### **Diamond Williams**

100160-EG

From:

Tibbetts, Arlene [Arlene.Tibbetts@pgnmail.com]

Sent:

Monday, October 04, 2010 4:47 PM

To:

Filings@psc.state.fl.us

Cc:

Katherine Fleming; Jennifer Crawford; 'vkaufman@kagmlaw.com'; 'jmoyle@kagmlaw.com';

'jmcwhirter@mac-law.com'; 'George@cavros-law.com'; 'jbrew@bbrslaw.com';

'ataylor@bbrslaw.com'; Triplett, Dianne; Burnett, John

Subject:

E-service: PEF Supplemental Responsees to Staff 6th Data Request - Dkt# 100160-EG

Attachments: PEF's Supplemental Response to Staff's 6th Data Request.pdf

This electronic filing is made by:

Dianne Triplett
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In Re: PEF's Petition for Approval of Demand-Side Management Plan

On behalf of Progress Energy Florida

Consisting of 9 pages

The attached document for filing is: PEF's Supplemental Response to Staff's 6<sup>th</sup> Data Request

DOCUMENT NUMBER-DATE

FPSC-COMMISSION CLERK



October 4, 2010

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

Re:

Docket 100160-EG

PEF's Petition for Approval of Demand-side Management Plan

Response to Staff's 6<sup>th</sup> Data Request (Nos. 1-13)

Dear Ms. Cole:

Enclosed for filing is the original and 5 copies of PEF's Supplemental Response to Staff's 6th Data Request in the above-referenced docket. PEF provided responses to questions 1 through 11a on Friday, October 1, 2010. This supplemental response represents the remaining responses to Staff's 6<sup>th</sup> Data Request.

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

Jannom. Lyloto

Sincerely,

Dianne M. Triplett

DMT/emc

- 11. Please refer to Attachment A, which is a list of certain programs and measures that staff has identified as having incentive/rebate levels that are greater than customer costs, based on PEF's Response to Staff's First Data Request, No. 9.
  - a. Please recalculate the "residential rate impact" when the incentive/rebate associated with each measure is capped at no greater than customer costs for the same measure and complete Table 1 on Attachment B.
  - b. Please recalculate the "percentage of total ECCR rate" of all programs when the incentive/rebate associated with each measure is capped at no greater than customer costs for the same measure and complete Table 2 on Attachment C.

## RESPONSE:

a.

Year Current		ECCR Revenue Requirement	Rate Impact (\$/Mo.)	% Increase
		\$86,501,449	\$3.24	
	2010	\$176,015,450	6.36	196
	2011	\$192,237,981	7.04	11
	2012	\$237,103,790	8.51	21
	2013	\$307,753,467	10.91	28
Projected	2014	\$353,707,293	12.64	16
	2015	\$495,396,293	17.65	40
	2016	\$594,684,173	21.00	19
	2017	\$715,076,132	24.96	19
	2018	\$812,320,680	28.02	12
	2019	\$876,948,768	30.15	88

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	P	ercentage of Tota	I ECCR Rate				
			% Total Goal		Net B	enefits	
		Sum	Win	Ann	E-TRC	E-RIM	ECCR
Program Name	Type	(%)	(%)	(%)	\$000	\$000	(%)
Energy Management	RES	9.45	22.00	0.00	7,312,911	139,704	18.6%
Technical Potential	RES	31.53	15.32	50.55	136,709	-964,803	34.4%
Home Energy Improvement	RES	21.00	35,98	17.56	95,141	-191,244	16.2%
Interruptible Service	C/I	0.27	0.31	0.00	6,000	4.872	3.8%
Residential Education	RES	7.04	4.78	8.97	84,825	-107,844	5.2%
Business Energy Response	C/I	8.57	4.20	5.02	206.998	21,865	3.7%
Better Business	C/I	6.23	2.22	7,51	8,952	-55,662	3.9%
C/I New Construction	C/I	2.29	0.85	2.09	2.058	-19,198	1.6%
New Construction	RES	2.64	3.40	2.42	17,306	-22,928	2.3%
Neighborhood Energy Saver	RES	3.27	2.67	2.81	7,208	-47,897	2.3%
Commercial Education	C/I	1.11	0.55	0.81	3,060	-6.537	0.3%
Standby Generation	C/I	3.57	3.85	0.00	79,161	68,926	0.5%
Solar WH with Energy Management	RES	1.01	2.10	0.58	9.967	5.390	0.2%
Curtailable Service	C/I	0,17	0.27	0.00	4,450	3,787	0.2%
Low Income Weatherization	RES	0.44	0.72	0.37	2,228	-5,571	0.4%
Commercial Green Building	C/I	1.06	0.70	0,90	363	-9,515	0.4%
Commercial Solar Photovoltaic	СЛ	0.07	0.00	0.14	-5,500	-3,690	0.1%
Residential Solar Photovoltaic	RES	0.06	0,00	0.12	-6,889	-4,292	0.1%
Business Energy Saver	C/I	0.20	0.06	0.11	430	-917	0.1%
Photovoltaics for Schools	C/I	0.02	0.00	0.04	-2,724	-6,232	0.3%
Solar WH for Low Income Res Customers	RES	0.00	0.00	0.01	-194	-546	0.0%
Business Energy Check (Audit)	C/I	N.A.	N.A.	N.A.	N.A.	N.A.	1.0%
Innovation Incentive	C/I	N.A.	N.A.	N.A.	N.A.	N.A.	0.1%
Research and Demonstration	C/I	N.A.	N.A.	N.A.	N.A.	N.A.	0.0%
Home Energy Check (Audit)	RES	N.A.	N.A.	N.A.	N.A.	N.A.	2.3%
Technology Development	ALL	N.A.	N.A.	N.A.	N.A.	N.A.	0.4%
Qualifying Facilities	ALL	N.A.	N.A.	N.A.	N.A.	N.A.	0.2%

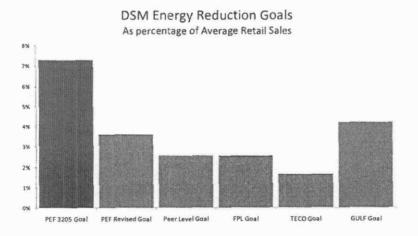
- 12. Please complete the tables (Attachment D) for each of the incentive level scenarios listed below, for each measure within the Technical Potential Program. Please also indicate any changes to participation rates as a result of changes to incentive levels.
  - Incentive levels are as proposed in PEF's filings.
  - b. Incentive levels are limited to 100% of Measure Cost.
  - c. Incentive levels are limited to 75% of Measure Cost.
  - d. Incentive levels are limited to 50% of Measure Cost.

### RESPONSE:

PEF is currently developing two new revised plans to file with the Commission, pursuant to the Commission's vote during the September 14<sup>th</sup> Agenda Conference. The first plan will comprise a portfolio of programs and measures to meet approximately 50% of the original Commission goal. The second plan will address the Commission's original goal of 3,205 GWH on an annual basis.

## Revised Goal Scenario (50% reduction of original Goal)

As recognized at the Commission agenda conference, and as demonstrated in the graphs circulated by PEF during that conference, PEF's goals are not in parity with the levels established for the other IOUs in Florida. PEF noted that, based on the information presented in its program plan filing, eliminating the impacts attributable to the Technical Potential Program ("TPP") would reduce the overall GWH by approximately 50%, enough to achieve closer parity with the other utilities. This suggestion, however, was merely a high level method of subtracting the impacts of one program to achieve that closer, more reasonable parity. Further insight into the potential drivers behind those differences was provided in PEF's response to Item #1 of this data request. Reducing PEF's goals by approximately 50% would bring PEF's goals more in line with those of Gulf's, yet still higher than goals set for FPL and TECO. As indicated in PEF's response to Item #1, a true "peer level" goal for PEF based on customer segment energy would be 1,126 GWh. The following graph illustrates the differences between the scenarios described above.



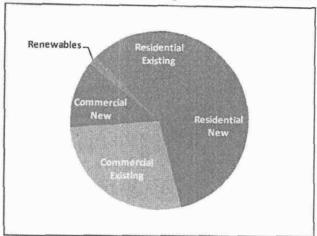
The next question, then, is how might PEF best achieve a lower, more appropriate goal. At the agenda conference, PEF did not mean to imply that it should simply remove all the measures included in the TPP. Rather, PEF intends to develop a new plan that leverages the best combination of measures and programs to meet the "revised goal" scenario in the most cost-effective manner.

It is unlikely that PEF will maintain a bundled Technical Potential Program as presented in PEF's March 30, 2010 filing since any new plan designed to meet the revised goal scenario will no longer be heavily leveraged by the need to achieve the full technical potential of certain measures. The revised goal scenario more closely represents what PEF estimates to be the "achievable potential" for all measures, including those with less than 2 year paybacks. While the design of this new plan is in the very early stages, PEF anticipates the following actions for maintaining a least-cost approach to meet this type of goals revision.

- 1. Reduce program costs PEF anticipates that it can significantly reduce program costs for most efficiency programs by means of lowering incentives and other program costs that were and are necessary for meeting the original 3,205 GWH goal. PEF also believes the cost reductions will outweigh the reduced number of projected participants and savings in the respective programs, as the Company seeks to reverse the exponential cost increases required to meet the extremely high adoption rate that would be required under the 3,205 GWH goal. PEF is currently assessing the penetration rates as a result of reduction of the incentive costs referenced above.
- Maintain currently offered energy-efficiency programs PEF will maintain all currently operating
  energy efficiency programs included in its March 30, 2010 DSM Plan filing, with the necessary
  modifications to best meet the revised goal (e.g., incentive levels, participation projections and
  other program costs as referenced above).
- 3. <u>Maintain capacity-based demand response programs</u> PEF intends to maintain its successful history of promoting capacity focused programs that cost effectively defer future generating units.
- 4. Continue to include selected new programs previously proposed In its March 30, 2010 DSM Plan filing, PEF proposed the following 5 new programs; Residential Education, Business Energy Saver, Commercial Education, Commercial Green Building New Construction, and Business Energy Response Program. These proposed programs are likely to be retained in the new plan with potential modifications. The new plan will also include the Demand Side Renewable Portfolio approved by the Commission during the September 14<sup>th</sup> Agenda Conference.
- Retain certain TPP measures PEF has identified certain TPP measures that it will incorporate
  into its Home Energy Improvement program. Remaining TPP measures other than those
  referenced below will be maintained as part of its low-income and informational education
  initiatives.
- 6. <u>Include new stand-alone programs</u> PEF has identified three (3) new stand-alone programs, some of which were previously embedded as measures within its Technical Potential Program: Residential Lighting Program, Appliance Recycling Program, and Home Comparison Report Program. PEF has selected these elements of the original TPP program due to their anticipated cost effectiveness and potential savings impact over the 10-year planning period.

The following graph and table provides a preliminary view of the potential mix of programs and their relative contribution towards meeting the total GWh of this Revised Goal Scenario.

Share of Total GWh Savings in PEF Revised Plan



PEF DSM Programs	GWh Share
Residential Existing Programs	25-30%
Home Energy Check	
Home Energy Improvement	
Residential New Construction	
Neighborhood Energy Saver	
Low Income Weatherization Ass	istance
Residential Energy Management	
Residential New Programs	28-34%
Residential Education	
Residential Lighting	
Appliance Recycling	
Home Comparison Report	
Commercial Existing Programs	25-30%
Business Energy Check	
Better Business	
Commercial/Industrial New Con	struction
Innovation Incentive	
Standby Generation	
Curtailable Service	
Interruptible Service	
Commercial New Programs	10-15%
Business Energy Saver	
Commercial Education	
Commercial Green Building New	Construction
Business Energy Response	
Renewables	2%
Solar Water Heating for Low Inco	me
Solar Water Heating with Energy	Management
Residential Solar Photovoltaic	
Commercial Solar Photovoltaic	
Photovoltaic for Schools	
Research & Demonstration	

## 3,205 GWH Goal (revised plan to meet goal on annual basis)

To meet the 3,205 GWH goal on an annual basis, PEF's program mix and overall 10-year cost will look very similar to its original plan filed on March 30, 2010, with the exception that this plan will result in substantially higher costs in earlier years resulting in substantially higher rate impacts (approximately 500%) almost immediately due to the elimination of the ramp-up approach for implementing TPP measures, as it will be necessary to achieve full penetration of such measures even in the near-term. In addition, PEF will have to maximize participation levels for nearly every program, even though it is unlikely that such levels can be attained. Thus, overall incentive levels and program costs over the 10-year planning period will likely resemble PEF's original plan.

Penetration rates widely vary among measures within any DSM portfolio. This is not surprising as participation within the program is impacted by a number of variable factors including technology maturity, electricity rates, awareness, and competitive technology prices. The table below provides a range of expected market penetration rates that attempt to provide more clarity into PEF's 3,205 GWH Goal plan.

Program Type	Penetration Rates
Technical Potential Program	100%
Existing Residential Programs	40% - 50%
New Residential Programs	30% - 40%
Existing Commercial Programs	10% - 20%
New Commercial Programs	20% - 50%

It should be noted that the table above represents the projected ratio of cumulative participating customers to the eligible customer pool at the program level. These values do not represent measure-specific penetration rates. In other words, if a program has multiple measures, the values above represent the total number of projected cumulative measures within the program divided by the eligible number of participating customers. Thus, the specific measure-level penetration rates will be lower than those provided above.

Additionally, PEF reiterates the 100% penetration projection for the Technical Potential Program is not supported by any achievable study. However, such an assumption was required in order to meet the Commission's 3,205 GWh goal.

Relative to PEF's original DSM Plan, maintaining this goal level, and requiring that it be met on an annual basis, simply shifts the customers rate impacts from the long-term to the short-term, resulting in an immediate and significant increase in ECCR rates. (See table below). This plan would have an immediate, detrimental rate impact to PEF's customers relative to the other Florida IOU's within the Commission's authority.

### Preliminary Rate Impacts

The following chart contrasts the rate impacts of the two revised plans for a residential customer using 1,200 kWh per month. As indicated above, PEF is in the early stages of developing these new plans. Thus, the cost estimates and resulting rate impacts presented below are preliminary and subject to change.

Since PEF anticipates that program mix and overall 10-year costs for the 3,205 GWh Goal plan will look very similar, the rate impacts reflected in PEF's March 30,2010 DSM Plan filing (Table II-5) can serve as reasonable surrogate. Removal of measure-level incentive costs that exceed participant costs from the surrogate rates for the 3,205 GWh Goal plan would reduce the rates by 1 to 2 cents.

# ECCR Rate Impact for Residential Customer Using 1,200 kWH per month

Year Current (Per Docket 090002)		3,205 GWh Goal Plan (a)	PEF Revised Goal Scenario	
		\$3.24	\$3.24	
Projected	2011	\$17.40	\$5.00 - \$5.50	
	2012	\$15.42	\$5.50 - \$6.00	
	2013	\$16.75	\$7.00 - \$7.50	
	2014	\$18.10	\$9.00 - \$9.50	
	2015	\$20.41	\$10.00 - \$10.50	
	2016	\$19.42	\$9.50 - 10.00	
	2017	\$18.62	\$9.00 - \$9.50	
	2018	\$17.24	\$8.00 - \$8.50	
	2019	\$16.34	\$7.00 - \$7.50	
	9-Year Avg	\$17.48	\$7.50 - \$8.00	

<sup>(</sup>a) 2011 - 2019 from Table II-5 of PEF's March 30, 2010 DSM Plan filing.

Docket No.: 100160-EG PEF's Response to Staff's 6th Data Request (Nos.1-13)

Please complete the tables (Attachment D) for each of the participation rate scenarios listed below, for each measure within the Technical Potential Program. Please also indicate the level of incentive necessary to reach the indicated participation rate.

- a. Participation rates are as proposed in PEF's filings.
- b. Participation rates are limited to 75% of eligible customers.
- c. Participation rates are limited to 50% of eligible customers.
- d. Participation rates are limited to 25% of eligible customers.

**RESPONSE:** Refer to PEF's response to Item 12