisition costs are included in the first unit's cost. The expected costs are based in part upon indexed costs, described in more detail below, in order to account for

certain market risk elements in a manner that is expected to result in a lower cost to customers compared to what would be incurred if FPL were to seek by contract to fix all cost elements at the present time.

40. For FGPP, FPL has been able to obtain firm pricing for most components of the Engineering, Procurement and Construction services contract (the "EPC contract"), and for the FGPP boiler and steam turbine contracts. FPL has also been able to negotiate firm pricing for pollution control equipment, with the exception of certain specialized material costs that are subject to market and commodity uncertainties.

41. The two non-fixed portions of the contracts described above will be indexed using published market indices. These indices address market risks over which neither the supplier nor FPL will have control, and which the suppliers are unwilling to assume. The estimated Project costs stated in this Petition include an allowance for the projected escalations based on the current index projections. In the event that an index decreases, then the contract cost would be reduced. In the event that the index increases, the contract cost would increase. For example, in the case of EPC labor costs, if the actual labor escalation were double the 4% rate of growth reflected in the filed cost of FGPP over the entire construction period, the increase in labor costs would be $146 million. In the case of the high alloy steels and metal for the pollution control equipment, if the actual material escalation were double the 4% rate of growth reflected in the filed cost of FGPP over the entire construction period, the increase would be approximately $6 million. FPL requests that the Commission approve the price indexing identified in the

Company's filing as an appropriate and necessary component of the overall cost to construct FGPP pursuant to which the Commission grants FPL's Petition for a Determination of Need.

42. As part of the Project, FPL needs to reliably interconnect and integrate the FGPP generation with FPL's transmission system to deliver approximately 1960 MW of new generation from the FGPP site in Glades County, an area where no major transmission infrastructure exists. Generator main step-up transformers need to be installed at FGPP, and an FGPP substation constructed to connect FGPP to the transmission system. FPL's transmission system needs to be extended to the FGPP substation, which requires construction of substantial transmission facilities as well as an additional major substation in Hendry County. In total, in addition to the FGPP substation and the Hendry Substation, FPL needs to construct approximately 172 miles of new 500 kV transmission lines to move power and energy over an approximate 100 mile distance. Some portions will contain two circuits, and other portions three or more circuits. FPL's existing 500 kV and 230 kV east to west coast transmission right-of-ways will be utilized, and new corridors, primarily north to south, from the plant site to meet the existing right-of-ways, will also be required. The cost of the transmission facilities required to interconnect and integrate FGPP is about $469 million. Details concerning the cost, construction, schedule and proposed facility locations are included in the Need Study and testimony submitted with this Petition.

IV. The Need for FGPP

43. FPL determined in its 2006 Integrated Resource Plan ("IRP") work that it would need significant additional resources starting in 2012 to meet its reserve margin criterion. In

performing its analysis, FPL employed two reliability criteria. First, FPL sought to maintain sufficient capacity to keep its loss of load probability to less than 0.1 day per year. Second, FPL sought to maintain the 20% reserve margin that it committed to maintain and the Commission approved in Order No. PSC-99-2507-S-EU. Based on the analysis, FPL determined it would need a minimum of either 2,283 MW of new supply (power plant construction or power purchase) or 1,903 of new DSM to meet its 2012 - 2015 reserve margin requirements.

44. Without completing FGPP 1 by June 2013, and FGPP by June 2014, FPL and Peninsular Florida's electric system reliability and integrity will be significantly reduced. Without FGPP, or an alternative arrangement to maintain its reliability criterion of a 20% reserve margin for those years, FPL's Summer reserve margins for 2013 and 2014 would decrease to 14.8% in 2013 and 13.0% in 2014. FGPP is needed to maintain the electric system reliability and integrity of FPL and Peninsular Florida.

45. Further, as discussed in FPL's 2006 Ten Year Site Plan ("TYSP") and as highlighted in the Need Study and testimony accompanying this Petition, the imbalance between the amount of generating capacity located in the southeast area of FPL's service territory and the electrical load for this region continues to increase as load increases without a corresponding amount of generation added in this area. The southeast area of FPL's system includes Dade County, Broward County and a portion of Palm Beach County and is referred to in this Petition and the Need Study as Southeast Florida. The electrical load for this region has traditionally been the largest portion of FPL's entire system load, and it continues to grow.

46. New generating capacity and/or new transmission facilities will have to be built in Southeast Florida to maintain system reliability. The integration of the proposed FGPP will have a positive impact on the Southeast generation/load imbalance.

47. FGPP will add highly efficient and cost-effective generation that, as a utility-owned plant, will be committed to Florida retail customers and subject to Commission oversight. As shown in the accompanying Need Study, FGPP will produce adequate electricity at a reasonable cost, improve system efficiency, and maintain system reliability.

V. FPL's Analysis of Generating Alternatives and Fuel Diversity

48. FPL periodically examines a variety of generation construction options in the course of determining the most economical self-build options for its system. Several factors influence the decision regarding the different types of alternatives that could reasonably be included in the resource planning process.

49. FPL's examination of construction options with which it could meet its 2013 - 2015 capacity needs focused on conventional technologies that could be developed, permitted and constructed in time to serve the projected load. These technologies were examined within FPL's IRP process which employs a multi-year, expansion plan analysis to evaluate the economics of competing generating options.

50. Natural gas-fired CC plants could be constructed in sufficient time to serve the load for the 2013-2015 time period. However, if the 2013-2015 need was satisfied with construction of natural gas-fired CC plants, the natural gas portion of the fuel mix serving FPL's customers would increase from 42% in 2005 to 71% by 2016. In addition, if the 2013-2015 need

was satisfied with natural gas-fired plants, the coal portion of the fuel mix serving FPL's customers would decrease from 18% in 2005 to only 7% in 2016, leaving customers served with a substantially less diversified fuel mix than exists today. Moreover, by mid-2009, the two pipelines serving Peninsular Florida will be fully subscribed. Therefore, the addition of incremental gas-fired generation will require an expansion of the existing pipelines and/or a new interstate pipeline into Florida.

51. In contrast, with the proposed addition of FGPP, the share of electricity produced with coal would be 18% in 2016, as opposed to 7% under an all-gas plan. With the proposed addition of FGPP, the share of electricity produced with natural gas would be about 60% in 2016, rather than 71% in 2016 under an all-gas plan. Thus, the addition of FGPP will help improve and maintain the contribution of coal-fueled generation on FPL's system, and prevent a dramatic reduction in the contribution of coal-fueled generation to FPL's system.

52. The primary benefits of FPL's proposed more balanced fuel mix and greater fuel diversity are better system reliability and reduced price volatility. An electric system that relies on a single fuel and a single technology to generate all the electricity needed to meet its customers' demand, all else equal, is less reliable than a system that uses a more balanced, fuel-diverse generation portfolio. In addition, greater fuel diversity mitigates the impact of wide or sudden swings in the price of one fuel, a phenomenon that has characterized the natural gas market over the last several years.

53. In regard to improved system reliability, an electric system that relies exclusively on one fuel is more susceptible to events that cause delays or interruptions in the production or

delivery of that fuel. For example, in 2005 a significant number of natural gas production facilities in the Gulf of Mexico were shut down as a result of hurricanes. The shutdown of these facilities, which occurred with very little advance warning, significantly reduced the quantities of natural gas available to FPL to meet electricity demand. Had FPL's system relied exclusively on natural gas to produce electricity it would have been difficult, if not impossible, to continue to meet its customers' demand for electricity until some gas production capability was restored. Adding solid fuel, particularly coal for which a 60 day full-load inventory can be maintained on site, thus provides a physical hedge against the unavailability of natural gas or fuel oil which improves FPL's overall system reliability. Similarly, the diversity in transportation methods and routes for coal compared to natural gas and oil (trains compared with pipelines and barges) helps mitigate the effect of problems related to transportation and delivery as well as production, thus further improving overall system reliability.

54. Because coal-fired generation is the only fuel-diverse capacity addition available to meet the large need projected to occur by 2013, even assuming successful implementation of FPL's DSM, renewable energy and other efforts, FPL evaluated four coal-based technologies to determine whether they could reliably contribute to the fuel diversity and capacity needs of FPL's system in this time period. The four technologies were: sub-critical pulverized coal ("PC") technology, circulating fluidized bed ("CFB") technology, integrated gasification combined cycle ("IGCC") technology, and ultra-supercritical pulverized coal (advanced technology coal).

55. FGPP will also provide the needed power and fuel diversity in an environmentally responsible manner. As explained in the Need Study and supporting testimony, FGPP will comply, and in many cases perform better than required, with respect to environmental laws and regulations. FGPP will use proven air pollution control technologies to maintain an emission level that will be among the lowest in the country for similar new facilities. Not only will FGPP minimize air emissions to the greatest extent practicable, but FPL is also designing the facilities with the aim that certain emissions control technologies currently in development may, when proven, be retrofitted into these units. For example, FGPP can be equipped for carbon capture as and when technology develops and regulations require. FPL notes that it and its parent company, FPL Group, Inc. ("FPL Group") have been recognized as environmental leaders in the utility industry, with emissions rates for NO_x, SO_2 and CO_2 among the lowest of their peer companies nationwide. The U.S. Department of Energy has ranked FPL's energy conservation efforts first among electric utilities nationwide. Our affiliate company, FPL Energy, is the world's largest renewable energy provider, the largest generator of wind energy in the United States and the world, and also is the largest producer of solar generation in the United States. With the addition of FGPP, FPL will continue to be among the very cleanest generating utilities in the nation and will continue to have the lowest CO_2 emissions rate of any major utility in the state of Florida.

56. Based upon extensive quantitative and qualitative evaluation of alternative solid fuel coal-fired technologies, FPL selected advanced technology coal as the best choice to provide a reliable power source at a reasonable cost to meet a growing demand for electricity and to

utilize a comparatively low cost fuel to reduce the volatility in fuel prices that customers pay directly. While there are many scenarios in which FGPP would provide needed diversity to FPL's system and its customers and would also, over the long-term, provide the lowest cost resource addition that could be made during the 2013 to 2014 time period, FPL is not recommending approval of FGPP based on any specific, projected set of assumptions or economics. Instead, FPL is requesting approval of FGPP to meet projected load on the basis of an interest in and need for fuel diversity, consistent with the 2006 legislative amendment to Section 403.519, Florida Statutes, which provides that in need determination proceedings the Commission shall take into account a number of matters including whether a proposed generating addition will "provide the most cost-effective source of power, taking into account the need to improve the balance of fuel diversity, reduce Florida's dependence on fuel oil and natural gas, reduce air emission compliance costs, and contribute to the long-term stability and reliability of the electric grid." For the reasons stated in this Petition, the accompanying Need Study and supporting testimony, FGPP is the most cost-effective source of power taking into account the factors provided for in Section 403.519, Florida Statutes.

VI. FPL's Analysis of Non-Generating Alternatives and Renewable Generation

57. FPL also considered DSM alternatives. FPL employs comprehensive and cost-effective DSM programs to reduce load requirements and encourage conservation. FPL has long been one of the key innovators in the field of DSM, and is a nationally ranked industry leader in conservation and load management. Without its DSM, FPL would require far more additional capacity to meet its present and projected needs.

58. With respect to DSM, FPL's programs include both conservation initiatives and load management. FPL's DSM efforts from their beginning in 1978 through 2005 have resulted in a cumulative Summer peak reduction of approximately 3,519 MW at the generator and an estimated cumulative energy saving of approximately 33,981 Gigawatt Hours ("GWh") at the generator. Accounting for line losses and reserve margin requirements, FPL's DSM efforts have eliminated the need to construct the equivalent of more than 10 new 400 MW generating units.

59. The Commission recently approved FPL's proposal to modify seven existing DSM programs and to introduce two new DSM programs. These efforts will result in a projected increase of 564 MW at the generator of additional DSM beyond FPL's Commission-approved DSM Goals. In total, over the time period 2006 to 2015, FPL expects to achieve an additional 1366 MW at the generator reduction in demand, which is the equivalent of avoiding the need for construction of approximately 1639 MW of new generation, taking into account reserve margin requirements. As previously discussed, this will result in the equivalent of about 5800 MW in total DSM-reduced capacity requirements, taking into account load losses and reserve margin. FPL's DSM efforts are thus of a significant magnitude even in comparison to its proposal to add 1,960 MW of generating capacity additions through construction of FGPP. Despite FPL's successful large-scale conservation achievements since the 1970s and its substantial increases in DSM projected into the future, FPL has assessed and determined that there is not sufficient additional, reasonably available, cost-effective DSM available to mitigate the need for FGPP.

60. Regarding renewable generation, in 2005 FPL purchased about 1.5 million MWH of electricity from nine suppliers. According to U.S. Energy Information Administration data published in June 2006, after adjusting for hydroelectric and geothermal sources which are not available renewable resources in Florida, Florida ranks second only to California in terms of production of electricity from renewable resources. FPL will file new standard offer contracts for renewable generation after the Commission issues its new rule on renewable energy. In addition, FPL will continue to encourage existing and potential renewable generators by facilitating dialogue with these entities and offering for negotiation contract terms that allow developers of renewable resources to choose from a portfolio of diverse generating units. FPL will continue to seek opportunities to encourage development of cost-effective renewable resources. For example, FPL is involved in a development effort for wind generation and supporting research regarding the potential for power generation using ocean currents off Florida's East Coast.

VII. Adverse Consequences of Delay

61. As noted above and detailed in the Need Study, FPL needs FGPP to maintain FPL system reliability requirements arising in 2013 through 2015. Without the units, or an alternative arrangement to maintain its reliability criterion of a 20% reserve margin for those years, FPL's Summer reserve margins would decrease to 14.8% in 2013 and 13.0% in 2014. FGPP, therefore, is needed to maintain the electric system reliability and integrity of FPL and Peninsular Florida. Thus, a delay in licensing FGPP may adversely affect FPL's and Peninsular Florida's electric system reliability and integrity in beginning in 2013, and would delay the benefits associated

with maintaining fuel diversity. The adverse consequences of delay are described in greater detail in the Need Study.

VIII. Request for Annual Project Review and to Affirm Ratemaking Treatment

62. FPL believes that the decision to construct FGPP is in the long-term interest of our customers, but recognizes that the capital costs for the Project are very large, and that the market forces and public policy issues that influence this decision are highly fluid and dynamic. Therefore, prior to undertaking a project of this magnitude, FPL requests that in its final order granting a need determination, that the Commission:

(a) find that the decision to build FGPP based on the estimated costs of the Project, as well as other relevant assumptions, is reasonable and prudent;

(b) affirm that FGPP costs due to present and future environmental requirements, will be deemed prudent and shall be recovered on an incremental basis through the ECRC,, or similar means;

(c) direct that the costs and projections for the Project will be reviewed on an annual basis until the Project is completed, in which reviews the Commission will determine the prudence of the actual costs incurred and the continued feasibility of the Project;

(d) affirm that after FGPP is placed in service, all prudently incurred non-fuel costs (other than those recoverable through the ECRC) shall be recoverable through base rates, either utilizing the Generation Base Rate Adjustment ("GBRA") mechanism, if the current base rate agreement is in effect or, if it is not, through new base rates or a GBRA set through a future base rate case; and

(e) direct that if the Commission determines construction should not be continued or if other conditions preclude continuation, all prudently incurred costs, including associated carrying costs, shall be accumulated and recovered over a five year period beginning when new base rates next go into effect.

63. An annual review and prudence determination of the Project costs will allow for more timely review than has been typical in past prudence determinations, i.e., closer in time to the actual expenditures, thus allowing a greater opportunity to consider the reasonableness and prudence of actual costs incurred and to assess the continued feasibility of the Project. Annually, FPL will furnish forecasted costs as well as actual costs incurred, providing detailed justifications of such costs, allowing an assessment of the continued cost-effectiveness and need for the Project. Such information would include a list of all contracts executed in excess of $1 million, including the value, term and method of vendor selection for such contracts. It is further contemplated that the Staff will have continual access, through its audit function, of key information and documentation supporting the Project. This annual review process will be particularly beneficial to the Commission and customers given the magnitude of the Project and the dynamic nature of circumstances and market conditions upon which a decision to proceed with the Project is predicated, in essence giving the Commission and interested parties a "real time" ability to review the continued feasibility of the Project.

64. The provision for annual reviews and the other findings with respect to prudence and future cost recovery will also provide a certain measure of assurance to investors who will be asked to finance the Project. For example, affirming in the need determination order that

prudently incurred costs will be recoverable whether the Project is ultimately completed or not will, all other things equal, help maintain a more favorable credit risk profile for the Company and help offset some of the negative impact that such a large, complex and uncertain project would otherwise have.

IX. Disputed Issues of Material Fact and Ultimate Facts Alleged

65. FPL is presently unaware of any disputed issues of material fact affecting this proceeding. In any event, consistent with the requirements of Section 403.519, Florida Statutes, FPL will show that: (a) the Project is needed to maintain electric system reliability and integrity and to provide adequate electricity at reasonable cost, taking into account the need for fuel diversity and supply reliability; (b) the Project is the most cost-effective option for providing fuel diverse generation capacity needed to meet the needs of FPL's customers beginning in 2013 through 2015; (c) there is no reasonably available conservation or other non-generation alternative that would mitigate the need for FGPP; and (d) the circumstances of this matter support a specific determination of the prudence of FPL's decision to construct FGPP, the institution of an annual review process with respect to the Project, and provision for cost recovery for the Project through future rates.

CONCLUSION

The proposed FPL Glades Power Park Units 1 and 2 and associated facilities are a cost-effective and environmentally sound means of maintaining the benefits of fuel diversity for meeting FPL's growing capacity needs. The Project presents several key advantages to FPL and its customers. Most importantly, this resource addition maintains fuel diversity and prevents

major erosion in the portion of power produced by FPL using solid fuel electric generation. The Project is critically needed to meet reliability needs in 2013-2015. The Project increases electric system reliability and integrity throughout Peninsular Florida, has a positive impact on the Southeast Florida load and generation imbalance, provides adequate power at reasonable cost and is the most cost-effective alternative to meet needed capacity to FPL's system while maintaining fuel diversity.

WHEREFORE, for the reasons set forth above, and as more fully set forth and described in the supporting testimony and documents included with its Petition, Florida Power & Light Company respectfully requests that the Commission grant an affirmative determination of need for the Project and, in connection with the determination of need, in acknowledging the magnitude of the Project, the associated uncertainties in market conditions, costs, and scheduling, and the significant financial commitment that FPL and its customers will need to make to bring the Project on-line:

(a) find that the Project is needed to maintain electric system reliability and integrity and to provide adequate electricity at reasonable cost, taking into account the need for fuel diversity and supply reliability;

(b) find that the Project is the most cost-effective option for providing fuel diverse generation capacity needed to meet the needs of FPL's customers beginning in 2013 through 2015;

(c) find that there is no reasonably available conservation or other non-generation alternative that would mitigate the need for the Project;

(d) find that the decision to construct the Project is reasonable and prudent, based on the estimated installed costs as well as the other relevant assumptions;

(e) find that the use of indexed costs for certain volatile commodity and labor cost elements of the Project is reasonable and appropriate;

(f) affirm that costs imposed pursuant to present and future environmental legislation or regulatory requirements will be deemed prudent and shall be recovered on an incremental basis through the ECRC, or similar means;

(g) direct that an annual review process shall be established pursuant to which the costs and projections for the Project will be reviewed on an annual basis by the Commission to determine the prudence of the actual costs incurred and the continued feasibility of the Project;

(h) direct that if, following a determination of need, the Commission at any time determines construction should not be continued or if other conditions preclude continuation, all prudently incurred costs, including associated carrying costs, shall be accumulated and recovered over a five year period beginning when new base rates next go into effect; and

(i) affirm that after FGPP is placed in service, all prudently incurred non-fuel costs (other than those recoverable through the ECRC or like means) shall be recoverable through base rates, either utilizing the GBRA mechanism, if the current base rate agreement is in effect or, if it is not, through new base rates or a GBRA set through a future base rate case.

FPL further requests that the Commission grant such additional appropriate relief as the case and law may permit.

Respectfully submitted this 1st day of February, 2007.

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