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CAPITAL CIRCLE OFFICE CENTEN ED FPSC 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FL 322990850 | 8 AM 8: 44

COMMISSION CLERK

# Aublic Service Commission

February 18, 2011

100000-07

Ms. Mary Guyton Baker Electric System Planning JEA 21 W. Church St., Tower 11 Jacksonville, Florida 32202

Re: Review of 2011 Ten-Year Site Plans - Supplemental Data Requests

Dear Ms. Mary Guyton Baker,

Pursuant to the Commission's authority under Section 366.05(7), Florida Statutes, we are making a request for supplemental information on each company's generation expansion plans. The information will be used to supplement each company's 2011 *Ten-Year Site Plan* filing.

Enclosed is a CD containing staff's data request, related tables, and appendixes. Please provide the information requested on the enclosed documents in hard copy and electronic format and submit it no later than April 29, 2011. Please complete the enclosed files in the following formats:

- 2011 TYSP Data Request (Word (.doc) or Adobe (.pdf))
- 2011 TYSP Data Request Tables (Excel (.xls))
- 2011 TYSP Data Request Appendix A (Excel (.xls))
- 2011 TYSP Data Request Appendix B (Excel (.xls))

If you have any questions regarding this request, you may contact me at (850) 413-6626 (pellis@psc.state.fl.us) or Traci Matthews at (850) 413-6682 (tmatthews@psc.state.fl.us). Thank you for your assistance.

Sincerely,

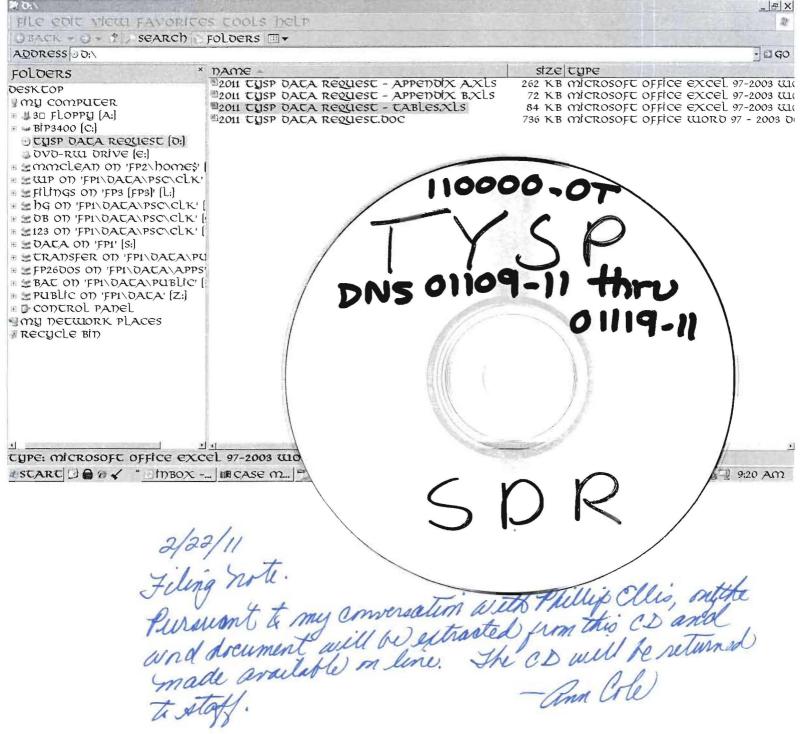
Phillip Ellis

Division of Regulatory Analysis

01113 FEB 18 =

Enclosure

cc: Office of the General Counsel (Murphy)
Office of the Commission Clerk (Cole)



# 2011 TEN YEAR SITE PLANS : SUPPLEMENTAL DATA REQUEST

Company 1	Vame:		

## **Renewable Generation Resources**

As used in the proceeding questions, the term "renewable energy" has the same meaning as used in Section 377.803, Florida Statutes. Please refer to the tables below when identifying fuel and generator types.

Fuel Types	Shorthand	Examples
	AB	Agriculture By-Products, Bagasse, Straw, Energy Crops.
	MSW	Municipal Solid Waste
Biomass	SLW	Sludge Waste.
	WDS	Wood / Wood Waste Solids
	OBS	Biomass Solids
Landfill Gas	LFG	Landfill gas.
Water	WAT	Hydro
Geothermal	GEO	Geothermal
7	WDL	Wood / Wood Waste Liquids
Biofuels	BL	Black Liquor
Biotueis	OBL	Biomass Liquids
	OBG	Biomass Gases
Solar	SUN	Solar Photovoltaic and Thermal devices
Waste Heat	WH	Waste heat from sulfuric acid manufacture
Wind	WND	Wind Energy.
Other	OTH	Any renewable not covered above. Please describe.

Generation Types	Shorthand
Combined Cycle - Steam Part	CA
Combined Cycle - Combustion Turbine Part	CT
Combined Cycle - Total Unit	CC
Compressed Air Energy Storage	CE
Combined Cycle Single Shaft	CS
Fuel Cell	FC
Combustion Turbine	GT
Hydraulic Turbine	HY
Hydraulic Turbine - Pumped Storage	PS
Internal Combustion Engine	IC
Not Available	NA
Other	OT
Photovoltaic Cells	PV
Steam Turbine	ST
Wind Turbine	WT

# **GENERAL QUESTIONS**

- 1. Please provide all data requested in the attached forms labeled 'Appendix A,' in electronic (Excel) and hard copy. If any of the requested data is already included in the Company's Ten-Year Site Plan, state so on the appropriate form.
- 2. Please provide all data requested in the attached forms labeled 'Appendix B,' which consist of Schedules 1 through 10 from the Company's Ten-Year Site Plan, in an electronic copy in Excel (.xls file format).

## LOAD & DEMAND FORECASTING

- 3. Please provide, on a system-wide basis, an average month of observed peak capacity values for Summer and Winter. From this data, excluding weekends and holidays, generate an average seasonal Daily Loading Curve. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.
- 4. Please provide, on a system-wide basis, historical annual heating degree day (HDD) and cooling degree day (CDD) data for the period 2001 through 2010 and forecasted annual HDD and CDD data for the period 2011 through 2020. Describe how the Company derives system-wide temperature if more than one weather station is used. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

1	ear	HDD	CDD
	2001		
	2002		
	2003		
+	2004		
Actual	2005		
ua	2006		
2,4	2007		
	2008		
	2009		
Mal	2010		
	2011		
	2012		
	2013		
Pr	2014		
Projected	2015		
ect	2016		
2	2017		100
	2018		
	2019		
	2020		

5. Please provide the following data to support Schedule 4 of the Company 's Ten-Year Site Plan: the 12 monthly peak demands for the years 2008, 2009, and 2010; the date when these monthly peaks occurred; and, the temperature at the time of these monthly peaks. Describe how the Company derives system-wide temperature if more than one weather station is used. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Year	Month	Peak Demand (MW)	Date	Day of Week	Hour	Temperature (F)
	1	1				
	2					
	3					
	4					
	5					
80	6			uc es ciliateras es		
2008	7					
	8					
	9					
	10					
	11					
	12					
	1					
	2					
	3					
	4					
	5					
66	6				1.000	
2009	7					
	8					
	9					
	10					
	11					
	12					
	1					
	2					
	3					
	4					
	5					
9	6					
2010	7					
	8					
	9					
	10					
	11					
	12					

- 6. Please discuss any recent trends in customer growth, by customer type (residential, industrial & commercial, etc), and as a whole. Please explain the nature or reason for these trends, and identify what types of customers are most affected by these trends. (For example, is a decline in customers a loss of temporary construction meters or a decline in population?)
- 7. Please discuss any impacts of "smart" or digital meter installations on forecasting sales and net energy for load. Please explain the nature or reason for these trends, and identify what types of customers are most affected by these trends. (For example, are increased sales due to more accurate measurement of low-load conditions?)

# RENEWABLE GENERATION

8. Please provide the estimated total capacity of all renewable resources the utility owns or purchases as of January 1, 2011. Include in this value the sum of all utility-owned, and purchased power contracts (firm and non-firm), and purchases from as-available energy producers (net-metering, self-generators, etc.). Please also include the estimated total capacity of all renewable resources (firm and non-firm) the utility is anticipated to own or purchase as of the end of the planning period in 2020.

Fuel Type	Renewable Resource Capacity (MW)			
	Existing	Planned		
Solar	1			
Wind				
Biomass				
Municipal Solid Waste				
Waste Heat				
Landfill Gas				
Hydro				
Total				

9. Please provide a description of each existing utility-owned renewable generation resource and each renewable purchased power agreement as of January 1, 2011. For both utility-owned and purchased resources, please divide them into Firm and Non-Firm categories as shown below. Please also include those renewable resources which provide fuel to conventional facilities, if applicable, with estimates of their capacity and energy contributions. As part of this response, please include the description of the unit's generator type, fuel type, commercial in-service date, seasonal net capacity (even if not considered firm capacity), annual energy generation. For purchased power agreements, also provide the contract start and end dates. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

Existing Renewables as of January 1, 2011
Utility-Owned Firm Renewable Resources

Facility Name	Unit Type	Fuel Type	Commercial In-Service Date	Net Capacity (kW)		Annual Generation	Capacity Factor	
-		-	(MM/YYYY)	Sum	Win	(MWh)	(%)	

#### Utility-Owned Non-Firm Renewable Resources

Facility Name			Fuel Commercial In-Service Date		apacity W)	Annual Generation	Capacity Factor	
•		-	(MM/YYYY)	Sum	Win	(MWh)	(%)	

#### Firm Renewable Purchased Power Agreements

Facility Name	Unit Type	Fuel Type	Unit Commercial In-Service Date		apacity W)	Annual Generation	Capacity Factor	Contract Start Date	Contract End Date
-	-	-	(MM/YYYY)	Sum Win (MWh)	(MWh)			(%)	

## Non-Firm Renewable Purchased Power Agreements

Facility Name	Unit Type	Fuel Type	Unit Commercial In-Service Date		apacity W)	Annual Generation	Capacity Factor	Contract Start Date	Contract End Date
-	-   -		(MM/YYYY)	Sum	Win	(MWh)		(%)	(%)
							-		

10. Please provide a description of each existing utility-owned renewable generation resource and each renewable purchased power agreement planned during the 2011 through 2020 period. For both utility-owned and purchased resources, please divide them into Firm and Non-Firm categories as shown below. Please also include those renewable resources which provide fuel to conventional facilities, if applicable, with estimates of their capacity and energy contributions. As part of this response, please include the description of the unit's generator type, fuel type, commercial in-service date, seasonal net capacity (even if not considered firm capacity), annual energy generation. For purchased power agreements, also provide the contract start and end dates. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

Planned Renewables for 2011 through 2020

### **Utility-Owned Firm Renewable Resources**

Facility Name	Unit Type	Fuel Type	Commercial In-Service Date	Net Capacity (kW)		Annual Generation	Capacity Factor	
-	-	7	(MM/YYYY)	Sum	Win	(MWh)	(%)	
		-				<del> </del>	<u> </u>	

#### Utility-Owned Non-Firm Renewable Resources

Facility Name	Unit Type	Fuel Type	Commercial In-Service Date	Net Capacity (kW)		Annual Generation	Capacity Factor	
	-	-	(MM/YYYY)	Sum	Win	(MWh)	(%)	

## Firm Renewable Purchased Power Agreements

Facility Name	Unit Type	Fuel Type	Unit Commercial In-Service Date		apacity W)	Annual Generation	Capacity Factor	Contract Start Date	Contract End Date
= 1	-	•	(MM/YYYY)	Sum	Win	(MWh)			(%)
								7:1	

#### Non-Firm Renewable Purchased Power Agreements

Facility Name	Unit Type	Fuel Type	Unit Commercial In-Service Date		apacity W)	Annual Generation	Capacity Factor	Contract Start Date	Contract End Date
•	-	-	(MM/YYYY)	Sum	Win	(MWh)		(%)	(%)

- 11. Please refer to the list of planned utility-owned renewable resource additions with an inservice date for the renewable generator during the 2011 through 2020 period outlined above. Please discuss the current status of each project.
- 12. Please refer to the list of existing or planned renewable PPAs with an in-service date for the renewable generator during the 2011 through 2020 period outlined above. Please discuss the current status of each project.
- 13. Please provide a description of each renewable facility in the company's service territory that it does not currently have a PPA with, including self-service facilities. As part of this response, please include the description of the unit's location, generator type, fuel type, commercial in-service date, seasonal net capacity (even if not considered firm capacity), annual energy generation. Please exclude from this response small customer-owned renewable resources, such as rooftop PV, which are more appropriately included in the following question. Please complete the tables below and provide an electronic copy in Excel format and hardcopy.

Facility Name	Unit Type	Fuel In-Service Date Net Capacit (kW)			Annual Generation	Capacity Factor	
		•	(MM/YYYY)	Sum	Win	(MWh)	(%)

14. Please provide the number of customer-owned renewable resources within the Company's service territory. Please organize by resource type, and include total estimated installed capacity and annual output. Please exclude from this response any customer-owned renewable resources already accounted for under PPAs or other sources. If renewable energy types beyond those listed were utilized, please include an additional row and a description of the renewable fuel and generator. For non-electricity generating renewable energy systems, such as geothermal cooling and solar hot water heaters, please use kilowatt-equivalent and kilowatt-hour-equivalent units. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

Customer Class	Renewable Type	# of Connections	Installed Capacity (kW)	Annual Output (kWh)
Residential	Solar Photovoltaic			
Residential	Solar Thermal Water Heating			
Residential	Geothermal Heat Pump			
Residential	Wind Turbine			
Residential	Other (Describe)			
Commercial	Solar Photovoltaic			
Commercial	Solar Thermal Water Heating			1
Commercial	Geothermal Heat Pump			
Commercial	Wind Turbine			
Commercial	Other (Describe)			

15. Please provide the annual output for the company's renewable resources (owned and purchased through PPA), retail sales, and the net energy for load for the period 2010 through 2020. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

1 10 4	- A (CIVIL)	Actual					Proj	ected				
Annual Outp	ut (GWn)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
D	Utility											
Renewable Generation	PPA											
Generation	Total											
Retail S	Sales											
Net Energy	for Load											

16. Provide, on a system-wide basis, the historical annual average as-available energy rate in the Company's service territory for the period 2001 through 2010. Also, provide the forecasted annual average as-available energy rate in the Company's service territory for the period 2011 through 2020. Please use the Consumer Price Index to calculate real as-available energy rates. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Year		able Energy MWh)	CPI
	Real	Nominal	
2010			
2011			
2012			
2013	,		
2014			
2015			
2016			
2017			
2018			
2019			
2020			

- 17. Please discuss any studies conducted or planned regarding the use combinations of renewable and fossil fuels in existing or future fossil units. What potential does the Company identify in this area?
- 18. Please discuss any planned renewable generation or renewable purchased power agreements within the past 5 years that did not materialize. What was the primary reason these generation plans or purchased power contracts were not realized? What, if any, were the secondary reasons?
- 19. Please discuss whether the company purchases or sells Renewable Energy Credits. As part of this response, please discuss whether the company offers the sale of Renewable Energy Credits to its customers through a green pricing or similar program.

## TRADITIONAL GENERATION

- 20. Please provide the cumulative present worth revenue requirement of the Company's Base Case for the 2011 Ten-Year Site Plan. If available, please provide the cumulative present worth revenue requirement for any sensitivities conducted of the Company's generation expansion plan.
- 21. Please illustrate what the Company's generation expansion plan would be as a result of sensitivities to the base case demand. Include impacts on unit in-service dates for any possible delays, cancellations, accelerated completion, or new additions as a result.
- 22. Please complete the following table detailing planned unit additions, including information on capacity and in-service dates. Please include only planned conventional units with an in-service date past January 1, 2011, and including nuclear units, nuclear unit uprates, combustion turbines, and combined-cycle units. For each planned unit, provide the date of the Commission's Determination of Need and Power Plant Siting Act certification (if applicable), and the anticipated in-service date.

Planned Unit Additions for 2011 through 2020

	Summer	Certification Dat	es (if Applicable)	In-Service
Generating Unit Name	Capacity (MW)	Need Approved (Commission)	PPSA Certified	Date
27747534511881144742411414141414141414141414141414141	Nuclear	Unit Additions / Upra	tes	
	Combustic	n Turbine Unit Addit	tions	
	Combin	ed Cycle Unit Additio	ns	
	Steam 7	Curbine Unit Addition	ıs	

23. For each of the generating units contained in the Company's Ten-Year Site Plan, please discuss the "drop dead" date for a decision on whether or not to construct each unit. Provide a time line for the construction of each unit, including regulatory approval, and final decision point.

24. Please complete the following table detailing unit specific information on capacity and fuel consumption for 2010. For each unit on the Company's system, provide the following data based upon historic data from 2010: the unit's capacity; annual generation; resulting capacity factor; estimated annual availability factor; unit average heat rate; quantity of fuel burned; average cost of fuel; and resulting average energy cost for the unit's production. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Plant	Unit #	Unit Type	Fuel Type	Nameplate Capacity		et acity W)	Annual Generation	Capacity Factor	Availability Factor	In- Service Date
				(MW)	Sum	Win	(MWh)	(%)	(%)	

Plant	Unit #	Fuel Type	Heat Rate	Total Fuel Burned	Total Fuel Cost	Unit F Cost	25178
			(BTU/kWh)	(MMBTU)	(\$000)	(\$/MMBTU)	(¢/kWh)

25. For each unit on the Company's system, provide the following data based upon historic data from 2010 and forecasted capacity factor values for the period 2011 through 2020. Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

Projected Unit Information - Capacity Factor (%)

Dlane	Unit	Unit	Fuel	Actual					Proj	ected				
Plant	#	Type	Туре	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
			1.1											

26. Please complete the table below, providing a list of all of the Company's steam units or combustion turbines that are candidates for repowering. As part of this response, please provide the unit's fuel and unit type, summer capacity rating, in-service date, and what potential conversion/repowering would be most applicable. Also include a description of any major obstacles that could affect repowering efforts at any of these sites, such as unit age, land availability, or other requirements.

Plant Name	Fuel & Unit Type	Summer Capacity (MW)	In-Service Date	Potential Conversion Type

27. Please complete the table below, in electronic (Excel) and hard copy, regarding the Company's generation fleet and the typical use of each unit. Please identify capacity type as either Baseload, Intermediate, or Peaking, and group units by their capacity type. Please use the abbreviations for fuel and generation facilities from the FRCC Load and Resource Plan for the table below. (For example, a combustion turbine that is not part of a combined cycle unit is identified with generator code "GT.") Please complete the tables below and provide an electronic copy in Excel (.xls file format) and hard copy.

Existing Facilities as of January 1, 2011

Plant	Unit #	Unit Type	Fuel Type	Typical Capacity Factor	Capacity Type	Summer Capacity
				(%)		(MW)
D I W				Sub-Total	Baseload	
	Pod A		MES O	Sub-Total	Intermediate	
	Indiana.			Sub-Total	Peaking	
					Total	

Planned Facilities during 2011 to 2020

Plant	Unit #	Unit Type	Fuel Type	Typical Capacity Factor	Capacity Type	Summer Capacity
1				(%)		(MW)
				Sub-Total	Baseload	
				Sub-Total	Intermediate	
				Sub-Total	Peaking	
					Total	

28. Please complete the table below regarding the system's installed capacity, categorized by capacity type, for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Y	ear	Baseload Capacity	Intermediate Capacity	Peaking Capacity	Total Installed Capacity
	2001				
	2002				
	2003				
Actual	2004				
	2005				
	2006				
	2007				
	2008				
	2009				
	2010				
	2011				
	2012				
	2013				
pa	2014				
Projected	2015				
	2016				
	2017	/			
	2018	<u> </u>			
	2019				
	2020				_

29. Please provide the system average heat rate for the generation fleet for each year for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

,	ear	System Average Heat Rate
		(BTU/kWh)
	2001	
	2002	
	2003	
Actual	2004	
	2005	
	2006	
	2007	
	2008	
	2009	
	2010	
	2011	
	2012	
	2013	
D	2014	
scte	2015	
Projected	2016	
7	2017	
	2018	
	2019	
	2020	

30. Please provide the average cost of a residential customer bill, based upon a monthly usage of 1200 kilowatt-hours, in nominal and real dollars for the period 2001 through 2020. Please use the Consumer Price Index to calculate real residential bill values. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Y	ear		ential Bill 00-kWh)	CPI
		Real	Nominal	
	2001			
	2002			
	2003			
_	2004			
En	2005			
Actual	2006	19		La de
	2007			
	2008			
	2009			
	2010			
	2011			
	2012			
	2013			
2	2014			
Sct	2015	W)		
Projected	2016			
P	2017			
	2018			
	2019			
	2020			

# **POWER PURCHASES / SALES**

31. Please identify each of the Company's existing and planned power purchase contracts, including firm capacity imports reflected in Schedule 7 of the Company's Ten-Year Site Plan. Provide the seller, capacity, associated energy, and term of each purchase, and provide unit information if a unit power purchase. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

## Existing Purchased Power Agreements as of January 1, 2011

Seller	Contrac	Contract Term		Contract Capacity (MW)		Capacity Factor	Primary Fuel	Description
	Begins	Ends	Summer	Winter	(MWh)	(%)	(if any)	
_				-				

#### Planned Purchased Power Agreements for 2011 through 2020

Seller	Contract Term		Contract Capacity (MW)		Annual Generation	Capacity Factor	Primary Fuel	Description
	Begins	Ends	Summer	Winter	(MWh)	(%)	(if any)	

32. Please identify each of the Company's existing and planned power sales, including firm capacity exports reflected in Schedule 7 of the Company's Ten-Year Site Plan. Provide the purchaser, capacity, associated energy, and term of each purchase, and provide unit information if a unit power sale. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Existing Power Sales as of January 1, 2011

Purchaser	Contract Term		Contract Capacity (MW)		Annual Generation	Capacity Factor	Primary Fuel	Description
	Begins	Ends	Summer	Winter	(MWh)	(%)	(if any)	
			-					

#### Planned Power Sales for 2011 through 2020

Purchaser	Contract Term		Contract Capacity (MW)		Annual Generation	Capacity Factor	Primary Fuel	Description
	Begins	Ends	Summer	Winter	(MWh)	(%)	(if any)	

33. Please discuss and identify the impacts on the Company's capacity needs of all known firm power purchases and sales over the planning horizon. As part of this discussion, please include whether options to extend purchases or sales exist, and the potential effects of expiration of these purchase or sales.

# **ENVIRONMENTAL ISSUES**

- 34. Please discuss the impact of environmental restrictions, relating to air or water quality or emissions, on the Company's system during the 2010 period, such as unit curtailments. As part of your discussion, please include the potential for environmental restrictions to impact unit dispatch or retirement during the 2011 through 2020 period.
- 35. Please provide the rate of emissions, on an annual and per megawatt-hour basis, of regulated materials and carbon dioxide for the generation fleet each year for the period 2001 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

	Year	SO	K	NO	X .	Merci	ury	Particu	lates	CO2	le le
- 105	rear	lb/MWh	Tons	lb/MWh	Tons	lb/MWh	Tons	lb/MWh	Tons	lb/MWh	Tons
	2001										
	2002										
	2003										
	2004										
Actual	2005										
*ct	2006										
	2007										
	2008										
	2009										
	2010										
	2011										
	2012										
	2013										
78	2014										
Projected	2015										
0.0	2016										
교	2017										
	2018										
	2019										
	2020										

# **FUEL**

36. Please provide, on a system-wide basis, the historic average fuel price (in nominal \$/MMBTU) for each fuel type for the period 2001 through 2010. Also, provide the forecasted annual average fuel price (in nominal \$/MMBTU) for each fuel type for the period 2011 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Fuel	ninal Price 4BTU)	Uranium	Coal	Natural Gas	Residual Oil	Distillate Oil
	2001					
	2002					
	2003					
Actual	2004					
	2005					
	2006					
-	2007					
	2008					
	2009					
	2010					
	2011					
	2012					
	2013					
D.	2014					
sct	2015					
2014 2015 2016 2017 2018 2019	2016					
	2017					
	2018	4				
	2020					

37. Please provide, on a system-wide basis, the historic annual fuel usage (in GWh) for each fuel type for the period 2001 through 2010. Also, provide the forecasted annual fuel usage (in GWh) for each fuel type for the period 2011 through 2020. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

Fuel (G'	Usage Wh)	Uranium	Coal	Natural Gas	Residual Oil	Distillate Oil
	2001					
	2002					
	2003					
	2004					
na	2005					
Actual	2006					
,	2007					
	2008					
	2009					
	2010					
	2011					
	2012					
	2013					
P	2014					
Projected	2015					
.0	2016					
Pr	2017					
	2018					
	2019					
	2020					

- 38. Please discuss how the Company compares its fuel price forecasts to recognized, authoritative independent forecasts.
- 39. For each fuel type (coal, natural gas, nuclear fuel, etc.), please discuss in detail the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.
- 40. What steps has the Company taken to ensure gas supply availability and transport over the 2011 through 2020 planning period?
- 41. Regarding existing and planned natural gas pipeline expansion projects, including new pipelines, affecting the Company for the period 2011 through 2020, please identify each project and discuss it in detail.

- 42. Please discuss in detail any existing or planned natural gas pipeline expansion project, including new pipelines and off-shore projects, outside the State of Florida that will affect the Company over the period 2011 through 2020.
- 43. Regarding unconventional natural gas production (shale gas, tight sands, etc.), please discuss in detail the expected industry factors and trends for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.
- 44. Regarding liquefied natural gas (LNG) imports to the United States, please discuss in detail the expected industry factors and trends for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.
- 45. Please discuss in detail the Company's plans for the use of firm natural gas storage for the period 2011 through 2020.
- 46. Please discuss the actions taken by the Company to promote competition within and among coal transportation modes.
- 47. Regarding coal transportation by rail, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company. Also include a discussion of any expected changes to terminals and port facilities that could affect coal transportation for the Company.
- 48. Regarding coal transportation by water, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company. Also include a discussion of any expected changes to terminals and port facilities that could affect coal transportation for the Company.
- 49. Regarding planned changes and construction projects at coal generating units, please discuss the expected changes for coal handling, blending, unloading, and storage for the period 2011 through 2020.

- 50. For the period 2011 through 2020, please discuss in detail the Company's plans for the storage and disposal of spent nuclear fuel. As part of this discussion, please include the Company's expectation regarding Yucca Mountain, dry cask storage, and litigation involving spent nuclear fuel, and the future of the Nuclear Waste Disposal Act.
- 51. Regarding uranium production, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.
- 52. Regarding the transportation of heavy fuel oil and distillate fuel oil, please discuss the expected industry trends and factors for the period 2011 through 2020. As part of this discussion, please include how these factors and trends will affect the Company.
- 53. Please discuss the effect of changes in fossil fuel prices on the competitiveness of renewable technologies.
- 54. Please discuss the effect of renewable resource development (for electric generation and non-generation technologies) on fossil fuel prices.

# **TRANSMISSION**

55. Please provide a list of all proposed transmission lines in the planning period that require certification under the Transmission Line Siting Act. Please also include those that have been approved, but are not yet in-service.

Transmission Line	Line Length	Nominal Voltage	Date Need	Date TLSA	In-Service Date
www.	(Miles)	(kV)	Approved	Certified	Date
					_