

Florida Power & Light Company, 215 S. Monroe St., Suite 810, Tallahassee, FL 32301

Jessica Cano Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 304-5226 (561) 691-7135 (Facsimile)

June 11, 2008



#### VIA HAND DELIVERY

Ms. Ann Cole 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. 080203-EI; In re: Florida Power & Light Company's Petition to Determine Need for West County Energy Center Unit 3 Electrical Power Plant

Dear Ms. Cole:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are an original and seven (7) copies of FPL's Notice of Intent to Request Confidential Classification for responses to certain interrogatories propounded by the Staff of the Florida Public Service Commission ("Staff"). The original includes Attachments 1 and 2. The seven (7) copies do not include attachments.

Attachment 1 contains the interrogatories propounded by Staff. Attachment 2 contains the confidential information provided in response to those interrogatories. Also included with this filing is a computer diskette containing FPL's Notice of Intent to Request Confidential Classification, without attachments, in word processing format.

Please contact me if you or your Staff has any questions regarding this filing.

Sincerely, Jupine the Oder me Jessica A. Cano

Enclosures

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This docketed notice of intent was filed with Confidential Document No. 0 S009-68 The document has been placed in confidential storage pending timely receipt of a request for confidentiality.

an FPL Group company

DOCUMENT NUMBER-DATE

FPSC-COMMISSION CLERK

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Florida Power & Light Company's Petition to Determine Need for West County Energy Center Unit 3 Electrical Power Plant Docket No. 080203-EI Filed: June 11, 2008

### FLORIDA POWER & LIGHT COMPANY'S NOTICE OF INTENT TO REQUEST CONFIDENTIAL CLASSIFICATION

Pursuant to Florida Administrative Code Rule 25-22.006(3)(a), Florida Power & Light Company ("FPL") files this Notice of Intent to Request Confidential Classification with respect to material provided to the Staff of the Florida Public Service Commission ("Staff") in response to its First Set of Interrogatories Nos. 41, 43 and 46, Third Set of Interrogatories No. 68, and Fourth Set of Interrogatories Nos. 74 and 83. A copy of those requests are attached hereto as Attachment 1. FPL, pursuant to Rule 25-22.006(3)(a) and (d), requests confidential handling of the material furnished in response to these Staff requests, which is enclosed in the attached envelope labeled "Attachment 2 – CONFIDENTIAL INFORMATION." This information is intended to be and has been treated by FPL as private and confidential and has not been publicly disclosed.

Respectfully submitted this 11th day of June, 2008.

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

Jessica A. Cano Florida Bar No. 0037372

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## **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing, without attachments, has been furnished electronically and by United States Mail this 11<sup>th</sup> day of June,

2008, to the following:

Martha C. Brown, Senior Attorney Florida Public Service Commission Office of General Counsel 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

Jessica A. Cano Florida Bar No. 0037372

# ATTACHMENT 1

0000MENT NUMBER DATE 05008 JUNITS FPSC-COMMISSION CLERK

### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for West DOCKET NO. 080203-EI County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company. DATED: APRIL 23, 2008

### <u>STAFF'S FIRST SET OF INTERROGATORIES</u> TO FLORIDA POWER & LIGHT COMPANY (NOS. 1 - 54)

The Staff of the Florida Public Service Commission, by and through its undersigned attorney, propounds the following interrogatories, pursuant to Rule 1.340, Florida Rules of Civil Procedure, to Florida Power & Light Company (FPL). These interrogatories shall be answered under oath by you or your agent, who is qualified and who will be identified, with the answers being served as provided by the Rules of Civil Procedure, and within twenty days. As provided by Rule 1.340(a), Florida Rules of Civil Procedure, each interrogatory shall be answered separately and fully in writing under oath unless it is objected to. Each answer shall be signed by the person making it.

Give the name, address, and relationship to FPL of those persons providing the answers to each of the following interrogatories.

If an interrogatory contained herein asks for information that has already been provided or is in the process of being provided to the Commission through a Commission audit, please so state, indicating the date provided and the audit document/record request number.

#### **DEFINITIONS**

"You", "your", "Company" or "FPL" refers to Florida Power & Light Company, its employees and authorized agents.

"Document" refers to written matter of any kind, regardless of its form, and to information recorded on any storage medium, whether in electrical, optical or electromagnetic form, and capable of reduction to writing by the use of computer hardware and software.

"Identify" means:

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- (a) With respect to a person, to state the person's name, address and business relationship (e.g., "employee") to the Company;
- (b) With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

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### INTERROGATORIES

- 1. For the years 2008 through 2017, Please provide the annual availability and capacity factors for each of FPL's generating units under the following scenarios:
  - a) Resource plan #1 shown in Exhibit SRS-9
  - b) Resource plan #7 shown in Exhibit SRS-9
  - c) Resource plan #8 shown in Exhibit SRS-9

2. Please provide the same information requested in the interrogatory above, except substitute the proposed re-powerings of FPL's existing units in place of the new generating units after the in-service date of WCEC #3

3. On page 3, lines 8-16 of Witness Silva's testimony, he states that the need for WCEC #3 is the first step in meeting the company's needs for the period 2011-2017. Does this statement mean that FPL is requesting the Commission to determine the need for a generation expansion plan to satisfy a need for a block of time (2011-2017) or a reliability need in the year 2011?

4. On pages 6-7 of witness Silva's testimony, he lists 6 categories of benefits to FPL's ratepayers as a result of adding WCEC #3 in June 2011. Of the 6 categories, which ones would FPL consider provide a reliability benefit and which ones provide an economic benefit?

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5. On page 6, lines 10-16 of witness Silva's testimony, he states that adding WCEC #3 in 2011 would reduce air emissions by certain amounts. Please provide a detailed explanation as to how these values were calculated. Provide all pertinent assumptions.

6. On page 6, lines 18-23 and page 7, lines 1-3 of witness Silva's testimony, he provides estimates of an improved system heat rate and resulting fuel requirement reductions. Please provide a detailed explanation of how these values were calculated. Provide all pertinent assumptions.

7. On page 7, lines 8-11 of witness Silva's testimony, he states that the costs for equipment, materials and labor for the addition of WCEC #3 in 2011 are significantly lower than they would be for a later addition of WCEC #3 or elsewhere. Please provide the information in the table below.

	Estimated costs of construction (\$/kw, 2007 dollars)		
	WCEC# 3 in 2011	WCEC# 3 in 2012	WCEC# 3 in 2013
Equipment			
Materials			
Labor			

8) If WCEC#3 is constructed by 2011, is the construction price for WCEC #3 firm? If not, when would the total construction price be known?

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9. Did the environmental benefits claimed in Docket No. 070650-EI (Turkey Point 6&7 need docket) contemplate the re-powering of some of FPL's existing units? If not, how would the inclusion of re-powering some existing units impact the estimated emission reductions contained in Docket No 070650-EI?

10. On pages 7 and 8 of witness Silva's testimony, he discusses the option of re-powering some of FPL's existing generating units to combined cycle generation. Please identify which units FPL would consider as candidates for re-powering including the MW before and after re-powering. Also, please provide a critical path timeline showing the units involved, when permitting would begin, actual construction times, and estimated inservice dates.

11. Please provide an estimated in-service cost for the repowered units, both on total dollar

basis and \$/incremental KW.

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12. What is the current book value of the generating units being considered for re-powering?

13. On page 8, lines 18-21 of witness Silva's testimony, he discusses the imbalance of generation and load in Southeast Florida. Please provide the actual and projected load vs. generation in Southeast Florida for the years 2000 through 2020.

14. Please provide the annual and cumulative present value revenue requirements for each generation plan shown on exhibit SRS-3 and SRS-10. Please provide the capital, fuel, transmission, and O&M values separately.

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15. Please explain why the analysis period for the plans shown in SRS-3 was 2007-2040 and

the analysis period for SRS-10 was 2008-2038?

16. Did any of the respondents to FPL's RFP express a desire to provide capacity with an inservice date later than 2011?

17. Since the benefits of adding WCEC #3 in 2011 are based on displacing energy from older, more inefficient generating units, please explain in detail why increased energy conservation could not achieve the same result? Please estimate how much energy each residential customer would have to conserve per month in order to equal the energy displacement benefits of WCEC #3 for the years 2011 and 2012.

18. On page 23, lines 4-6 of witness Sim's testimony, he states that the benefit of adding WCEC #3 in 2011 vs. 2012 is \$148 million. On Exhibit SRS-11, the net benefits of adding WCEC #3 in 2011 vs. 2012 are estimated to be \$137 million. Please explain in detail the difference between the two values?

19. For the years 2009 through 2017, please provide the annual total capacity values, total peak demand, DSM, firm peak demand, and resulting reserve margins for each generation expansion plan shown in exhibit SRS-9. This information should be provided for both summer and winter seasons.

20. For the years 2009 through 2017, please provide the annual total capacity values, total peak demand, DSM, firm peak demand, and resulting reserve margins for a generation expansion plan that includes WCEC #3 coming on line in 2011 followed by FPL's potential re-powering projects. This information should be provided for both summer and winter seasons.

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21. Please provide the annual and cumulative revenue requirements for a generation expansion plan that includes a 3x1 G CC unit at WCEC in 2011 along with the proposed re-powerings of FPL's existing units in place of the new generating units after the inservice date of WCEC #3. Please provide the capital, fuel, transmission, and O&M values separately.

22. Have any contractual commitments been made by FPL regarding the re-powering projects?

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23. Resource plan #8 shown in Exhibit SRS-9 shows a 3x1 G CC in 2013. Is this unit assumed to be built at the WCEC? If not, please provide the annual and cumulative revenue requirements for a generation expansion plan that includes a 3x1 G CC unit at WCEC in 2013 along with the remaining units depicted in SRS-9, plan #8. Please provide the capital, fuel, transmission, and O&M values separately.

24. Please provide the annual estimated average residential rate impact, in c/kwh and \$/1,200 kwh, for each of the expansion plans contained in interrogatories # 14, 21, and 23. This should be done for the period of 2008 through 2020.

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25. Please provide a detailed explanation as to how the columns labeled "Peak Hour Capacity Losses" and "Annual Energy Losses" on Exhibit SRS-11 were calculated for each plan listed.

26. Please provide a detailed explanation as to why the transmission related costs shown on SRS-11 changed for resource plans 7 and 8 compared to resource plan 1?

27. On page 27, lines 12-14 of witness Silva's testimony, he states that the preliminary results of the re-powering analysis indicate a net benefit of approximately \$200 million compared to not converting these units. Has FPL explored the possibility of a short term purchase to allow for the re-powering of some existing units? If so, what were the results of such an analysis? If not, please explain in detail why FPL has not considered such an option?

28. Please describe the technical, cost, and performance differences between the "F" series combustion turbines and the "G" series combustion turbines mentioned in witness Gnecco's testimony.

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29. Please explain the difference between the net rating of 1,115 MW shown on page 12 of witness Gnecco's testimony and the rating of 1,219 MW shown on exhibit JCG-6?

30. On page 12, lines 9-21 of witness Gnecco's testimony, he describes the effects of inlet air evaporative coolers. Please identify each FPL plant that uses such technology and provide the date such technology was installed, the capital cost, and the annual operating cost. Also please include the net output increase, in MW, and heat rate improvement, in BTU/kwh, associated with adding this technology to each unit.

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31. Please describe what other FPL generating units would be capable of installing inlet air evaporative coolers? Has FPL performed an analysis to determine the improvements in net output and heat rate that could be obtained by installing this technology on such units? If so, please provide the results of the analysis.

32. On page 18, lines 8-9 of witness Gnecco's testimony, he states that the construction of WCEC #3 in 2011 would provide for greater assurance of water availability for the project. Please provide a detailed explanation of this statement.

33. For each operational combined cycle power plant listed in Exhibit JCG-2, please provide the manufacturer, type, and size of combustion turbine units used, historic annual equivalent availability, capacity factor, and average heat rate for the life of each unit.

34. For each projected combined cycle power plant listed in Exhibit JCG-2, please provide the manufacturer, type, and size of combustion turbine units used, projected annual equivalent availability, capacity factor, and average heat rate for the first ten years of operation.

35. Please refer to Exhibit JCG-8 which shows the construction schedule for WCEC #3. Please explain why FPL will initiate a sequence of combustion turbine orders for 4 combustion turbines and 4 HRSGs when WCEC #3 is planned to be a 3x1 CC?

36. Does exhibit JCG-8 indicate that the limited notice to proceed dates are the various dates that FPL would make a financial commitment to purchase combustion turbines, HRSG, and a steam turbine for the WCEC #3 unit?

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37. Please prepare an exhibit similar to JCG-9 that includes WCEC #1 & 2 shown separately. Dollars should be expressed in in-service year costs.

38. Please provide a generation expansion plan based on a 15% reserve margin planning standard. The plan should indicate the total available capacity, total peak demand, DSM mw, Firm peak demand, and % reserve margin. Include all previously certified plant additions. Also provide a table describing the generation additions by type, timing, and size. The time frame for the plan should be for the period 2007 through 2030.

39. For the generation expansion plan produced in interrogatory #38, please provide the annual and cumulative present value revenue requirements for the years 2007 through 2030. Also provide an estimate of the average annual residential rate impact.

- 40. Pages 79 and 80 of Exhibit SRS-7 contains a description of FPL's activities relating to wind and solar projects. Specifically, FPL expects to start construction of a 13.8 MW wind project in St Lucie county during 2008 with completion in 2009.
  - a) Has FPL begun construction of this project? If not, when does FPL expect construction will start and what will be the in-service date of the facility?
  - b) What is the projected annual energy production from this facility and has the projected energy production from this facility been included in FPL's need filing in this Docket?
  - c) What are the annual and cumulative revenue requirements associated with this project?

- 41. Pages 79 and 80 of Exhibit SRS-7 contains a description of FPL's activities relating to wind and solar projects. Specifically, FPL expects to install up to 350 MW of solar capacity by 2012. FPL expects to start construction on three solar projects totaling 80 MW during 2008 with completion by 2009/2010.
  - a) Has FPL begun construction of these projects? If not, when does FPL expect construction will start and what will be the in-service date of each facility?
  - b) What is the projected annual energy production from these facilities and has the projected energy production from these facilities been included in FPL's need filing in this Docket?
  - c) What are the annual and cumulative revenue requirements associated with each solar project described in exhibit \$RS-7?

42. Please list any purchased power contracts that will expire before the installation date of West County 3. Please list whom the contract is with, expiration date of the contract, amount of capacity lost and whether FPL has considered renewing the contract.

43. Please list any future purchased power agreements that FPL has under consideration.Please list the entity with which you are negotiating and the amount of capacity being discussed.

44. Please provide a list showing the number of FPL customers currently participating in its

DSM programs. In addition, please show the percentage participation per program.

45. Please provide a table which reflects FPL's DSM savings during the 2008-2015 periods. The table should show the projected annual summer and winter MW savings as well as the projected annual GWH savings.

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46. Please provide any information on FPL's current and planned solar projects. Include the description, MW size, kWh output, installation dates, and square footage required for each project. Also, please provide the costs (capital, operating and maintenance) of such projects.

47. On Page 6 of his testimony, Witness Sim states that prior to starting the Economic and Non-Economic Evaluations of the next planned generating unit and the RFP proposals, FPL developed a new load forecast. Please explain the new load forecast and its basis.

48. Please discuss and explain what unacceptable level of risks exist as discussed by witnessSim on page 7, line 12-13 of his testimony.

49. Witness Stubblefield's testimony states on page 4, lines 5-7, that a reduction in natural gas and heavy oil consumption is projected to provide fuel savings benefits of \$273 million. Over what period of time should customers expect to see these benefits?

50. Has FPL discussed the proposed West County Energy Center unit 3 project with credit

rating agencies? If yes, please explain and/or describe these discussions.

51. Has FPL discussed the proposed West County Energy Center unit 3 project with investment banking firms? If yes, please explain and/or describe these discussions.

52. Please define the weighted average cost of capital the Company proposes to use for purposes of this project. For purposes of this response, identify the capital structure components, amounts, relative percentages, cost rates, and the weighted average cost of capital on a pretax and after tax basis.

53. Please provide the rationale for the assumed capital structure for this analysis.

54. How does FPL propose it will finance the construction of the West County Energy Center unit 3 project? For purposes of this response, please provide the debt and equity financing plan for the period 2009 – 2011 necessary to complete the West County Energy Center unit 3 project.

MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6287

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### AFFIDAVIT

#### STATE OF FLORIDA)

COUNTY OF \_\_\_\_\_)

I hereby certify that on this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2008, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared \_\_\_\_\_\_\_, who is personally known to me, and he/she acknowledged before me that he/she provided the answers to interrogatory number(s) \_\_\_\_\_\_ from STAFF'S FIRST SET OF INTERROGATORIES (NOS. 1 - 54) in Docket No. 080203-EI, and that the responses are true and correct based on his/her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this \_\_\_\_\_\_ day of \_\_\_\_\_, 2008.

Notary Public State of Florida, at Large

My Commission Expires:

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for Levy Units 1 and 2 nuclear power plants, by Progress Energy Florida, Inc. DATED: APRIL 23, 2008

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original and one correct copy of STAFF'S FIRST SET OF INTERROGATORIES (NOS. 1 - 54) has been served by electronic and U. S. mail to Bryan S. Anderson, Florida Power & Light Company, 700 Universe Blvd., Juno Beach, FL 33408-0420, and that a true copy thereof has been furnished to the following by electronic and U. S. mail this 23rd day of April, 2008:

R. Wade Litchfield & Jeffrey S. Bartel
Florida Power & Light Company
215 South Monroe Street, Suite 810
Tallahassee, FL 32301-1859

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MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6187

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Petition to determine need for West DOCKET NO. 080203-EI County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company. DATED: MAY 1, 2008

#### STAFF'S THIRD SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 61 - 71)

The Staff of the Florida Public Service Commission, by and through its undersigned attorney, propounds the following interrogatories, pursuant to Rule 1.340, Florida Rules of Civil Procedure, to Florida Power & Light Company (FPL). These interrogatories shall be answered under oath by you or your agent, who is qualified and who will be identified, with the answers being served as provided by the Rules of Civil Procedure, and within twenty days. As provided by Rule 1.340(a), Florida Rules of Civil Procedure, each interrogatory shall be answered separately and fully in writing under oath unless it is objected to. Each answer shall be signed by the person making it.

Give the name, address, and relationship to FPL of those persons providing the answers to each of the following interrogatories.

If an interrogatory contained herein asks for information that has already been provided or is in the process of being provided to the Commission through a Commission audit, please so state, indicating the date provided and the audit document/record request number.

#### **DEFINITIONS**

"You", "your", "Company" or "FPL" refers to Florida Power & Light Company, its employees and authorized agents.

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"Identify" means:

- (a) With respect to a person, to state the person's name, address and business relationship (e.g., "employee") to the Company;
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#### **INTERROGATORIES**

- 61. Please refer to the fuel price forecasts (Exhibit HCS-1).
  - A. To what other published contemporary fuel price forecasts did FPL compare its fuel price forecasts?
  - B. Did FPL review or test these fuel price forecasts for reasonableness? Please explain.
  - C. (1) How does the natural gas price forecast for WCEC#3 compare to the natural gas price forecast in FPL's 10 year site plan? As part of the answer to this question, please show the 10 price points from the current 10 year site plan (2008 through 2017) compared to the yearly averages for the same period from the WCEC#3 gas price forecast.
    - (2) Explain any differences between these forecasts.
  - D. How did FPL forecast gas prices beyond 2020?
  - E. For fuel price escalations beyond 2020, what is the date of the EIA forecast used to determine real price changes?

- 62. Please refer to page 5 of the testimony of FPL witness Heather Stubblefield, lines 8 through 11.
  - A. How were the transportation costs forecasts for fuel oil and natural gas developed?
  - B. Did FPL test the fuel oil and natural gas transportation costs forecasts for reasonableness? Please explain.

63. See page 9, lines 4 through 7, of the testimony of FPL witness Heather Stubblefield. Please explain how FPL determined that FGT's proposed infrastructure expansion was more cost-effective than the Gulfstream proposal.

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- 64. Please refer to page 8, lines 19 through 21, of the testimony of FPL witness Heather Stubblefield.
  - A. What percentage of FGT's Phase 8 expansion is FPL acquiring as firm transportation?
  - B. Does FPL foresee using non-firm gas transportation to supply WCEC#3? Please explain.

65. Did FPL evaluate the cost-effectiveness of on-site storage of light fuel oil for WCEC#3?Please explain.

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- 66. In the Direct Testimony and Exhibits of witness Sim, FPL's Resource Plan A Line 22 indicates that several 3x1 G CC units, a 2x1 G CC unit and 36 2x1 F CC filler units will be added to FPL's system in future years.
  - A. Describe the main differences between these three generating unit choices: 3x1 G
     CC, 2x1 G CC and 2x1 F CC.
  - B. Please provide the emission rates (tons/year or ounces/year) for each kind of unit for the current, and potential, regulated air emission pollutants SO2, NOx, CO2 and Hg.
  - C. Please specify the amount of cooling and other related water consumption, if any, required by each kind of unit.

67. Please identify whether the construction and operation of the proposed WCEC 3 unit will require, now or in the near future, capital cost, and O&M costs for any auxiliary system/ equipment/ technology/ project for complying with environmental laws or regulations.

68. Please respond to the following questions regarding the water usage of WCEC unit 3:

- A. What is the amount of water (gal/day) that will be required for operation?
- B. What will be the resource for the water required?
- C. How reliable is the water resource identified?
- D. What will be the water supply system?
- E. Will any construction project be required for the water supply system?
- F. If the answer to question 68E is yes, what will be the pertinent capital costs and where are the cost estimates included in FPL's filing?
- E. What will be the O&M costs for the water supply system and where are the cost estimates included in FPL's filing?

- 69. Regarding the statement "converting generating units at two existing plants in 2013 and 2014" (page 2 of the Petition for WCEC 3 Unit), please specify the environmental benefits that would result from these conversions. For each of the units to be converted, please identify the following:
  - A. The pollutants' emission rates before and after the conversion;
  - B. The environmental compliance costs before and after the conversion;
  - C. The water consumption before and after the conversion.

- 70. On page 5 of the Petition, FPL estimated that by adding WCEC 3 the cumulative system emissions to be reduced will be: 2.2 million tons of CO2, 6,500 tons of sulfur, and 10,750 tons of nitrogen oxide, through 2013 alone.
  - A. Are these emission reductions due to the convertion of existing units?
  - B. If the answer is "yes", please provide the annual emissions of SO2, NOx, CO2 and Hg respectively for the proposed WCECC unit 3, each of the to-be-converted units before convertion, and each of the to-be-converted units after conversion.
  - C. If the answer is "no", please explain how the addition of WCEC 3 can result in the reduction of emissions.

- 71. Please provide the following information:
  - A. Emission price forecasts (ton/year for SO2, NOx and CO2, ounce/year for Hg);
  - B. FPL's total system emissions forecasts by year for SO2, NOX, CO2 and Hg with and without WCEC 3 unit;
  - C. FPL's total system emission costs by year with and without WCEC 3 unit.

Hea C. Brown

MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6287

#### AFFIDAVIT

#### STATE OF FLORIDA)

# COUNTY OF \_\_\_\_\_)

I hereby certify that on this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2008, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared \_\_\_\_\_\_\_, who is personally known to me, and he/she acknowledged before me that he/she provided the answers to interrogatory number(s) \_\_\_\_\_\_ from STAFF'S THIRD SET OF INTERROGATORIES (NOS. 61 - 71) in Docket No. 080203-EI, and that the responses are true and correct based on his/her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2008.

Notary Public State of Florida, at Large

My Commission Expires:

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Petition to determine need for West DOCKET NO. 080203-EI County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company. DATED: MAY 1, 2008

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original and one correct copy of STAFF'S THIRD SET OF INTERROGATORIES (NOS. 61 - 71) has been served by electronic and U. S. mail to Bryan S. Anderson, Florida Power & Light Company, 700 Universe Blvd., Juno Beach, FL 33408-0420, and that a true copy thereof has been furnished to the following by electronic and U. S. mail this 1st day of May, 2008:

R. Wade Litchfield & Jeffrey S. BartelFlorida Power & Light Company215 South Monroe Street, Suite 810Tallahassee, FL 32301-1859

Nortea C. Brown

MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6187

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for West DOCKET NO. 080203-EI County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company. DATED: MAY 7, 2008

#### STAFF'S FOURTH SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 72 - 91)

The Staff of the Florida Public Service Commission, by and through its undersigned attorney, propounds the following interrogatories, pursuant to Rule 1.340, Florida Rules of Civil Procedure, to Florida Power & Light Company (FPL). These interrogatories shall be answered under oath by you or your agent, who is qualified and who will be identified, with the answers being served as provided by the Rules of Civil Procedure, and **within twenty days**. As provided by Rule 1.340(a), Florida Rules of Civil Procedure, each interrogatory shall be answered separately and fully in writing under oath unless it is objected to. Each answer shall be signed by the person making it.

Give the name, address, and relationship to FPL of those persons providing the answers to each of the following interrogatories.

If an interrogatory contained herein asks for information that has already been provided or is in the process of being provided to the Commission through a Commission audit, please so state, indicating the date provided and the audit document/record request number.

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- (a) With respect to a person, to state the person's name, address and business relationship (e.g., "employee") to the Company;
- (b) With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

#### **INTERROGATORIES**

72. Has FPL evaluated the cost-effectiveness of including residential solar water heating as a measure with the "On Call" residential load management program? If not, explain why not.

73. Provide a cost-effectiveness analysis pursuant to Rule 25-17.008, F.A.C., of a combined residential solar water heating and "On Call" residential load management program? Provide a detailed explanation of assumed demand and energy savings, incentives, utility and customer equipment costs, customer maintenance costs, lost revenues and avoided costs.

74. Provide detailed information on the solar thermal and/or photovoltaic facilities FPL is evaluating, including technology type, location, in-service date, summer and winter capacity, estimated capacity factor, acreage required for each project, installed cost, operating and maintenance costs. In this evaluation, is FPL evaluating customer-sited solar thermal and/or photovoltaic installations?

75. Does FPL assume the solar thermal and/or photovoltaic facilities that are being evaluated will be a firm resource? If not, explain why?

76. Provide a list of the responses to the 2007 renewable energy-only RFP including project title, technology, in-service date, capacity and location. Explain the status of the responses including whether any of the responses resulted in a contract for the purchase of energy and/or capacity?

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77. What is the status and schedule of the April 2008 renewable energy-only RFP?

78. Explain why contracts for energy and capacity from renewable generators that are scheduled to expire during the current planning period are assumed to be extended?

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79. Explain why contracts for energy and capacity from non-renewable generators that are scheduled to expire during the current planning period are not assumed to be extended?

80. Provide a list of purchases that make up the 269 MW of firm capacity from renewable facilities that will be added to FPL's system in the 2008-2017 planning period? Include facility name, location, technology type, contract start date, contract end date, and summer and winter capacity by year?

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81. Provide a list of existing and planned renewable as-available resources, including facility name, location, technology type, contract start date, contract end date, and energy delivered in 2007 in megawatt-hours?

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82. Has FPL done an assessment of what additional renewable generation is physically available? If so, what were the results?

83. Please provide any information on FPL's current and planned wind projects, including the project description, MW size, kWh output, installation dates and square footage required for each project. Also, please provide the costs (capital, operating and maintenance of such projects).

84. Please provide a levelized cost (in \$/kWh) for various capacity factors comparing West County 3 with a natural gas combined cycle unit, an IGCC unit, a single wind unit, and a roof top PV unit. Please show levelized capital costs and O&M/fuel costs separately. Please provide the raw data and a chart depicting this information.

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85. How many FPL customers are participating in each FPL DSM program?

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86. Please provide the number of DSM audits performed in 2007. What percentage of

eligible customers have utilized FPL's DSM audits over the past five years?

87. Please describe any DSM programs offered by FPL that specifically provide consumer education.

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88. Does FPL have any plans to expand the consumer education efforts of its DSM plan?

89. Explain how FPL evaluates and verifies the demand and energy savings of the measures associated with its DSM programs? What is the frequency of these evaluation and verification efforts? Provide the annual budget for the evaluation and verification efforts?

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90. Describe FPL's DSM research and development activities. Identify the measures that have been assessed but were not developed into a DSM program or included as part of an existing DSM program. Explain why these measures were not developed into a DSM program or included as part of an existing DSM program.

91. Please discuss any action FPL has taken toward encouraging greater customer participation in DSM programs.

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MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6287

#### AFFIDAVIT

# STATE OF FLORIDA)

COUNTY OF \_\_\_\_\_)

I hereby certify that on this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2008, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared \_\_\_\_\_\_, who is personally known to me, and he/she acknowledged before me that he/she provided the answers to interrogatory number(s) \_\_\_\_\_\_ from STAFF'S FOURTH SET OF INTERROGATORIES (NOS. 72 - 91) in Docket No. 080203-EI, and that the responses are true and correct based on his/her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this \_\_\_\_\_\_ day of \_\_\_\_\_, 2008.

Notary Public State of Florida, at Large

My Commission Expires:

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for West DOCKET NO. 080203-EI County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company. DATED: MAY 7, 2008

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original and one correct copy of STAFF'S FOURTH SET OF INTERROGATORIES (NOS. 72 - 91) has been served by electronic and U. S. mail to Bryan S. Anderson, Florida Power & Light Company, 700 Universe Blvd., Juno Beach, FL 33408-0420, and that a true copy thereof has been furnished to the following by electronic and U. S. mail this 7th day of May, 2008:

R. Wade Litchfield & Jeffrey S. BartelFlorida Power & Light Company215 South Monroe Street, Suite 810Tallahassee, FL 32301-1859

SUM

MARTHA C. BROWN Senior Attorney FLORIDA PUBLIC SERVICE COMMISSION 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 (850) 413-6187 COMMISSIONERS: MATTHEW M. CARTER II, CHAIRMAN LISA POLAK EDGAR KATRINA J. MCMURRIAN NANCY ARGENZIANO NATHAN A. SKOP



OFFICE OF COMMISSION CLERK ANN COLE COMMISSION CLERK (850) 413-6770

# Hublic Service Commission

# ACKNOWLEDGEMENT

**DATE:** June 12, 2008

TO: Jessica A. Cano, Esquire/FPL

FROM: Marguerite H. McLean, Office of Commission Clerk

RE: Acknowledgement of Receipt of Confidential Filing

This will acknowledge receipt of a CONFIDENTIAL DOCUMENT filed in Docket Number <u>080203-EI [DN 05009-08]</u> or, if filed in an undocketed matter, concerning response to staff's 1st set of interrogatories (Nos. 41, 43, and 46); 3rd set of interrogatories (No. 68); and 4th set of interrogatories (Nos. 74 and 83)., and filed on behalf of <u>Florida</u> <u>Power & Light Company</u>. The document will be maintained in locked storage.

If you have any questions regarding this document, please contact Marguerite McLean, Deputy Clerk, at (850) 413-6770.