BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090009-EI
FLORIDA POWER & LIGHT COMPANY

MAY 1, 2009

IN RE: NUCLEAR POWER PLANT COST RECOVERY
FOR THE YEARS ENDING
DECEMBER 2009 AND 2010

TESTIMONY & EXHIBITS OF:

STEVEN R. SIM

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF STEVEN R. SIM

DOCKET NO. 090009 - EI

May 1, 2009

Q. Please state your name and business address.

A. My name is Steven R. Sim, and my business address is 9250 West Flagler Street, Miami, Florida 33174.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL) as Senior Manager of Integrated Resource Planning in the Resource Assessment & Planning department.

Q. Please describe your duties and responsibilities in that position.

A. I supervise and coordinate analyses that are designed to determine the magnitude and timing of FPL's resource needs and then develop the integrated resource plan with which FPL will meet those resource needs.

Q. Please describe your education and professional experience.

A. I graduated from the University of Miami (Florida) with a Bachelor's degree in Mathematics in 1973. I subsequently earned a Master's degree in Mathematics from the University of Miami (Florida) in 1975 and a Doctorate in Environmental Science and Engineering from the University of California at Los Angeles (UCLA) in 1979.

While completing my degree program at UCLA, I was also employed full-time as a Research Associate at the Florida Solar Energy Center during 1977 - 1979. My responsibilities at the Florida Solar Energy Center included an evaluation of Florida consumers' experiences with solar water heaters and an analysis of potential renewable resources including photovoltaics, biomass, wind power, etc., applicable in the Southeastern United States.

In 1979 I joined FPL. From 1979 until 1991 I worked in various departments including Marketing, Energy Management Research, and Load Management, where my responsibilities concerned the development, monitoring, and cost-effectiveness of demand side management (DSM) programs. In 1991 I joined my current department, then named the System Planning Department, where I held different supervisory positions dealing with integrated resource planning. In late 2007 I assumed my present position.

Q. Are you sponsoring any exhibits in this case?

A. Yes, I am sponsoring the following five exhibits:

- Exhibit SRS – 1: Comparison of Key Assumptions Utilized in the 2008 and 2009 Economic Analyses of FPL Nuclear Projects;
- Exhibit SRS – 2: The Two Resource Plans Utilized in the 2009 Feasibility Analyses of the Nuclear Uprates;
- Exhibit SRS – 3: 2009 Feasibility Analyses Results for the Nuclear Uprates: Total Costs and Total Cost Differentials for All Fuel and Environmental Compliance Cost Scenarios in 2009$;

- Exhibit SRS – 4: The Two Resource Plans Utilized in the 2009 Feasibility Analyses of Turkey Point 6 & 7; and,
- Exhibit SRS – 5: 2009 Feasibility Analyses Results for Turkey Point 6 & 7: Total Costs, Total Cost Differentials, and Breakeven Costs for All Fuel and Environmental Compliance Cost Scenarios in 2009$, and Breakeven Costs in 2007$.

Q. What is the purpose of your testimony?

A. My testimony provides the results of the 2009 economic analyses for both the uprates of FPL's existing nuclear units and the new FPL nuclear units, Turkey Point 6 & 7. In my testimony I will refer to these analyses as the 2009 feasibility analyses for both projects. The 2009 feasibility analyses are presented to satisfy the requirement of Subsection 5(c)5 of the Florida Administrative Code Rule 25-6.0423, Nuclear Power Plant Cost Recovery which states "By May 1 of each year, along with the filings required by this paragraph, a utility shall submit for Commission review and approval a detailed analysis of the long-term feasibility of completing the power plant."

Q. What is the scope of your testimony?

A. My testimony addresses three main points:

(1) I briefly discuss the analytical approach used in the 2009 feasibility analyses provided in this filing compared to prior economic analyses of these projects. I also identify certain key assumptions used in the 2009 feasibility analyses and compare them to the assumptions used in

the 2008 analyses. The likely effects that these changes in assumptions had on the 2009 feasibility analyses results are also discussed.

(2) I provide the results of the 2009 feasibility analyses of the nuclear uprates.

(3) I provide the results of the 2009 feasibility analyses of Turkey Point 6 & 7.

2009 FEASIBILITY ANALYSES - APPROACH & ASSUMPTIONS

Q. Were the analytical approaches used in the 2009 feasibility analyses of the nuclear uprates and Turkey Point 6 & 7 similar to those used in the Determination of Need filings for these projects and in the 2008 feasibility analyses of these projects?

A. Yes. The analytical approaches that were used in the 2009 feasibility analyses for each project were virtually identical to the approaches used in the 2007 Determination of Need filings and the 2008 feasibility analyses.

In regard to the nuclear uprates project, FPL believes that the analytical approach used currently, and that was used in both the 2007 Determination of Need filing and the 2008 feasibility analyses; i.e., the direct comparison of resource plans with and without the nuclear uprates, is the appropriate approach for analyzing this project.

In regard to the Turkey Point 6 & 7 project, FPL believes that the analytical approach used currently, and that was used in both the 2007 Determination of Need filing and the 2008 feasibility analyses, i.e., the calculation of breakeven overnight capital costs for the new nuclear units, remains the appropriate approach to use at this time. In later years, as more information becomes available regarding the cost and other aspects of the new nuclear units, another analytical approach may emerge as more appropriate.

Q. Have the assumptions in the 2009 feasibility analyses changed from the assumptions that were used in the 2008 feasibility analyses?

A. Yes. As one would expect with economic analyses performed in different years, a number of assumptions have changed.

Exhibit SRS - 1 provides an overview of certain assumptions used in FPL's 2008 and 2009 feasibility analyses that allows one to see how the assumptions used in the 2009 analyses have changed from the assumptions used in the 2008 analyses. This exhibit provides a look at five forecasts that are key assumptions: (1) forecasted Summer peak load, (2) forecasted natural gas costs, (3) forecasted oil costs, (4) forecasted uranium costs, and (5) forecasted environmental compliance costs for carbon dioxide (CO_2). Exhibit SRS – 1 provides the forecasted values for each of these assumptions for selected years starting with 2010 and every five years thereafter through 2040.

In addition, Exhibit SRS - 1 provides 2008 and 2009 values for four additional inputs to the analyses: the amount of additional capacity (MW) that will serve FPL's customers from the nuclear uprates project; the projected cost of a Greenfield 3x1 G combined cycle (CC) unit assumed to be in-service in 2018 ($/kw); the projected cost of firm gas transportation for a new CC unit in 2018 ($/mmBTU), and the projected average annual planned outage days for FPL's existing nuclear units for 2009 through 2012.

The intent of Exhibit SRS – 1 is to show how these assumptions have changed from those used in the 2008 analyses and to provide some insight into what effects these changes have had on the results of the 2009 feasibility analyses.

Q. Would you please briefly discuss the five forecasts presented in Exhibit SRS – 1, including the likely impact that changes in these values would likely have in relation to the 2009 feasibility analyses?

A. Yes. I'll discuss these forecast values and their likely impact by first comparing the changes in the 2009 assumptions from the 2008 assumptions. Then I'll discuss the directional effect that these changes would likely have (i.e., whether additional nuclear capacity should be more economic or less economic due to the assumption changes). Unless otherwise stated, the directional effect should be the same for both the nuclear uprates and Turkey Point 6 & 7 (although the magnitude of the effect may be somewhat different).

I'd summarize this information as follows:

(1) Forecasted Summer Peak Load:

The 2009 forecasted Summer peaks, compared to the 2008 forecasted values, are lower for all years shown. This change will tend to lower the projected economic benefits of additional nuclear capacity, at least in the near term.

(2) Forecasted Natural Gas Costs:

A comparison of forecasted natural gas costs utilized in the 2009 feasibility analyses with those used in the 2008 analyses shows a general trend of: (i) lower natural gas costs in 2010, (ii) higher natural gas costs in the near-term years of 2015 through 2025, then (iii) lower natural gas costs in the later years of 2030 through 2040.

The effect(s) of these changes in forecasted natural gas costs on the projected economic benefits of additional nuclear capacity is a bit more difficult to judge. However, because the nuclear uprates are in service during all of the near-term years (because of their 2011/2012 in-service dates), while Turkey Point 6 & 7 are only in service during about half of these near-term years, the uprates should benefit more from the near-term increase in natural gas costs than will Turkey Point 6 & 7. In addition, because the operating licenses for FPL's existing nuclear units are currently set to expire approximately 20 years earlier

than will the projected operating licenses for Turkey Point 6 & 7, the projected economic benefits of the nuclear uprates will be less negatively affected by the lowering of forecasted natural gas costs in the later years than will the benefits of Turkey Point 6 & 7.

(3) Forecasted Oil Costs:

The forecasted oil costs utilized in the 2009 feasibility analyses compared to the forecasted costs used in the 2008 analyses showed a similar pattern to that discussed above for natural gas. Similar to the effects discussed above regarding these changes in forecasted natural gas costs, the changes in forecasted oil costs would be more beneficial (or less negative) for the nuclear uprates than for Turkey Point 6 & 7. (However, any impact of the projected economic benefits will be relatively small due to the fact that FPL's system burns relatively little oil.)

(4) Forecasted Uranium Costs:

The forecasted uranium costs utilized in the 2009 feasibility analyses are higher than those in the 2008 analyses. This assumption change will lower the projected economic benefits of additional nuclear capacity. Because of the larger size of the additional nuclear capacity of Turkey Point 6 & 7 compared to the nuclear uprates, this assumption change will tend to lower the projected economic benefits

of Turkey Point 6 & 7 more than the projected economic benefits of the nuclear uprates would be lowered. (However, the increase in the forecasted uranium costs is a relatively small increase on cost values that are small to begin with. Therefore, this change would have little effect on the projected economic benefits.)

(5) Forecasted CO_2 Compliance Costs:

The 2009 forecasted CO_2 compliance costs are unchanged from those utilized in the 2008 analyses. Because there is no change in this assumption, there is no effect on the projected economic benefits of additional nuclear capacity when comparing the results of the 2009 and 2008 feasibility analyses.

Q. Would you summarize the likely net effects of these changes in the forecasts of load, fuel costs, and CO_2 costs between the 2008 and 2009 analyses?

A. Yes. The changes in the assumptions in 2009 compared to those in 2008 are a mixed bag in regard to the direction of the changes. A comparison of these assumptions shows the following changes: lower forecasted load; a pattern of natural gas and oil costs that starts lower, is higher in the near-term, then is lower in later years; higher uranium costs; and no change in CO_2 compliance costs. The net effect of these changes will likely tend to lower the projected economic benefits of Turkey Point 6 & 7 because the units have a in-service date that near the end of the period of higher forecasted natural gas and oil

costs in the near-term, and have a long term of service during years of forecasted lower natural gas and oil costs. Conversely, the projected economic benefits of the nuclear uprates will be improved due to a better chronological "fit" with the near-term years of higher natural gas and oil costs.

Q. Would you also briefly discuss the other four inputs that appear in Exhibit SRS – 1?

A. Yes. The first of these four inputs is the projected amount of additional capacity from the nuclear uprates that will serve FPL's customers. In FPL's 2008 analyses, the assumption was that FPL would receive all of the 414 MW of additional capacity from the nuclear uprates. Since that time, the St. Lucie Unit 2 co-owners have indicated that they plan to pay for, and receive, their portion of the additional output associated with the St. Lucie Unit 2 uprate. Accordingly, FPL now assumes that it will receive only its ownership share of the increased capacity at St. Lucie Unit 2. (There is no change in the additional capacity that will serve FPL's customers from the other three nuclear units.) This change results in the amount of total additional capacity that will serve FPL's customers being lowered slightly to 399 MW. However, the nuclear uprates costs that FPL's customers will pay will be reduced commensurately. Therefore, by itself, this assumption change does not significantly alter the projected economic benefits from the nuclear uprates project in the 2009 feasibility analyses.

The second of these inputs is the projected cost of a greenfield 3x1 G CC unit. Such a unit was assumed to come in-service in 2018 and 2020 if Turkey Point 6 & 7 are not built as shown in the Resource Plan without Turkey Point 6 & 7 presented in Exhibit SRS – 4. The installed cost of a CC generator installed in 2018 was projected to be $1,000.18/kw and $817.23/kw in the 2008 and 2009 analyses, respectively. The cost projection for new CC units, with annual escalation, is also used for the 2020 CC unit mentioned above in the Turkey Point 6 & 7 analyses, and for the filler units in both the uprates and Turkey Point 6 & 7 analyses. By itself, this change lowers the projected economic benefits from the nuclear projects in the 2009 feasibility analyses.

The third of these inputs is the projected cost of firm gas transportation for new CC units. The projected firm gas transportation cost for a 2018 CC unit was $1.60/mmBTU and $2.21/mmBTU in the 2008 and 2009 analyses, respectively. The projected firm gas transportation cost, with annual escalation, is also used for the 2020 CC unit mentioned above in the Turkey Point 6 & 7 analyses, and for the filler units in both the uprates and Turkey Point 6 & 7 analyses. By itself, this change increases the projected economic benefits from the nuclear projects in the 2009 feasibility analyses.

The fourth input is the projected average annual planned outage days for FPL's four existing nuclear units for the years 2009 through 2012. It is during these planned outages that the necessary work to accomplish the capacity

uprates will be performed. The projected average annual duration for these planned outages was 44 days in the 2008 analyses and is 55 days in the 2009 analyses. By itself, this change lowers the projected economic benefits from the nuclear uprates project in the 2009 feasibility analyses.

2009 FEASIBILITY ANALYSES RESULTS FOR THE NUCLEAR UPRATES PROJECT

Q. What resource plans were used to perform the 2009 feasibility analyses of the nuclear uprates project?

A. The two resource plans that were utilized in the 2009 feasibility analyses are presented in Exhibit SRS – 2. As shown in these exhibits, the new generating unit additions in the two resource plans are identical through 2020 except for the addition of the nuclear uprates. The approximately 400 MW of capacity added by introduction of the nuclear uprates in the Plan with Nuclear Uprates does defer additions of new generation, but only after 2020. (The additional capacity supplied by the nuclear uprates also slightly alters the schedule for the return to active service of FPL's existing generating units that will have been temporarily placed on Inactive Reserve status.)

This result differs from the 2008 feasibility analyses of the nuclear uprates. In the 2008 analyses, the nuclear uprates' additional capacity deferred the addition of new generation much earlier (in 2015 and 2017).

The reason for this change is the much lower projection of load growth based on the January 2009 load forecast used in the 2009 feasibility analyses.

Q. What were the results of the 2009 feasibility analyses for the nuclear uprates project?

A. The results of the analyses are presented in Exhibit SRS – 3. As shown in Column (5) of Exhibit SRS - 3, the Resource Plan with Nuclear Uprates is projected to have a lower cumulative present value of revenue requirements (CPVRR) cost in 2009$ compared to the Resource Plan without Nuclear Uprates in 9 of 9 scenarios of fuel cost and environmental compliance cost forecasts utilized in the analyses.

Q. What conclusion do you draw from the results of the 2009 feasibility analyses of the nuclear uprates?

A. These results indicate that the nuclear uprates project is still projected to be a solidly cost-effective capacity and energy addition for FPL's customers. These results fully support the feasibility of continuing the nuclear uprates project.

2009 FEASIBILITY ANALYSES RESULTS FOR THE TURKEY POINT 6 & 7 PROJECT

Q. What resource plans were used to perform the 2009 feasibility analyses of Turkey Point 6 & 7?

A. The two resource plans that were utilized in the 2009 feasibility analyses are presented in Exhibit SRS – 4. As shown in these exhibits, the two resource plans are identical through 2017. The resource plans differ in 2018 and 2020 with the Resource Plan with Turkey Point 6 & 7 adding the two 1,100 MW nuclear units, one in 2018 and one in 2020. The Resource Plan without Turkey Point 6 & 7 adds two 1,219 MW CC units, one in 2018 and one in 2020. The resource plans then differ slightly after 2020 in the timing and number of filler units due to the 238 MW greater amount of capacity added in the Resource Plan without Turkey Point 6 & 7. (1,219 MW – 1,100 MW = 119 MW x 2 units = 238 MW.)

The differences in these two resource plans are similar to the differences seen in the 2008 economic analyses of the Turkey Point 6 & 7 project. In the 2008 analyses, the same differential in long-term capacity added to FPL's system in 2018 through 2020 was projected. Also, the impact of this differential in long-term capacity added during 2018 – 2020 resulted in relatively small differences in the timing and number of filler units after 2020.

Q. What were the results of the 2009 feasibility analyses for Turkey Point 6 & 7?

A. The results of the analyses are presented in Exhibit SRS – 5. The breakeven nuclear capital costs in $/kw in 2009$ are presented in Column (6) of this exhibit and are presented in $/kw in 2007$ in Column (7). The results in Column (7), when compared to FPL's non-binding estimated range of capital

costs in 2007$ of $3,108/kw to $4,540/kw, shows that the projected breakeven capital costs for Turkey Point 6 & 7 are above this range in 8 of the 9 scenarios of fuel cost and environmental compliance cost. In the 9th scenario that consists of low fuel costs and low environmental compliance costs, the projected breakeven capital costs are at the upper end of this range.

Q. What conclusion do you draw from the results of the 2009 feasibility analyses of Turkey Point 6 & 7?

A. These results indicate that the Turkey Point 6 & 7 project is still projected to be a solidly cost-effective addition for FPL's customers. These results fully support the feasibility of continuing the Turkey Point 6 & 7 project.

Q. Does this conclude your testimony?

A. Yes.

Comparison of Key Assumptions Utilized in the 2008 and 2009 Economic Analyses of FPL Nuclear Projects

(all $ values shown are in Nominal $)

(1)

Selected Years	Forecasted Summer Peak Load (MW)	
	2008 Feasibility Analysis	2009 Feasibility Analysis
2010	23,554	21,147
2015	27,241	24,142
2020	30,910	27,715
2025	34,780	30,973
2030	38,934	33,931
2035	42,075	35,148
2040	47,259	37,622

(2)

Selected Years	Forecasted Natural Gas Cost ($/mmBTU)	
	2008 Feasibility Analysis	2009 Feasibility Analysis
2010	$9.98	$8.86
2015	$8.72	$9.70
2020	$10.57	$13.37
2025	$13.13	$14.74
2030	$16.34	$16.25
2035	$20.34	$17.92
2040	$25.34	$19.77

(3)

Selected Years	Forecasted Oil Cost (1% S.) ($/mmBTU)	
	2008 Feasibility Analysis	2009 Feasibility Analysis
2010	$13.35	$9.31
2015	$12.41	$14.16
2020	$15.23	$17.92
2025	$19.12	$20.03
2030	$24.04	$22.38
2035	$30.28	$25.03
2040	$38.18	$27.98

(4)

Selected Years	Forecasted Uranium Cost ($/mmBTU)	
	2008 Feasibility Analysis	2009 Feasibility Analysis
2010	$0.78	$0.78
2015	$0.87	$0.83
2020	$0.96	$1.05
2025	$1.03	$1.11
2030	$1.17	$1.26
2035	$1.32	$1.43
2040	$1.49	$1.61

(5)

Selected Years	Forecasted CO_2 Compliance Cost ($/ton)	
	2008 Feasibility Analysis	2009 Feasibility Analysis
2010	$0	$0
2015	$17	$17
2020	$27	$27
2025	$43	$43
2030	$67	$67
2035	$101	$101
2040	$149	$149

(6)

Inputs	Other Inputs	
	2008 Feasibility Analysis	2009 Feasibility Analysis
1) Nuclear Uprates (MW)	414	399
2) CC Generator Capital ($/kw in 2018)	$1,000.18	$817.23
3) Firm Gas Trans.Cost ($/mmBTU in 2018)	$1.60	$2.21
4) Avg. Annual Planned Outage Days for Nuclear Units (2009-2012)	44	55

The Two Resource Plans Utilized in the 2009 Feasibility Analyses of the Nuclear Uprates

Resource Plan with Nuclear Uprates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 - 2040
- unit(s) added	WCEC 3 CC added; Cape Canaveral & Riviera Removed	*Nuclear Uprate (3 units)* *	Cape Canaveral Conversion / Modernization Nuclear Uprate (1 unit)*	Riviera Conversion / Modernization	---	---	---	Turkey Point 6	---	Turkey Point 7	27 - 2x1 CC
- Projected Summer Reserve Margin	25.5%	23.6%	29.1%	28.0%	25.1%	20.0%	21.1%	22.2%	20.4%	20.6%	(meets criterion in all yrs)

Resource Plan without Nuclear Uprate	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 - 2040
- unit(s) added	WCEC 3 CC added; Cape Canaveral & Riviera Removed	(none)	Cape Canaveral Conversion / Modernization	Riviera Conversion / Modernization	---	---	---	Turkey Point 6	---	Turkey Point 7	27 - 2x1 CC
- Projected Summer Reserve Margin	25.5%	22.1%	27.1%	26.1%	23.3%	20.2%	21.2%	22.3%	19.5%	20.4%	(meets criterion in all yrs)

Notes: - assumes FPL's current DSM Goals (2005-2014), additional cost-effective DSM approved by FPSC after DSM Goals were set, and extensions of DSM after 2014 at implementation rates commensurate with those in years leading up to 2014.
- assumes no peak load or annual energy growth after 2040.
- FPL's reserve margin criterion is 20%.

* One of the four nuclear uprates is scheduled to occur in Dec 2011, one in May 2012, one in June 2012, and one in Dec 2012. Because the 2011 uprate will occur after the Summer of 2011, for reserve margin calculation purposes the first three uprates are accounted for starting with the 2012 Summer reserve margin calculation. The fourth uprate is accounted for starting with the 2013 Summer reserve margin calculation.

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The Two Resource Plans Utilized in the 2009 Feasibility Analyses o the Nuclear Uprates
Exhibit SRS-2, Page 1 of 1

Docket No. 090009-EI
2009 Feasibility Analyses Results for the Nuclear Uprates: Total Costs and Total Differentials for All Fuel and Environmental Compliance Cost Scenarios in 2009$
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2009 Feasibility Analyses Results for the Nuclear Uprates:

Total Costs and Total Cost Differentials for All Fuel and Environmental Compliance Cost Scenarios in 2009$ (millions, CPVRR, 2009 - 2043)

(1)	(2)	(3)	(4)	(5) = (3) - (4)
Fuel Cost Forecast	Environmental Compliance Cost Forecast	Total Costs for Plans (2009$)		Total Cost Difference Plan with Nuclear Uprates minus Plan without Nuclear Uprates (2009$)
		Plan with Nuclear Uprates	Plan without Nuclear Uprates	
High Gas Cost	Env I	136,686	137,766	(1,080)
High Gas Cost	Env II	142,743	143,950	(1,207)
High Gas Cost	Env III	154,082	155,483	(1,401)
High Gas Cost	Env IV	160,128	161,702	(1,574)
Medium Gas Cost	Env I	118,773	119,456	(683)
Medium Gas Cost	Env II	124,874	125,657	(783)
Medium Gas Cost	Env III	136,094	137,100	(1,006)
Medium Gas Cost	Env IV	142,051	143,232	(1,181)
Low Gas Cost	Env I	101,127	101,383	(256)

Note: A negative value in Column (5) indicates that the Plan with Nuclear is less expensive than the Plan without Nuclear. Conversely, a positive value in Column (5) indicates that the Plan with Nuclear is more expensive than the Plan without Nuclear.

The Two Resource Plans Utilized in the 2009 Feasibility Analyses of Turkey Point 6 & 7

Resource Plan with TP 6&7	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 - 2040
- unit(s) added	WCEC 3 CC added; Cape Canaveral & Riviera Removed	Nuclear Uprate (3 units) *	Cape Canaveral Conversion / Modernization Nuclear Uprate (1 unit)*	Riviera Conversion / Modernization	---	---	---	Turkey Point 6	---	Turkey Point 7	27 - 2x1 CC
- Projected Summer Reserve Margin	25.5%	23.6%	29.1%	28.0%	25.1%	20.0%	21.1%	22.2%	20.4%	20.6%	(meets criterion in all yrs)

Resource Plan without TP 6&7	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 - 2040
- unit(s) added	WCEC 3 CC added; Cape Canaveral & Riviera Removed	Nuclear Uprate (3 units) *	Cape Canaveral Conversion / Modernization Nuclear Uprate (1 unit)*	Riviera Conversion / Modernization	---	---	---	Greenfield 3x1 G CC	---	Greenfield 3x1 G CC	26 - 2x1 CC
- Projected Summer Reserve Margin	25.5%	23.6%	29.1%	28.0%	25.1%	20.0%	21.1%	22.7%	20.9%	21.6%	(meets criterion in all yrs)

Notes: - assumes FPL's current DSM Goals (2005-2014), additional cost-effective DSM approved by FPSC after DSM Goals were set, and extensions of DSM after 2014 at implementation rates commensurate with those in years leading up to 2014.
- assumes no peak load or annual energy growth after 2040.
- FPL's reserve margin criterion is 20%.

* One of the four nuclear uprates is scheduled to occur in Dec 2011, one in May 2012, one in June 2012, and one in Dec 2012. Because the 2011 uprate will occur after the Summer of 2011, for reserve margin calculation purposes the first three uprates are accounted for starting with the 2012 Summer reserve margin calculation. The fourth uprate is accounted for starting with the 2013 Summer reserve margin calculation.

Docket No. 090009-EI
2009 Feasibility Analyses Results for Turkey Point 6 & 7:
Total Costs, Total Cost Differentials, and Breakeven Costs
for All Fuel and Environmental Compliance Cost Scenarios
in 2009$, and Breakeven Costs in 2007$
Exhibit SRS - 5 , Page 1 of 1

2009 Feasibility Analyses Results for Turkey Point 6 & 7:

Total Costs, Total Cost Differentials, and Breakeven Costs for All Fuel and Environmental Compliance Cost Scenarios in 2009$, and Breakeven Costs in 2007$ (millions, CPVRR, 2009 - 2060)

(1)	(2)	(3)	(4)	(5) = (3) - (4)	(6)	(7)
Fuel Cost Forecast	Environmental Compliance Cost Forecast	Total Costs for Plans: Plan with Nuclear	Total Costs for Plans: Plan without Nuclear - CC	Total Cost Difference Plan with Nuclear minus Plan without Nuclear - CC	Breakeven Nuclear Capital Costs ($/kw in 2009$)	Breakeven Nuclear Capital Costs ($/kw in 2007$)
High Gas Cost	Env I	164,719	178,700	(13,981)	7,385	6,229
High Gas Cost	Env II	174,367	189,332	(14,965)	7,905	6,667
High Gas Cost	Env III	189,638	206,015	(16,377)	8,650	7,296
High Gas Cost	Env IV	196,670	214,085	(17,415)	9,199	7,758
Medium Gas Cost	Env I	143,521	155,464	(11,943)	6,308	5,321
Medium Gas Cost	Env II	153,171	166,063	(12,892)	6,810	5,743
Medium Gas Cost	Env III	168,265	182,617	(14,352)	7,581	6,394
Medium Gas Cost	Env IV	175,249	190,583	(15,334)	8,099	6,831
Low Gas Cost	Env I	122,528	132,437	(9,909)	5,234	4,414

Note: A negative value in Column (5) indicates that the Plan with Nuclear is less expensive than the Plan without Nuclear. Conversely, a positive value in Column (5) indicates that the Plan with Nuclear is more expensive that the Plan without Nuclear.