Progress Energy

(Writer's Direct Dial No. 727-820-5184)

John T. Burnett
Associate General Counsel – Florida

110000-OT

July 22, 2011

VIA HAND DELIVERY

Ms. Ann Cole
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: 2011 TYSP Supplemental Data Request #3; Undocketed

Dear Ms. Cole:

Please find enclosed for filing on behalf of Progress Energy Florida, Inc., the original and five copies of its responses to the 2011 Supplemental TYSP Data Request #3 issued by Staff on July 1, 2011.

Please let me know if you have any questions. Thank you for your assistance in this matter.

COM ___
APA ___
ECR ___ 3 CD containing requests.
GCL ___
RAD ___
SSC ___
ADM ___
OPC ___
CLK ___

Sincerely,

John T. Burnett cms

John T. Burnett

JTB:emc
Enclosures

Progress Energy, Inc.
106 E. College Avenue
Suite 800
Tallahassee, FL 32301

PEF'S RESPONSE TO
STAFF'S 3rd SUPPLEMENTAL DATA REQUEST
(NOS. 1-12)

2011 TEN-YEAR SITE PLAN : SUPPLEMENTAL DATA REQUEST #3

Company Name: Progress Energy

1. Please provide a status update of all planned Renewable Energy facilities in terms of scheduled construction dates, upcoming and achieved milestones, and any other notable progress/alterations towards their completions.

RESPONSE: Please see the Planned Renewable Energy facility table below:

Progress Energy Florida's planned Renewable Energy facilities as of July 1, 2011					
Counterparty	**County**	**Contract Start Execution**	**Contract End**	**MW**	**Status of Project**
BG&E #1	Gulf	11/25/2009	2033	45	Has acquired a site, but DOE funding has been delayed. A number of MOUs have been entered into to procure fuel and BG&E has applied for Interconnection/Transmission service. Project was assigned to NFREC, LLC.
FB Energy	Manatee	7/10/2009	2033	60	Has acquired a site and is in the permitting process. FB Energy is still obtaining financing sources.
TransWorld Energy	Citrus	1/20/2011	2033	40	Contract was approved by Order PSC-11-0255-PAA-EQ July 6, 2011 and the counter-party is in the initial project development phases for land acquisition and permitting.
US EcoGen	Polk	3/28/2011	2043	60	Contract is currently under review by FPSC
Blue Chip	Lake	3/1/2011	N/A	40	System Impact Study has been submitted to transmission for review and approval. Lake County has issued the projects permit for construction due to start August 2011. Sorrento Solar Farm's projection to have 5% of the panels in place and operational by 12/31/2011.
Blue Chip	Seminole	3/12/2010	N/A	10	Roof top PV panels are currently being installed and the project is net-metering 120 kW as of 7/5/2011. PV panel build-out is continuing.
Eliho Energy	Dixie	6/7/2010	N/A	8	Working to secure financing
E2E2	Polk	9/30/2010	N/A	30	Working with various companies and agencies to secure financing
National Solar	Columbia	11/23/2010	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.

National Solar	Gadsden	11/23/2010	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Gilchrist	4/11/2011	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Hamilton	6/3/2010	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Hardee	2/1/2011	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Highlands	4/11/2011	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Osceola	4/11/2011	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Polk	6/3/2010	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.
National Solar	Suwannee	11/23/2010	N/A	50	Project development phase for land acquisition, financing, and all associated permitting.

2. Please list all planned Renewable Energy Contracts and/or facilities that have been cancelled, withdrawn, or delayed since the filing of the 2010 Ten-Year Site Plan. As part of this response, explain or describe the reason(s) for the change in the status of each.

RESPONSE: Please see the table below:

Planned Renewable Facility	**MW**	**Status**	**Comment**
Horizon Energy	60	Terminated	Contract terminated in August, 2010 due to the lack of funding
Vision Power Systems	40	Terminated	After several extensions allowed under contract, contract was terminated in September, 2010 due to lack of funding
National Solar - Alachua	2	Terminated	Contract terminated by counter-party in January, 2011 stating county does not have criterion for their business needs
National Solar - Marion	50	Terminated	Contract terminated by counter-party in January, 2011 stating county does not have criterion for their business needs

National Solar - Sumter	50	Terminated	Contract terminated by counter-party in January, 2011 stating county does not have criterion for their business needs
National Solar - Lake	50	Terminated	Contract terminated by counter-party in January, 2011 stating county does not have criterion for their business needs
Hathaway Renewables	18	Withdrawn and Terminated	PEF and Hathaway Renewables mutually agreed to withdraw the petition from the FPSC and terminate in May, 2011 due to pricing issues
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3. Please complete the table below describing the status of the company's generating units during each month's peak demand, for each year from 2007 through 2010. Please also provide data for 2011 as available. As part of this response, include the actual values at monthly peak for planned capacity, scheduled maintenance, forced outages, available capacity, and the system peak demand. Please provide these responses in hardcopy and in electronic (Excel) format.

RESPONSE: Please see the completed tables below for the years 2007 through 2010 (partial data provided for 2011) and provided in the Excel file PEF 2011 TYSP 3rd SDR Tables.xls:

Year: 2007					
	Capacity / Demand at Time of Peak (MW)				
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand
Jan	11703	489	168	11046	8803
Feb	11703	535	123	11045	9097
Mar	11703	1246	95	10362	6990
Apr	11703	1933	0	9770	7474
May	11165	1822	20	9323	8123
Jun	11165	179	273	10713	9398
Jul	11165	68	26	11071	9842
Aug	11165	53	865	10247	10405
Sep	11165	612	299	10254	9443
Oct	11165	1736	481	8948	8618
Nov	12392	1428	313	10651	6812
Dec	12392	0	302	12090	7162

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

Year: 2008					
	Capacity / Demand at Time of Peak (MW)				
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand
Jan	12392	0	24	12368	10210
Feb	12392	578	40	11774	8223
Mar	12392	2915	137	9340	6794
Apr	12392	2518	33	9841	7620
May	11420	180	102	11138	9298
Jun	11420	63	374	10983	9898
Jul	11420	24	334	11062	10017
Aug	11420	722	222	10476	10036
Sep	11420	168	174	11078	9501
Oct	11420	825	457	10138	8059
Nov	12392	2059	9	10324	7446
Dec	12392	945	9	11438	8133

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

Year: 2009					
	Capacity / Demand at Time of Peak (MW)				
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand
Jan	12147	55	53	12039	11195
Feb	12147	53	404	11690	11313
Mar	12147	773	76	11298	7829
Apr	12147	2512	24	9611	6818
May	11542	1427	250	9865	8736
Jun	11542	545	452	10545	10247
Jul	11542	380	191	10971	9294
Aug	11542	386	444	10712	9591
Sep	11542	526	86	10930	8392
Oct	11542	1605	55	9882	8949
Nov	12147	2502	12	9633	6236
Dec	12147	200	1086	10861	7154

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

Year: 2010					
	Capacity / Demand at Time of Peak (MW)				
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand
Jan	12679	30	1629	11,020	11644
Feb	12679	1144	1927	9,608	8746
Mar	12679	1335	1362	9,982	8276
Apr	12679	835	1252	10,592	6183
May	11598	1391	1696	8,511	8585
Jun	11598	12	1147	10,439	9516
Jul	11598	73	984	10,541	9600
Aug	11598	44	1152	10,402	9467
Sep	11598	66	1893	9,639	8844
Oct	11598	1943	1020	8,635	7753
Nov	12679	2359	867	9,453	6180
Dec	12679	308	1631	10,740	10381

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

Year: 2011					
	Capacity / Demand at Time of Peak (MW)				
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand
Jan	12876	324	1050	11502	9586
Feb	12876	682	1500	10694	7395
Mar	12876	1147	1454	10275	6133
Apr	12876	1112	1032	10732	8188
May	11697				
Jun	11697				
Jul	11697				
Aug	11697				
Sep	11697				
Oct	11697				
Nov	12876				
Dec	12876				

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

4. Please complete the following table describing the company's historic actual peak demand and available capacity, and the company's projected (from the previous year's forecast) peak demand and planning capacity. As part of this response, also provide the variance between the actual and projected values. Please provide these responses in hardcopy and in electronic (Excel) format.

RESPONSE: Please see the tables below for the years 2007 through 2010 and provided in the Excel file PEF 2011 TYSP 3rd SDR Tables.xls:

Year	Peak Demand (MW)	Projected (Year Before) Peak Demand (MW)	Variance (%)	Available Capacity During Peak (MW)	Projected Capacity During Peak (MW)	Variance (%)
2007	10405	10137	3%	10247	11165	-8%
2008	10210	11385	-10%	12368	12392	0%
2009	11313	11327	0%	11690	12147	-4%
2010	11644	10972	6%	11,020	12679	-13%

Note: Any additional non-firm or short-term purchases beyond Planned Capacity were not included in the Available Capacity column. Scheduled and Forced Outages were based on PEF owned generation capacity resources and can reflect hourly capacity derations.

5. Please complete the following table below describing the company's usage of interruptible or curtailable load. As part of the response, please describe, for each type of load management, the total number of customers available to be interrupted or curtailed, the number of customers interrupted each year, total load interrupted and available to be interrupted, and the average duration of interruptions. Please complete this table for each of the following groups: interruptible load, curtailable load, residential load management, and commercial load management. Please provide these responses in hardcopy and in electronic (Excel) format.

RESPONSE: Please see the tables below for the years 1995 through 2011 and provided in the Excel file PEF 2011 TYSP 3rd SDR Tables.xls:

Interruptible Load						
Year	Total Customers Available for Interruption (-)	Total Customer(s) Interrupted (-)	Interruptions per Customer per Year (int/yr)	Total Interrupted Load (MW)	Total Interruptible Load Available (MW)	Average Duration of Interruption (mins)
1995	116	0	0	0	273	0
1996	130	130	1	210	255	180
1997	133	0	0	0	288	0
1998	132	132	9	0	315	180
1999	135	135	5	266	292	180
2000	141	141	1	0	224	90
2001	144	144	3	174	236	120
2002	147	0	0	0	300	0
2003	148	0	0	0	243	0
2004	149	0	0	0	303	0
2005	151	0	0	0	279	0
2006	150	150	1	0	255	120
2007	148	148	1	54	272	60
2008	147	0	0	0	271	0
2009	146	0	0	0	244	0
2010	143	143	2	194	220	210

Notes: Interrupted and Interruptible available loads are at the time of winter peak. Customer sites are indicated. Total Interrupted Load off peak will depend on time and temperature and **are not** included in the total.

Curtailable Load						
Year	Total Customers Available for Interruption (-)	Total Customer(s) Interrupted (-)	Interruptions per Customer per Year (int/yr)	Total Interrupted Load (MW)	Total Interruptible Load Available (MW)	Average Duration of Interruption (mins)
1995	7	0	0	0	27	0
1996	7	7	1	0	5	180
1997	7	0	0	0	16	0
1998	8	8	9	0	25	180
1999	8	8	5	13	20	180
2000	8	8	1	0	11	90
2001	8	8	3	13	13	120
2002	8	0	0	0	8	0
2003	8	0	0	0	6	0
2004	8	0	0	0	12	0
2005	8	0	0	0	28	0
2006	8	8	1	0	25	120
2007	7	7	1	1	12	60
2008	8	0	0	0	16	0
2009	7	0	0	0	17	0
2010	5	5	2	10	10	210

Notes: Interrupted and Interruptible available loads are at the time of winter peak. Customer sites are indicated. Total Interrupted Load off peak will depend on time and temperature and are not indicated in the total.

Residential LM						
Year	Total Customers Available for Interruption (-)	Total Customer(s) Interrupted (-)	Interruptions per Customer per Year (int/yr)	Total Interrupted Load (MW)	Total Interruptible Load Available (MW)	Average Duration of Interruption (mins)
1995	524,362	524,362	5	997	997	153
1996	532,319	532,319	32	1156	1156	158
1997	540,503	540,503	67	111	917	161
1998	493,129	493,129	56	514	663	213
1999	472,194	472,194	30	870	874	209
2000	467,608	467,608	28	314	849	154
2001	446,317	446,317	6	826	829	180
2002	427,519	427,519	5	257	822	130
2003	418,029	418,029	2	402	795	88
2004	409,641	409,641	6	0	788	112
2005	401,951	0	0	0	779	0
2006	389,089	389,089	13	52	762	240
2007	390,337	390,337	13	30	671	180
2008	391,511	391,511	17	25	763	240
2009	392,763	392,763	3	0	759	120
2010	397,234	397,234	9	531	651	100

Notes: Interrupted and Interruptible available loads are at the time of winter peak. Total Interrupted Load off peak will depend on time and temperature and are not included in column E.

Commercial LM						
Year	Total Customers Available for Interruption (-)	Total Customer(s) Interrupted (-)	Interruptions per Customer per Year (int/yr)	Total Interrupted Load (MW)	Total Interruptible Load Available (MW)	Average Duration of Interruption (mins)
1995	*	*	5	28	28	153
1996	*	*	32	28	28	158
1997	*	*	67	18	18	161
1998	*	*	56	27	27	213
1999	*	*	30	26	26	209
2000	*	*	28	26	26	154
2001	*	*	6	24	24	180
2002	*	*	5	17	17	130
2003	397	397	2	15	15	88
2004	388	388	6	13	13	112
2005	355	0	0	0	12	0
2006	332	332	13	11	11	240
2007	325	325	13	10	10	180
2008	316	316	17	9	9	240
2009	316	316	3	8	8	120
2010	316	316	9	8	8	100

Notes: Interrupted and Interruptible available loads are at the time of summer peak. Not offered after 2000; may be replaced by Business Energy Response Program. * Historical data not maintained as use is concurrent with Residential Load Management.

6. Please indicate the number of customers since 1995 participating in interruptible, curtailable, and load management programs that have requested to discontinue their participation. Please provide annual figures for each of the following programs individually: interruptible load, curtailable load, residential load management, and commercial load management.

RESPONSE: An annual history of specific customer interactions related to the requests/discussion of Demand Response Program options since 1995 is not available. PEF does not maintain this level of detail on customer communications pertaining to program participation. Real time participation numbers can be obtained, but a formal log of program option discussions or the monthly tracking of participation additions or deletions is not maintained. Customers who have discussed program options with Company personnel often elect to remain on the Demand Response Programs in which they are enrolled. Conversations regarding program options typically increase following extreme weather conditions. In review of a notable direct load control event in Florida during the summer of 1998, the Company handled a large volume of inquiries in response to the highest number of June degree days recorded since the existence of the program. These control events generated unprecedented call activity with a net impact to the Residential Load Management Program (EnergyWise Home^{SM}) of more than 40,000 customers or approximately a 5% customer loss.

For Interruptible/Curtailable (IS/CS) customers, conversations with PEF account executives take place on an ongoing basis with program options evaluated regularly. The majority of those customers participating in the IS/CS rate options elect to remain on those programs when considering the benefits to their operations, even during the unprecedented weather during the summer of 1998.

The Commercial Load Management Program has been closed to new participants since April 1, 2001, so any changes in the number of participants over the past ten-years may be due to customers closing or moving their operations.

7. Please explain or describe the reason(s) given, if any, by those customers that chose to discontinue participation in interruptible, curtailable, or load management programs.

RESPONSE: Although PEF does not maintain this level of detail on specific customer interactions for this duration, program option conversations with customers do occur on a regular basis. Some of the reasons for disconnection requests provided by Residential Load Management Program customers in the past include comfort, equipment change-out and frequency and duration of

interruption. Most customer concerns related to frequency and duration of interruption typically follow periods of unusually hot or cold temperatures, but in many cases customers do not follow through with program disconnection once the weather returns to normal. This holds true even following extreme weather conditions as noted in the response to question 6. The Company estimates that the number of Residential Load Management Program cancellations over the last 4 years is less than 1%, including cancellations associated with occupancy changes.

In the case of Interruptible/Curtailable (IS/CS) customers, reasons include economic (shut down of all or part of business), and the loss of power to their operations did not justify the savings. One IS customer requesting disconnection from the program recently, Agere Systems, Inc., left the state several years ago, and the customer buying the operations elected to convert to a commercial development not suited to non-firm participation. Marion County Public Schools requested removal of 11 elementary schools from the IS-1 rate in 2010 while continuing middle and high school participation.

Overall, the Interruptible, Curtailable and Load Management Programs provide a cost-effective means to ensure the integrity of capacity and reliability to serve customer load. Value to the customer is confirmed by the lack of attrition noted in these programs.

8. In both the 2009 (p. 21) and 2010 (p. 41) reviews of the utilities Ten-Year Site Plans, the Commission has stated that, "...in an era of rising rates, utilities should study all options available to mitigate price increases, including possible modification of current planning criteria." Please provide and discuss any such studies that have been performed, including those that demonstrate the benefit of maintaining the company's current level of planning reserve. If no such studies have been conducted, please describe and explain the reason(s).

RESPONSE: PEF is regularly involved in studies and other exercises with the goal of identifying strategies to mitigate expected or potential price increases. PEF continues to evaluate our fleet needs in the context of overall reliability for which planning criteria is only one element. Numerous other factors including the reliability and sustainability of demand side programs, transmission constraints including voltage and frequency control, and the availability of market power in the short and long term enter into the reliability evaluation.

As a part of the Ten-Year Site Plan process, PEF conducts a full review of significant factors affecting fleet operations, costs, and reliability. This data is used to develop a plan which is optimized to provide the lowest cost service to our customers while maintaining our standard of reliability. PEF also conducts a

variety of interim reviews and scenarios to evaluate the cost impact of fuel price movements, potential economic power purchases, changes to fleet or unit configurations and other options to control costs and customer price.

9. For the next planned generating unit identified in the company's 2011 Ten-Year Site Plan, please provide the estimated annual value of deferral for each year for five years. As part of this response, identify which unit is capable of being deferred, and what potential impacts this deferral would have on any pre-existing contracts or purchases.

RESPONSE: In accordance with the FPSC Rule 25-17.0832(6)(a) regarding Qualifying Facilities/Renewable Generators, PEF used the same value of deferral methodology used in PEF's 2011 Standard Offer for the next planned generating unit. This method determines the value of deferral for the capital and fixed O&M of the avoided unit.

Unit: Undesignated 2020 CT

Year	2020	2021	2022	2023	2024	2025
Months	7	12	12	12	12	5
Value of Deferral Rate ($/kW-month)	5.69	5.80	5.92	6.04	6.16	6.28
MW	177.5	177.5	177.5	177.5	177.5	177.5
Value of Deferral ($000)	7,070	12,354	12,610	12,865	13,121	5,574

There are no other generating units in PEF's TYSP that are capable of being deferred. Any deferral of the 2020 undesignated CT will not have any effect on PEF's pre-existing QF purchase contracts.

10. Please explain or describe the impact(s) of having an operating capacity that was reduced from current levels by 5% during the two previous peak seasons (Jan/Feb 2011, and July/Aug 2010).

RESPONSE: During the two referenced time periods, PEF was able to meet its capacity needs through a combination of its own native generation resources, some use of demand side management, and with market purchases as needed.

11. Has PEF evaluated the implementation of a minimum generation-only requirement?

    a) If yes, what is the status of PEF's evaluation?

    b) What does PEF believe is an appropriate minimum generation-only requirement?

RESPONSE: PEF has not specifically studied the implementation of a minimum generation only requirement. As with overall planning criteria, PEF believes that each utility has unique needs in this area and that the specifics of these needs may change over time. PEF believes that generation supply reserves need to be capable of covering the loss of the system's largest unit, but PEF also believes that this reserve should be evaluated in light of transmission constraints, unit flexibility and starting response, import and export capabilities, availability of market power and a range of related factors that impact the overall system reliability.

12. Please discuss whether any renewable projects in Florida could have a potential impact on North Carolina's Renewable Portfolio Standard, such as through the sale of renewable energy credits.

RESPONSE:

Any REC generated and verified in Florida could generally be sold in the NC REC market. However, renewable energy providers in Florida that own RECs must compete with all other REC markets across the United States as a prudent, least cost out-of-state REC purchase option for NC electric suppliers. Additionally, only 25% of the NC Electric Public Utility's REPS requirement can come from out-of-state RECs.