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R. Wade Litchfield
Associate General Counsel
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
(561) 691-7101
(561) 691-7135 (Facsimile)

March 13, 2006

VIA HAND DELIVERY
Ms. Blanca S. Bayó, Director
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
Betty Easley Conference Center
2540 Shumard Oak Boulevard, Room 110
Tallahassee, FL 32399-0850

Re: Docket No. 060225-EI
In re: Florida Power & Light Company's Petition to Determine Need for West County 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 West County Units 1 and 2 Electrical Power Plant; (ii) Need Study for Electrical Power Plant; (iii) Appendices A-P 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.

Sincerely,

R. Wade Litchfield

RWL:ec
Enclosures

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's Petition to Determine Need for West County Energy Center Units 1 and 2 Electrical Power Plant	)	Docket No. 060225-EI
	)	Dated: March 13, 2006

PETITION FOR DETERMINATION OF NEED FOR ELECTRICAL POWER PLANT

Pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, 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 the West County Energy Center Units 1 and 2 electrical power plant ("West County 1 and 2"). In support of this Petition, FPL states:

I. Introduction

1. FPL projects continued strong electric load growth within FPL's service territory due to increases in both the numbers of customers and the amount of energy used per customer. With no additional resources beyond its existing generating units, existing purchases, completing the previously-approved Turkey Point Unit 5, and fulfilling its Demand Side Management ("DSM") goals, FPL expects that it will not meet the summer reserve margin criterion of 20 percent starting in the summer of 2009 and for each summer thereafter.

2. FPL's analysis conducted in preparation for FPL's 2005 Generation Capacity Request for Proposals (the "RFP") showed that a minimum of 2,371 MW of additional supply resources would be needed to supply customers' needs reliably during the 2009 – 2011 time frame, including satisfying the summer reserve margin criterion. FPL has conducted detailed

studies to determine how best to provide for the needed resources, and has also issued pursuant to Commission rules, its RFP directed at ensuring that FPL obtains the needed resources at the lowest reasonable cost. More recent forecasts show that FPL's capacity needs are higher than those shown in the forecasts at the time of the issuance of the RFP, further confirming the need for capacity resources.

3. Based upon its studies and other information, including submissions by respondents to the RFP, FPL has determined that constructing two new combined cycle natural-gas fired electric generating units, West County Energy Center Units 1 and 2, is the most cost-effective as well as an environmentally benign way to meet the additional capacity needs of FPL's customers arising during the 2009-2011 period. The two proposed units will have summer net capacities of approximately 1,219 MW for a combined capacity of 2,438 MW. If approved, they will be constructed on a 220-acre site located in unincorporated western Palm Beach County, approximately 5 miles west of the village of Wellington, which site has been zoned for power plants. FPL proposes to place West County 1 and 2 in commercial service by June 2009 and June 2010, respectively.

4. FPL submits in support of this Petition and incorporates by reference a detailed Need Study document and appendices (the "Need Study") that develop more fully the information required by Rule 25-22.081, F.A.C. As demonstrated below and in the Need Study, West County 1 and 2 are needed to maintain electric system reliability and integrity and to provide adequate power at reasonable cost. West County 1 and 2 are the most cost-effective option for providing the generation capacity needed to meet the needs of FPL's customers.

Additionally, there is no reasonably available, cost-effective DSM alternative that would mitigate the need for West County 1 and 2. Constructing the proposed units will increase electric system reliability and integrity throughout Peninsular Florida, address 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.

II. Preliminary Information

5. The Petitioner's name and address are:

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

6. 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, Esq. Associate General Counsel-Regulatory Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408 Telephone: 561-691-7101

III. The Primarily Affected Utility

7. FPL is a Florida corporation with headquarters at 700 Universe Boulevard, Juno Beach, Florida, 33408. 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.

8. FPL serves approximately 4.3 million retail customers throughout Florida. Its

service area comprises more than 27,500 square miles in 35 Florida counties. Approximately 8.5 million people live within FPL's service area.

9. 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 75,105 new customers for the next ten years. FPL projects that its annualized retail customer growth will be 1.2% for 2006, 1.8% for 2007 and 2008 and then average 1.6% for the next ten years. In addition to significant projected customer growth, FPL forecasts significant increases in per-customer electrical load and energy usage. FPL projects that in 2006 FPL's energy use per customer will be 2.5% above 2005, with an increase of 1.6% in 2007 and 1.5% in 2008, with a longer term compound annual average growth in use per customer projected to be 0.9% annually after 2007. Combining the energy use per customer and the growth in customers yields an expected growth in energy sales estimated at 3.7% in 2006, 3.5% in 2007, and 3.3% in 2008, with an average 2.4% increase thereafter for the next ten years.

10. In 2005, FPL experienced a coincident peak demand of 22,361 MW (summer) and 18,108 MW (winter) and a Net Energy for Load ("NEL") of 111,301 Gigawatt-hours ("GWh"). In forecasts prepared in connection with FPL's RFP, for 2009 FPL forecasted increased coincident peak loads of 22,884 MW (Summer) and 22,916 (Winter), before accounting for DSM. For 2010 FPL forecasted coincident peak loads of 23,424 (Summer) and 23,466 (Winter), before accounting for Demand-Side Management ("DSM"). FPL forecasted NEL to grow from its present level to 127,521 GWh in 2009 and 130,980 GWh in 2010, and

133,674 GWh in 2011. More recent forecasts, discussed in the testimony of Dr. Leonardo Green submitted with this Petition, show that FPL's capacity needs are higher than those shown in the forecasts at the time of the issuance of the RFP, further confirming the need for capacity resources.

11. FPL is part of a nationwide interconnected power network. It has multiple points of interconnection with other utilities that enable power to be exchanged among utilities. FPL's interconnection points with other utilities are addressed in more detail in the Need Study. The FPL transmission system is comprised of 6,381 circuit-miles of transmission lines. Integration of the generation, transmission and distribution system is achieved through FPL's 543 substations.

12. FPL meets its resource needs through a mix of conventional and nuclear generating units, purchased power and DSM. FPL's existing generating resources will total approximately 20,919 MW (summer) in 2006. This capability includes four nuclear steam units, three coal steam units, 11 combined cycle units, 17 fossil fuel steam units, 48 combustion turbines and 5 diesel units. FPL has a 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) and 390 MW (winter) 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 1,353 MW (summer) and 1,543 MW (winter) for 2006. FPL also has contracts to purchase firm capacity and energy from seven cogeneration and small power production ("qualifying facilities") totaling 880 MW. With respect to DSM, FPL's current DSM

Plan was approved by the Commission in 2004 and is designed to achieve 141.7 MW of demand reduction during 2006, in addition to those amounts of DSM achieved through FPL's actions before the year 2004. FPL has assessed and determined that there is not sufficient additional, reasonably available, cost-effective DSM available to mitigate the need for West County 1 and 2.

13. FPL's reliability analyses show that with no additional resources beyond its existing generating units, existing purchases and the completion of the under-construction and previously-approved 1,144 MW CC unit at FPL's existing Turkey Point plant site (Turkey Point Unit 5), FPL would not meet its summer reserve margin criterion of 20 percent starting in the summer of 2009 and for each summer thereafter. Based on the forecasts performed at the time of the RFP, a minimum of 2,371 MW of additional supply resources would be needed during the 2009 – 2011 time frame for FPL to continue to meet it summer reserve margin criterion of 20 percent for those years.

IV. The Proposed Electrical Power Plants

14. West County Units 1 and 2 are each designed to use three Mitsubishi Power Systems 501G series advanced combustion turbines ("CTs"), three heat recovery steam generators ("HRSGs") and one steam driven turbine generator. Each resulting three-on-one (3x1) Combined Cycle ("CC") unit is expected to have an approximate total rated capacity of 1,219 MW in summer (at 95° F) and 1,335 MW in winter (at 35° F).

15. FPL anticipates engineering and construction savings with West County 1 and 2 because the 3x1 configurations are similar to the project presently being constructed at the Turkey Point site. Accordingly, the project planning, detailed design, procurement, construction,

commissioning and O&M will involve similar requirements. The resulting engineering and construction savings for customers are reflected in the cost estimate for West County 1 and 2.

16. Generally, CC plants of the design to be used for West County 1 and 2 can be expected to achieve energy conversion rates (heat rates) of less than 7,000 Btu/kWh. This compares favorably to values on the order of 10,000 Btu/kWh for conventional boiler steam-electric generating units, and it results in a fuel savings of about 30 percent. FPL anticipates that the new West County 1 and 2 will each achieve a highly efficient average base heat rate of 6,582 Btu/kWh (HHV at 75° F).

17. The CTs will use natural gas delivered by pipeline to the plant as their primary fuel. Natural gas will be transported to West County 1 and 2 through a new lateral pipeline, which would be owned and operated by Gulfstream Pipeline. Gulfstream will independently undertake the permitting and construction activities for the necessary upgrades to the existing infrastructure.

18. To provide a backup fuel to the unit should there be a loss of natural gas to the site, West County Units 1 and 2 will be designed to use light oil for an equivalent of up to 500 hours per year per CT at baseload conditions. Light oil will be trucked to the site and stored in two 6.2 million gallon tanks that will be constructed as a part of the West County 1 and 2 project.

19. West County 1 and 2 will connect to the adjacent existing Corbett system substation via generator leads. The Corbett system substation will be expanded to accommodate the new interconnection to FPL's electric transmission system. Additional bays will be added to the existing system substation to accommodate the new interconnection to FPL's electric transmission system. Transmission interconnection and integration requirements, plans and costs

are discussed in the Need Study.

20. The location of West County 1 and 2 will maximize the beneficial use of the site while helping minimize environmental, land use and cost impacts. The site benefits from adjacent existing transmission infrastructure, which includes a transmission system substation for both the 230 kV and 500 kV systems. The site is also a reclaimed parcel that requires no impact to environmentally sensitive lands, which will further minimize environmental impacts. There are no water supply, fuel supply, transmission or other constraints that will interfere with FPL's ability to successfully construct and operate West County 1 and 2.

21. The two units will be located on the northern 100 acres of the 220 acre project site. The entire site has been zoned for power plants. Currently, there are no on-site activities or facilities on the proposed project site. A portion of the site has been in agricultural use for the past 30 years, while the 50 acre northern portion has been partially reclaimed and restored after mining of lime rock. Adjacent lands to the east and north have been extensively mined for lime rock for the past 15 years. The use of clean fuels and combustion controls will minimize air emissions from West County 1 and 2 and ensure compliance with applicable emission-limiting standards. FPL's design constitutes the Best Available Control Technology for air emissions and minimizes such emissions while balancing economic, environmental and energy impacts.

22. West County 1 and 2 will be a highly reliable source of energy for FPL's customers. The units will have an estimated equivalent availability factor of approximately 97 percent and a low estimated equivalent forced outage rate of about one percent. These highly reliable units will help maintain the system reliability and integrity of FPL and Peninsular

Florida.

23. The estimated total installed cost for West County Unit 1 is $688.6 million in 2009 dollars. This cost includes $585.3 million for the power block, $22.7 million for transmission interconnection and integration, $13.2 million for land costs, and $67.4 million in allowances for funds used during construction (AFUDC) to an in-service date of June 2009. The estimated total installed cost for West County Unit 2 is $632.4 million (2010 dollars). This cost includes $515.9 million for the power block, $33.6 million for the transmission interconnection and integration, $13.2 million for land costs, and $69.7 million in allowances for funds used during construction (AFUDC) to an in-service date of June 2010.

V. FPL's Need for West County 1 and 2

24. FPL determined in its 2005 integrated resource planning ("IRP") work that it would need significant additional resources in 2009 - 2011 to meet its reserve margin criterion for those years. 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 percent 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 2,371 MW of new supply (power plant construction or power purchase) or 1,976 of new DSM to meet its 2009 - 2011 reserve margin requirements.

25. Without completing West County Unit 1 by June 2009, and West County Unit 2 by June 2010, FPL and Peninsular Florida's electric system reliability and integrity will be

significantly reduced. FPL will also fail to meet its required 20 percent reserve margin beginning in 2009. Without the units, or an alternative arrangement to maintain its reliability criterion of a 20 percent reserve margin for those years, FPL's summer reserve margins for 2009, 2010 and 2011 would decrease to 15.5% in 2009, 11.7% in 2010 and 9.2% in 2011. West County 1 and 2, therefore, are needed to maintain the electric system reliability and integrity of FPL and Peninsular Florida.

26. Further, as discussed in FPL's 2005 Ten Year Site Plan ("TYSP") and as highlighted in its RFP, there is a growing imbalance between the amount of generating capacity located in the southeast area of FPL's service territory and the electrical load for this region. 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, particularly in the vicinity of the proposed West County site.

27. New generating capacity and/or new transmission facilities will have to be built in Southeast Florida to maintain system reliability. The location of the proposed West County 1 and 2 will help mitigate the Southeast generation / load imbalance. The Southeast Florida generation/load imbalance and related cost and reliability issues are discussed in greater detail in the Need Study.

28. West County 1 and 2 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, West County 1 and 2 will

produce adequate electricity at a reasonable cost, improve system efficiency, and maintain system reliability.

VI. FPL's Analysis of Generating Alternatives

29. 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.

30. FPL's examination of construction options with which it could meet its 2009 - 2011 capacity needs focused on conventional technologies which could be developed, permitted and constructed within four years. These technologies were examined within FPL's IRP process that employs a multi-year, expansion plan analysis to evaluate the economics of competing generating options.

31. Solid fuel-based (coal) and nuclear power plants require more than six years to permit and to construct, and present significant hurdles relating to siting and permitting that cause substantial cost uncertainty. While FPL's resource plan includes new solid fuel-based capacity additions in 2012 and 2013 (that are being addressed in Part II of the RFP), and FPL is examining the feasibility of new nuclear units after 2013, these additions could not be brought on-line in the 2009 – 2011 time period. Therefore, in terms of selecting its best self-build option(s), these technologies could not address FPL's capacity need for 2009 - 2011.

32. Previous analyses consistently showed that CC units were generally better economic choices for FPL's system than are CT units. FPL's detailed economic analyses of

construction options to meet its 2009 – 2011 capacity needs focused on different CC technologies and configurations. Different sites were also considered. Ultimately, FPL analyzed 31 different variations of CC technologies and configurations in its analyses at the West County Energy Center site in western Palm Beach County. The site was selected based on proximity to the transmission system via the Corbett Substation, correlation to the load to be served in south Florida, compatibility with existing land use, and access to two major natural gas transmission systems. FPL evaluated the generator capital and O&M costs, transmission interconnection cost, system emission costs, gas pipeline costs, and system fuel costs (i.e., the "generator system" costs) in a multi-year resource plan approach using its Electric Generation Expansion and Analysis System (EGEAS) model.

33. Because all of the capacity options being evaluated for the 2009 – 2011 time frame were assumed to be placed at the West County Energy Center site, the portfolios were identical in regard to both transmission-related costs (including integration, losses, and impacts on the dispatch of FPL existing FPL generating units located in Southeast Florida) and upstream gas system infrastructure costs. Likewise, all of the self-build options were assumed to be constructed with a capital structure of 55% equity/45% debt so there is no impact from any of the self-build options on FPL's target adjusted capital structure of 55% equity/45 % debt. Therefore, there were no differences between these self-build options in regard to costs related to transmission, gas infrastructure, or capital structure. As a result, the EGEAS analyses were able to capture the total cost differences between the portfolios.

34. These analyses resulted in identifying the 3x1 Mitsubishi 501G-based option as

the economic choice for FPL's system for the 2009 – 2011 time frame. One CC unit with a summer capacity of 1,219 MW to be placed in-service at the West County Energy Center site in June 2009, and a second such unit to be placed in-service in June 2010 at the same site, are FPL's best self-build options for meeting the 2009 – 2011 capacity needs. These units (West County 1 and West County 2) were designated as FPL's Next Planned Generating Units ("NPGU") in the RFP. In addition, the 2009 CC unit, by itself, was designated an Alternate Generating Unit in the RFP. Its inclusion increased flexibility in the evaluation and gave potential respondents to the RFP a known "pairing partner" if their anticipated capacity offering could not meet all of FPL's capacity needs.

35. FPL developed and employed the RFP in 2005 to solicit viable firm capacity and energy resources that could be compared to FPL's NPGU. Beyond addressing the timing and magnitude of capacity additions required by Florida's continued growth, FPL's Integrated Resource Planning ("IRP") process addressed other issues. Significant analytical activities were undertaken in 2003 - 2004 resulting in FPL's Clean Coal Technology Study (March 2005). That study demonstrated that advanced technology coal generation was becoming much more cost-competitive compared to gas fired generation. As a result of those efforts, FPL's 2005 TYSP identified a generation plan that met the reliability, efficiency and fuel diversity needs of the system by proposing two efficient combined cycle generation units in 2009 and 2010 to address the system needs for the 2009-2011 period and proposing two advanced technology pulverized coal units in 2012 and 2013 to address system needs for the 2012-2014 period.

36. FPL's identification of West County 1 and 2, installed as a combined project with delivery in 2009 and 2010, respectively, as the NPGU for the 2009-2011 period set in motion the

Power Plant Siting Act (PPSA) process. In connection with that process, FPL is required to obtain a Determination of Need from the Commission. The Determination of Need requires that a utility provide a demonstration of cost-effectiveness through an RFP (the Bid Rule) that solicits generation alternatives to the FPL NPGU. In accord with the Bid Rule, FPL issued a two part RFP in 2005.

37. Part One of the RFP addressed capacity resources needed to maintain or improve FPL's reliability and efficiency between 2009 and 2011. The timeline to complete the West County units in time for the 2009-2010 need required that the RFP for this segment be issued in 2005. Part Two will solicit alternatives to maintain FPL's reliability and improve its fuel diversity between 2012 and 2014. Due to the longer timeline required for developing solid fuel technologies, FPL chose to take the public step of identifying its intent to solicit proposals in 2006 in the RFP document issued in 2005. This action, along with the well published FPL position supporting fuel diversity in its TYSP, served as a clear signal to potential participants to prepare their solid fuel projects for submission in 2006.

38. The Bid Rule was used as the primary reference for the development and execution of the FPL RFP process. Where specific actions were required of the utility or participants, FPL ensured those actions were taken and the completion of the steps documented. Where the Bid Rule directed specific content be included in the RFP, such as the description of FPL's Next Planned Generating Unit, FPL ensured that the specified content was included in clear and concise terms. Equally important, the Bid Rule provides general guidance as to how the RFP process is to be organized and conducted. Throughout the entire process FPL ensured

that the RFP met the spirit and letter of the Bid Rule requirements.

39. As encouraged by the Bid Rule, FPL drafted its RFP to enable proposers to present a wide range of resource alternatives in a number of transactional formats. The RFP allows for purchased power sales from interconnected utility systems, purchased power sales from existing or new construction assets, outright facility sales (transfer of ownership) and Engineer, Procure, Construct (EPC) Turnkey offerings. The RFP solicitation resulted in five proposals from three bidders representing four distinct types of transactions. FPL was offered two purchased power sales from an interconnected utility system, a purchased power sale from an existing asset, a purchased power sale from a new construction asset, as well as the transfer of ownership of an existing asset. One of the five proposals, consisting of a purchased power sale from an interconnected utility system, was subsequently withdrawn by its bidder.

40. As mentioned above, FPL also included an Alternative Generating Unit located in Southeast Florida with which potential proposals could be combined in portfolios that satisfied the need for the 2009-2011 period. The FPL Alternative Generation Unit was a single 3x1 CC unit at West County Energy Center with a capacity delivery date of June 1, 2009. The inclusion of the Alternative Generation Unit was intended to aid bidders by (a) creating an option with which proposals smaller than FPL's entire need could be combined, and (b) providing a generating alternative that was located in Southeast Florida, thereby reducing the likely impact of transmission-related costs for portfolios that included proposals located outside Southeast Florida combined with the Alternative Generating Unit.

41. FPL took extensive measures, described in the Need Study, to ensure that proposals solicited by the RFP would be fairly evaluated in comparison with FPL's Next Planned

Generating Unit. In addition, as FPL has done in past solicitations, an independent evaluator, Sedway Consulting, was contracted to independently conduct an economic evaluation and review FPL's overall RFP evaluation process. Mr. Alan Taylor provides direct testimony to describe the results of Sedway Consulting's activities.

42. On August 18, 2005, in accordance with the Bid Rule, FPL issued a press release for trade publications and newspapers and published a Notice in the New York Times, the Wall Street Journal and the Miami Herald newspapers announcing its intent to issue an RFP. FPL's press release and notices also announced pre-RFP-issuance and pre-bid workshop meetings to be held in Miami that interested entities could attend in-person or by telephone. The press release and the notices published by FPL announcing these meetings and FPL's RFP are provided in Appendix H to the Need Study.

43. A website was established for the RFP where participants could register their interest in the RFP process and be retained on a listing to receive process communications and access to RFP documents. Through the course of the pre-publication period 31 individuals representing 20 companies or organizations registered in the process. Seventeen of those registrants indicated they had an interest in participating as a bidder in Part One or Part Two of the RFP, the remainder having peripheral interest in the process.

44. Consistent with its press release and published notices, FPL conducted a pre-issuance meeting in Miami on September 7, 2005. Fifteen individuals representing 10 organizations participated in the forum in person or by teleconference. Following RFP Publication, FPL conducted a Pre-Bid Workshop on September 14, 2005. Ten individuals,

representing 7 organizations participated in the workshop in person or by teleconference. Consistent with the Bid Rule, FPL invited not only the Commission Staff, but also the Office of Public Counsel to both the pre-RFP-issuance meeting and Pre-Bid Workshop.

45. Participants were provided an opportunity under the Bid Rule to raise objections if they felt that FPL's RFP did not comply with the Bid Rule. No objections were raised in the RFP process.

46. FPL continued to engage interested participants and observers throughout the period leading up to proposal submission. FPL published one Addendum on September 12, 2005, correcting a typographical error in a table located on page 41, Section III.C.6.a of the RFP. FPL also published two Notices. Notice #1 of October 13, 2005 discussed issues related to developing the Fuel Cost Forecast, and Notice #2 of November 4, 2005 provided the Fuel Cost Forecast that was used for the RFP economic evaluation. The RFP is included as Appendix D to the Need Study, and Addendum One and Notices #1 and #2 are included in Appendix H to the Need Study.

47. Additionally, FPL maintained an open line of communication with Participants, and fielded and answered questions as bidders developed their bids. Fifty-Nine Questions and Answers were published in three sections, as they were received, on September 30, October 13, and November 4, 2005. The Questions and Answers are provided as Appendix I to the Need Study.

48. As noted above, three bidders provided five proposals in response to FPL's RFP (with one of the proposals subsequently being withdrawn by its bidder). This level of response is consistent with the levels of response in FPL's most recent (2003) capacity solicitation. The four

remaining proposals were first evaluated on an individual basis using the EGEAS model and were then combined with FPL's Alternative Generating Unit to create three alternative portfolios of generation additions to meet FPL's needs in 2009 through 2011, and were then evaluated and compared to a portfolio based on FPL's NPGU. Although some proposals did not satisfy the RFP's minimum requirements, FPL evaluated all proposals. Where proposals did not meet the minimum requirements, FPL notified those bidders of the nature and extent of the non-compliance and encouraged them to make changes to bring the proposals into compliance. In the meantime, FPL clarified the price components of the proposals and initiated a full economic evaluation of all proposals, in the hope that the proposers might attain compliance.

49. As is described in more detail in the Need Study, FPL's extensive economic evaluation of these alternatives included generation system-related costs and transmission-related costs, as well as the impact of each portfolio on FPL's capital structure. In the economic evaluation of individual proposals, generation system costs were developed in the EGEAS model using the proposed pricing indicated in the proposal. Concurrently, the independent evaluator, Sedway Consulting, conducted a separate generation system cost analysis of the individual proposals using a different model, the Response Surface Model ("RSM"). The use of the RSM is explained in the Need Study and the Independent Evaluation Report, which is filed as Document No. AST-2 attached to the Direct Testimony of Alan S. Taylor.

50. Once the economic evaluation of the individual proposals was completed, the previously mentioned four portfolios were developed and analyzed by FPL using a Fixed Cost Spreadsheet model combined with its P-MArea production costing model. Sedway Consulting

also evaluated the portfolios using its RSM model. Transmission-related costs were individually developed for each portfolio. Similarly, each portfolio's impact on FPL's capital structure also was assessed using static capital structure assumptions for self-build options and making net equity adjustments (the equity adjustment less mitigating factors) for purchased power-based proposals as appropriate. An evaluation of upstream gas pipeline costs was also conducted.

51. The sum of each portfolio's generation system costs, transmission costs, impact on capital structure, and upstream gas pipeline costs represented the total system costs to FPL customers for each portfolio. The results from both FPL's and Sedway Consulting's analyses conclusively demonstrated that West County 1 and 2 offered the lowest generation system cost of all alternatives, with an advantage of $15 million CPVRR compared to the next most competitive portfolio (which portfolio also included West County 1 and 2). The results of the transmission-related costs analysis increased the separation between the total of all generation system and transmission-related costs for West County 1 and 2 and the total of all such costs for other portfolios to a $22 million CPVRR advantage for West County 1 and 2 compared to the next most competitive proposal. Finally, including the results of the net equity adjustment analysis further demonstrated the cost-effectiveness of West County 1 and 2. (There were no upstream gas pipeline costs for any portfolio.) In total, West County 1 and 2 offered a $24 million CPVRR advantage compared to the next most competitive proposal. The economic evaluation is discussed in more detail in the Need Study.

52. It is important to note that the next most competitive portfolio, compared with West County 1 and 2 alone, consisted of West County 1 and 2 coupled with a 50 MW system sale offered by one participant. The advantage of West County 1 and 2 compared with the next

most competitive portfolio consisting of generating units other than FPL's NPGUs (assuming all such proposals were ultimately considered eligible as complying with the RFP) was much greater. In comparison with the next most competitive portfolio of non-NPGU units, West County 1 and 2 had a $567 million CPVRR advantage considering generation system costs alone, a $641 million CPVRR advantage when generation system costs and transmission costs were considered, and an at least $758 million CPVRR advantage when generation system costs, transmission costs and impact on FPL's capital structure were considered.

53. Accordingly, FPL's final cost comparisons from its RFP evaluation demonstrated a clear and substantial separation in cost between West County Units 1 and 2 and all other alternatives. The total economic benefit of West County 1 and 2 compared to the next best alternative involving construction of anything other than both NPGU is at least $758 million CPVRR. Sedway Consulting's independent economic evaluations confirmed the significant cost difference between the portfolio consisting of West County 1 and West County 2, and the two competing portfolios that did not contain both West County 1 and West County 2. The other competing portfolio, that consisted of West County 1, West County 2, and the proposed 50 MW power purchase, was $24 million CPVRR more expensive than West County 1 and 2 alone due to the inclusion of the power purchase proposal.

54. There are a wide range of non-economic attributes associated with each proposal as well. These attributes taken together affected the risk profile of each proposal. To evaluate these attributes, FPL identified three major areas to be reviewed by subject matter experts. The areas covered environmental, technical/operational and project execution factors. Non-economic

considerations are discussed in more detail in the Need Study.

55. Through the process FPL adhered to the requirements of the Bid Rule. FPL concluded the evaluation phase of the analysis with the determination that construction of West County 1 and 2 is the best and most cost-effective alternative to satisfy FPL's 2009-2011 capacity need. The independent evaluation confirmed FPL's conclusion. FPL's senior management reviewed and approved West County 1 and 2 as the best and most cost-effective alternative.

VII. FPL's Analysis of Non-Generating Alternatives

56. Apart from considering all potentially viable supply-side alternatives, FPL also considered DSM alternatives. FPL employs comprehensive and cost-effective DSM programs to reduce peak load requirements and reduce energy consumption. 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.

57. Since the inception of FPL's DSM programs in 1978, FPL has achieved 3,519 MW of summer peak demand reduction at the generator. After accounting for line losses and reserve margin requirements, FPL's DSM efforts have cost-effectively eliminated the need to construct the equivalent of 10 new 400 MW nominal capacity power plants. FPL's current DSM Goals call for FPL to implement 802 MW of summer peak reduction at the meter during the 2005 through 2014 time frame.

58. The Commission approved FPL's current DSM Plan in 2004. In its DSM Plan,

FPL evaluated and proposed various DSM strategies which comply with the Florida Energy Efficiency and Conservation Act and Commission-approved tests of cost-effectiveness. FPL's DSM Goals call for FPL to implement 532 incremental MW of summer peak reduction at the meter during the 2005 through 2011 time frame. FPL assumed the successful accomplishment of these DSM Goals in determining its future capacity needs. Without this additional DSM, FPL's future capacity needs for 2009 – 2011 would have increased by over 600 MW (after accounting for line losses and reserve margin requirements) and capacity needs would have emerged a year earlier in 2008 as well.

59. FPL forecasts that it will achieve its DSM goals of 532 MW at the meter of DSM through 2011 (and, subsequently, the 2014 Goal of 802 MW at the meter) through a number of DSM programs. These programs are part of FPL's DSM Plan that was approved by the Commission in Consummating Order No. PSC-05-0323-CO-EG. FPL's current DSM Plan consists of six residential DSM programs, eight commercial/industrial DSM programs, one research program, and four research projects. A brief summary of each of these DSM programs and research projects appears in Appendix P of the Need Study.

60. FPL is actively implementing all of its DSM programs, and all were factored into FPL's reliability analyses. As shown in the accompanying Need Study, FPL's projected need for 2,371 MW of additional capacity in 2009 through 2011 accounts for the cost-effective DSM options presently available. There is, therefore, no reasonably available, cost-effective DSM option that could significantly mitigate the need to add the generation capacity provided by West County 1 and 2.

VIII. Adverse Consequences of Delay

61. As noted above and detailed in the Need Study, FPL needs West County 1 and 2 to maintain FPL system reliability through 2009 and 2010, respectively. Because of this, it is critical to meet the June 2009 and June 2010 in-service dates for the units. Without West County 1 and 2, FPL will be unable to maintain the reliability criterion of a 20 percent reserve margin for those years, and FPL's summer reserve margins for 2009, 2010 and 2011 would decrease to 15.5% in 2009, 11.7% in 2010 and 9.2% in 2011, respectively.

62. Any delay in licensing West County 1 and 2 may adversely affect FPL's and Peninsular Florida's electric system reliability and integrity in 2007. Any delay in these projects also will delay the benefits of the reliable, cost-effective and environmentally benign power that would be provided upon the project's timely completion.

63. A delay in the in-service date of West County 1 also will result in higher costs to FPL's customers. A seven month delay from the currently planned West County 1 start date of June 2009 to January 2010 would result in an increase of more than $14 million (Nominal) and a greater long term cost increase of approximately $52 million (NPV). The adverse consequences of delay are described in greater detail in the Need Study and supporting testimony.

VIII. Disputed issues of Material Fact

64. FPL is presently unaware of any disputed issues of material fact affecting this proceeding. As noted above, no party asserted that FPL's conduct of the RFP violated the Bid Rule. In any event, FPL will demonstrate that West County 1 and 2 are needed to maintain electric system reliability and integrity and to provide adequate electricity at reasonable cost.

Likewise, FPL will demonstrate that West County 1 and 2 are the most cost-effective option for providing the generation capacity needed to meet the needs of FPL's customers. FPL also will demonstrate that there is no reasonably available DSM or other non-generation alternative that would significantly mitigate the need for West County 1 and 2.

CONCLUSION

The proposed West County Energy Center Units 1 and 2 are a highly cost-effective and environmentally benign option for meeting FPL's capacity needs. The project presents several key advantages to FPL and its customers. Most importantly, this resource addition is critically needed to meet reliability needs in 2009-2011. The project increases electric system reliability and integrity throughout Peninsular Florida, addresses 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.

Based upon the foregoing and the more detailed information in the Need Study and pre-filed testimony submitted contemporaneously with this Petition, FPL requests that the Commission grant a favorable determination of need for West County Energy Center Units 1 and 2 within the time limitations set forth in Rule 25-22.080, F.A.C.

Respectfully submitted this 13th day of March, 2006.

R. Wade Litchfield, Esquire
Bryan Anderson, Esquire
Natalie F. Smith, Esquire
Attorneys for
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408-0420
By: _____
R. Wade Litchfield, Esquire