State of Florida

Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: May 12, 2011

TO: Office of Commission Clerk (Cole)

FROM: Division of Regulatory Analysis (Lewis, Brown, Clemence, Ellis, Garl, Gilbert, Harlow)
Office of the General Counsel (Harris, Tan)

RE: Docket No. 100160-EG – Petition for approval of demand-side management plan of Progress Energy Florida, Inc.

AGENDA: 05/24/11 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\RAD\WP\100160.RCM.05-24-11.DOC

Case Background

The Commission, as required by the Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80 through 366.85 and 403.519, Florida Statutes (F.S.), adopted annual goals for seasonal peak demand and annual energy consumption for the FEECA Utilities. These include Florida Power & Light Company (FPL), Progress Energy Florida, Inc. (PEF), Tampa Electric Company (TECO), Gulf Power Company (Gulf), Florida Public Utilities Company (FPUC), JEA, and Orlando Utilities Commission (OUC).

Pursuant to Rule 25-17.008, Florida Administrative Code (F.A.C.), in any conservation goal setting proceeding, the Commission requires each FEECA utility to submit cost-

effectiveness information based on, at a minimum, three tests: (1) the Participants test; (2) the Rate Impact Measure (RIM) test, and (3) the Total Resource Cost (TRC) test. The Participants test measures program cost-effectiveness to the participating customer. The RIM test measures program cost-effectiveness to the utility's overall rate payers, taking into consideration the cost of incentives paid to participating customers and lost revenues due to reduced energy sales that may result in the need for a future rate case. The TRC test measures total net savings on a utility system-wide basis. In past goal setting proceedings, the Commission established conservation goals based on measures that pass both the Participants test and the RIM test.

The 2008 Legislative Session resulted in several changes to the FEECA Statutes, and the Commission's goal-setting proceeding was the first implementation of these modifications. By Order No. PSC-09-0855-FOF-EG,[1] the Commission established annual numeric goals for summer peak demand, winter peak demand, and annual energy conservation for the period 2010 through 2019, based upon an unconstrained Enhanced-Total Resource test (E-TRC) for the investor-owned utilities (IOUs). The E-TRC test differs from the conventional TRC test by taking into consideration the estimated additional costs imposed by the potential regulation of greenhouse gas emissions. In addition, the numeric impacts of certain measures with a payback period of two years or less were also included in the goals. Further, the IOUs subject to FEECA were authorized to spend up to 10 percent of their historic expenditures through the Energy Conservation Cost Recovery (ECCR) clause as an annual cap for pilot programs to promote solar water heating (Thermal) and solar photovoltaic (PV) installation.

On January 12, 2010, PEF filed a Motion for Reconsideration of the Commission's decision in Docket No. 080408-EG. Order No. PSC-10-0198-FOF-EG[2] granted, in part, PEF's reconsideration which revised PEF's numeric goals to correct a discovery response that caused a double-counting error. On March 30, 2010, PEF filed a petition requesting approval of its Demand-Side Management (DSM) Plan pursuant to Rule 25-17.0021, Florida Administrative Code (F.A.C.).

On May 7, 2010, the Florida Industrial Users Group (FIPUG) was granted leave to intervene by the Commission.[3] White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs (PCS Phosphate) was granted leave to intervene on June 18, 2010.[4] The Southern Alliance for Clean Energy (SACE) was granted leave to intervene on August 9, 2010.[5] The Florida Solar Energy Industry Association (FlaSEIA) was granted leave to intervene on

[1] See Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No. 080408-EG, In re: Commission review of numeric conservation goals (Progress Energy Florida, Inc.).
[2] See Order No. PSC-10-0198-FOF-EG, issued March 31, 2010, in Docket No. 080408-EG, In re: Commission review of numeric conservation goals (Progress Energy Florida, Inc.).
[3] See Order No. PSC-10-0289-PCO-EG, issued May 7, 2010, in Docket No. 100160-EG, In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc. (FIPUG)
[4] See Order No. PSC-10-0399-PCO-EG, issued June 18, 2010, in Docket No. 100160-EG, In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc. (PCS Phosphate)
[5] See Order No. PSC-10-0498-PCO-EG, issued August 9, 2010, in Docket No. 100159-EG, In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc. (SACE)

August 11, 2010.[6] Wal-Mart Stores East, LP, and Sam's East, Inc. (Walmart) was granted leave to intervene on August 18, 2010.[7]

On July 14, 2010, the SACE filed comments on the FEECA Utilities' DSM Plans. These comments were amended on August 3, 2010, to include comments regarding FPUC. No other intervenors filed comments. On July 28, and August 12, 2010, PEF and Gulf, respectively, filed responses to SACE's comments.

On September 1, 2010, staff filed a recommendation, noting that the DSM Plan filed by PEF on March 30, 2010, did not meet the annual goals the Commission set for PEF in Order No. PSC-10-0198-FOF-EG. On October 4, 2010, the Commission issued Order No. PSC-10-0605-PAA-EG approving six solar pilot programs but denying the remainder of PEF's petition and directing the Company to modify its DSM Plan to meet the annual goals originally set by the Commission. During the discussion at the September 14, 2010, Commission Conference, the Commission also encouraged PEF to provide an alternative DSM Plan to reduce the customer rate impact in addition to the DSM Plan to meet the Commission's original goals. Therefore, on November 29, 2010, the Company filed two DSM Plans: an Original Goal Scenario DSM Plan and a Revised Goal DSM Plan. For clarity and ease of reference, the Original Goal Scenario DSM Plan, which features programs designed to meet the full demand and energy savings goals, will be referred to throughout the remainder of this recommendation as the "Compliance Plan" and the Revised Goal DSM Plan, which has a lower rate impact, but reduced projected savings, will be referred to as the "Rate Mitigation Plan."

On December 22, 2010, SACE filed a letter offering comments on the DSM plans submitted by PEF and several of the other IOUs. The letter references the August 3, 2010, filing by SACE relating to the PEF's initial DSM filing, and updates several issues relating to the Company's new DSM Plans. On April 25, 2011, SACE filed another letter offering similar comments and recommendations with regard to PEF's new DSM Plans filed on November 29, 2010, and FPL's modified and alternate DSM Plans filed March 25, 2011. On May 9, 2011, SACE filed a letter providing its comparison of PEF's proposed DSM plans filed on November 29, 2010, with Progress Energy Carolina's DSM/energy efficiency cost recovery rider application filed on May 2, 2011, with the South Carolina Public Service Commission.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.85, F.S.

[6] See Order No. PSC-10-0509-PCO-EG, issued August 11, 2010, in Docket No. 100160-EG, In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc. (FlaSEIA)
[7] See Order No. PSC-10-0529-PCO-EG, issued August 18, 2010, in Docket No. 100160-EG, In re: Petition of approval of demand-side management plan of Progress Energy Florida, Inc. (Walmart)

Discussion of Issues

Issue 1: Should the Commission approve the Compliance Plan filed by PEF on November 29, 2010?

Recommendation: No. The Commission should not approve the Compliance Plan because it is estimated to have an undue rate impact through the Energy Conservation Cost Recovery (ECCR) clause. (Lewis, Ellis, Harris)

Staff Analysis: By Order No. PSC-09-0855-FOF-EG, the Commission established annual goals for the FEECA Utilities for the period 2010 through 2019. The annual goals for PEF were modified to eliminate an error caused by an incorrect discovery response, and were revised by Order No. PSC-10-0198-FOF-EG. PEF's approved goals are divided into residential and commercial/industrial goals, with each of these further subdivided into three categories: summer peak demand, winter peak demand, and annual energy.

PEF's initial filing submitted March 30, 2010, was insufficient to meet several of the Commission's annual goals in multiple categories. PEF was directed by the Commission, in Order No. PSC-10-0605-PAA-EG, to file a modified DSM Plan which would comply with the goal-setting Order. However, the Compliance Plan PEF filed on November 29, 2010, still failed to fully meet the goals established by the Commission. Specifically, PEF's filing failed to achieve the annual and cumulative summer and winter demand (MW) goals for the commercial sector. Consequently, staff sent a data request to PEF requesting an explanation for PEF's failure to comply with the Commission's Order.[8] PEF responded that it had inadvertently developed the portfolio of commercial programs in the Compliance Plan based upon an estimate of the commercial summer and winter demand (MW) goals "at-the-meter" rather than targeting the actual Commission-established demand goals which are "at-the-generator." This resulted in the assumed commercial demand savings being less than the Commission's established demand goals. PEF modified anticipated participation levels for measures within its Better Business program which were sufficient to eliminate the deficiency. With the provision of these modifications, PEF's Compliance Plan satisfies the Commission's Order and features programs designed to fully meet the Commission-established demand and energy savings goals.

As shown in Tables 1 and 2, based on PEF's current estimates and projections, the Company's Compliance Plan would meet or exceed the Commission-established annual demand and energy goals for the residential and commercial/industrial sectors. The Compliance Plan represents a projected achievement greater than 100 percent for each category, including 117.8 percent for summer peak demand, 117.6 percent for winter peak demand, and 106.8 percent for annual energy.

[8] Staff's 10th Data Request to PEF, question number 1 (a – d), issued December 9, 2010.

Table 1 – Comparison of Residential Goals to PEF's Compliance Plan

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Commission Goals	PEF Compliance Filing	Commission Goals	PEF Compliance Filing	Commission Goals	PEF Compliance Filing
2011	81.5	107.4	86.8	103.8	267.6	286.4
2012	84.5	108.0	90.8	107.5	276.7	295.5
2013	86.5	108.8	93.5	111.4	282.7	301.5
2014	88.4	108.5	96.2	113.1	288.8	307.6
2015	93.8	117.5	100.9	124.1	309.9	328.7
2016	102.3	118.7	111.7	123.6	297.8	316.6
2017	101.9	118.4	111.1	121.9	291.8	310.6
2018	96.4	111.1	103.6	112.8	279.7	298.5
2019	81.9	100.6	79.1	97.2	270.6	289.4
Sum	**817.2**	**999.0**	**873.7**	**1,015.5**	**2,565.6**	**2,734.7**

Table 2 – Comparison of Commercial/Industrial Goals to PEF's Compliance Plan

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Commission Goals	PEF Compliance Filing	Commission Goals	PEF Compliance Filing	Commission Goals	PEF Compliance Filing
2011	16.2	17.7	5.3	9.9	33.0	33.0
2012	25.5	27.5	11.4	11.4	35.9	43.7
2013	25.9	25.9	11.5	12.9	37.7	40.6
2014	26.4	26.4	11.5	14.0	39.6	42.6
2015	27.6	27.6	11.7	16.7	46.2	47.7
2016	27.1	27.1	11.6	16.4	42.5	46.1
2017	27.0	27.0	11.6	16.4	40.6	45.9
2018	25.7	25.7	11.4	15.9	36.8	42.3
2019	22.3	22.7	11.3	13.2	34.0	34.0
Sum	**223.7**	**227.6**	**97.3**	**126.7**	**346.3**	**375.8**

Compliance Plan Programs

PEF's Compliance Plan includes seven residential programs and ten commercial/industrial programs. One of the residential programs, Technical Potential, is new. Three of the commercial/industrial programs are new: Commercial Green Building, Business Energy Saver, and Business Energy Response. Modifications, such as adding new measures, have been made to most of the programs. The status of each program relative to PEF programs currently in effect is indicated in Table 3. Staff notes PEF's six solar pilot programs are not included in Table 3 as these programs were previously approved by the Commission in Order No. PSC-10-0605-PAA-EG. A description of the programs contained in PEF's Compliance Plan is included in Attachment A.

In reviewing PEF's Compliance Plan, staff analyzed the assumptions made for a variety of the program aspects, including, but not limited to: rebate and incentive levels, participation

rates, program savings, program costs, and avoided costs. Staff issued multiple data requests, and used previously submitted data from the utility's DSM programs and information from the goal-setting docket to examine each category. Overall, staff believes the assumptions are reasonable for use in evaluating PEF's Compliance Plan.

Table 3 – Compliance Plan Programs

Program Name	Program Status
Residential Portfolio	
1. Technical Potential	New
2. Home Energy Improvement	Modified
3. Residential New Construction	Modified
4. Neighborhood Energy Saver	Modified
5. Low Income Weatherization Assistance	Modified
6. Home Energy Check	Modified
7. Residential Energy Management	Existing
Commercial/Industrial Portfolio	
1. Business Energy Check	Modified
2. Commercial Green Building	New
3. Business Energy Saver	New
4. Commercial/Industrial New Construction	Modified
5. Better Business	Modified
6. Innovation Incentive	Modified
7. Business Energy Response	New
8. Interruptible Service	Modified
9. Curtailable Service	Modified
10. Standby Generation	Modified
Renewable Portfolio	
1. Qualifying Facilities	Existing
2. Technology Development	Modified

Changes from PEF's Initial DSM Plan filed March 30, 2010

The Compliance Plan includes all but one of the eight residential programs described in PEF's initial DSM Plan filed March 30, 2010. The Residential Education program is no longer proposed as a stand-alone program but has been combined with the Home Energy Check audit program in the Compliance Plan. The initial DSM Plan filed on March 30 did not attribute energy savings to audit programs. However, because these two programs are combined under the Compliance Plan, savings that would have been attributed to the stand-alone Residential Education program are attributed to the Home Energy Check program. In addition, PEF plans to measure the savings from this program through follow-up surveys to determine what specific conservation actions have been implemented due to completed audits as well as from participant specific data gathered during the audit.

The Compliance Plan includes all but one of the 11 commercial/industrial programs described in PEF's initial DSM Plan filed March 30, 2010. The Commercial Educational Tools program has been combined with the Business Energy Check audit program in the Compliance Plan similar to the manner in which the residential audit and education programs described above were combined.

One of the concerns raised with regard to PEF's initial DSM plan was related to the Technical Potential program. PEF designed the Technical Potential program to capture savings from measures with a less than two-year payback period. In its initial DSM Plan, PEF forecast 100 percent of eligible customers participating in the Technical Potential program by 2019. Staff notes that in its Compliance Plan filing, PEF projects increased customer participation levels in the early years of the program and continues to project 100 percent customer participation by 2019. The Technical Potential program and other programs have been modified in the Compliance Plan by adjusting and redistributing participation levels in order to reflect achievement of annual goals.

Another concern staff raised with regard to PEF's initial plan was that the incentive amounts to be paid for adopting certain measures appeared to exceed the cost of the measure in some programs. Overly high incentive levels could contribute to higher costs being passed on to customers. Staff notes that PEF has capped the incentive levels at no more than 100 percent of the incremental measure cost in the Compliance Plan. This cap does not include the rebate for appliance recycling, which is a flat amount.

Cost Effectiveness

As illustrated in Table 4, all of the programs in the Compliance Plan passed the E-TRC and Participants tests. Programs are determined to be cost-effective if the result of the test yields a ratio greater than 1.00. Although Order No. PSC-09-0855-FOF-EG states E-RIM test results shall be considered in evaluating programs, it does not require programs to pass the E-RIM test. Several types of programs are not evaluated for cost-effectiveness. These include audits, which are mandated by the Commission to be available for ratepayers, and pilot programs, which are designed to gather additional information on conservation measures or methods.

Table 4 - Cost-Effectiveness Test Results by Program – Compliance Plan

Program Name	E-TRC	E-RIM	Participants
Residential Programs			
Technical Potential Program*	1.19	0.47	7.62
Home Energy Improvement	1.63	0.75	2.49
Residential New Construction	1.61	0.77	2.30
Neighborhood Energy Saver	1.69	0.77	2.73
Low Income Weatherization Assistance	1.51	0.77	2.57
Home Energy Check (Audit)	-	-	-
Residential Energy Management	1.79	1.17	9999
Commercial/Industrial Portfolio			
Business Energy Check (Audit)	-	-	-
Commercial Green Building	1.64	0.72	2.70
Business Energy Saver	2.31	0.99	3.40
Commercial/Industrial New Construction	1.56	0.78	2.34
Better Business	2.57	0.85	4.11
Innovation Incentive (Custom)	-	-	-
Business Energy Response	2.58	1.14	9999
Interruptible Service	33.09	4.70	9999
Curtailable Service	78.80	6.26	9999
Standby Generation	59.68	6.95	9999

*Values for Technical Potential program based on PEF's June 4, 2010, response to staff's data request.

Rate Impact

The costs to implement a DSM program consist of administrative, equipment, and incentive payments to the participants, which are recovered by the Company through its ECCR clause. This clause represents a monthly bill impact to customers as part of the non-fuel cost of energy on their bills. As discussed above, if a program passes the E-TRC test it is cost-effective from a system basis. However, utility incentive payments, not included in the E-TRC, are recovered through the utility's ECCR factor and have an immediate impact on customer rates.

Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact but produce savings over time. Table 5 shows the ECCR Expenditures and Rate Impact on a typical residential customer's bill under the Compliance Plan over ten years. The monthly bill impact of PEF's ECCR factor would range from $11.28 in 2011 to $16.52 in 2014, when the Commission is due to revisit the conservation goals as required by Section 366.82(6), F.S.

Table 5 – Estimated Rate Impact of PEF's Compliance Plan (1,200 kWh Residential Bill)

Year	ECCR Component ($/mo)	Estimated Residential Bill ($/mo)	Percent of Bill (% Bill)
2010	$3.24	$154.58	2.10%
2011	$11.28	$162.62	6.94%
2012	$12.60	$163.94	7.69%
2013	$14.45	$165.79	8.72%
2014	$16.52	$167.86	9.84%
2015	$19.72	$171.06	11.53%
2016	$19.56	$170.90	11.45%
2017	$20.00	$171.34	11.67%
2018	$19.03	$170.37	11.17%
2019	$18.20	$169.54	10.73%

Residential Energy Management Program

A notable program in PEF's DSM Plans is the Residential Energy Management program. The program utilizes load control switches to reduce peak demand (more-so during the winter period). The program was initially established in 1981, last being modified in 2007, and has approximately 400,000 participants with a total of 520,000 control switches. A majority (70 percent) of these switches are analog devices which are no longer manufactured, and the remainder (30 percent) are digital switches. PEF states that its current switches require replacement due to reduced functionality or operational limitations. The manufacturer has stated that it intends to only support its digital load control switches and new two-way smart grid-ready switches.

As a result, PEF intends to replace its load control switches with digital two-way smart grid-ready switches. This investment is not related to the goals, and is required to retain existing benefits only. Staff therefore considers that expenditures associated with the upgrading of switches is not the result of the Commission's increased goals for PEF, but rather an activity that would have been engaged in regardless of the results of the goal-setting proceeding. Total program costs are estimated at $844.2 million, with approximately $325.6 million spent on customer incentives and O&M activities, and the remaining $518.6 million on upgrading the load control devices to digital two-way smart grid-ready load control switches. This results in a cost of approximately $1,000 per load control switch for existing customers.

Staff believes that because these costs were included in the Residential Energy Program, the rate impact of PEF's Compliance Plan that is associated with the Commission's goals is overstated by $518.6 million. Staff removed this amount and believes a more accurate estimation of the rate impact of the Compliance Plan is shown on Table 6 below. The removal of the switch replacement costs lowers the rate impact to an average of $14.83 over nine years. Staff notes the Commission will have the opportunity to review planned and actual expenditures associated with this program during the ECCR clause proceeding, where PEF must still demonstrate that expenditures in implementing this DSM program are reasonable and prudent.

Table 6 - Estimated Rate Impact of PEF's Compliance Plan Associated with Goals (1,200 kWh Residential Bill)

Year	ECCR Component	Estimated Residential Bill	Percent of Bill
	($/mo)	($/mo)	(% Bill)
2010	$3.24	$154.58	2.10%
2011	$11.17	$162.51	6.88%
2012	$12.59	$163.93	7.68%
2013	$13.31	$164.65	8.08%
2014	$14.28	$165.62	8.62%
2015	$16.34	$167.68	9.74%
2016	$16.20	$167.54	9.67%
2017	$16.94	$168.28	10.06%
2018	$16.46	$167.80	9.81%
2019	$16.20	$167.54	9.67%

Staff also compared the rate impact of PEF's proposed plans with the rate impact of the DSM plans the Commission has approved for two other investor-owned utilities, Gulf and TECO.[9] FPL's plan has not been approved at this writing. Table 7 shows that the ECCR charge resulting from PEF's Compliance Plan is much higher than that of other approved plans. Even when the costs of the load control switches charged to the Residential Energy Management program are removed, leaving only those costs associated with the increased goals, the rate impact of PEF's Compliance Plan remains disproportionately high. For example, by the year 2014, when the Commission is scheduled to reset conservation goals, the costs passed on to PEF's customers in an average monthly bill are projected to be over twice as high as those of Gulf and TECO.

Table 7 – Comparison of Rate Impact to Florida Utilities (1200 kWh Residential Bill)

Year	GULF		TECO		PEF	
	Approved Plan		Approved Plan		Compliance Plan Associated with Goals	
	($/mo)	(% Bill)	($/mo)	(% Bill)	($/mo)	(% Bill)
2010	$1.30	0.87%	$3.05	2.22%	$3.24	2.10%
2011	$5.19	3.48%	$3.53	2.57%	$11.17	6.88%
2012	$5.43	3.64%	$3.61	2.63%	$12.59	7.68%
2013	$5.74	3.84%	$3.79	2.76%	$13.31	8.08%
2014	$6.36	4.26%	$3.89	2.83%	$14.28	8.62%
2015	$7.03	4.71%	$3.88	2.83%	$16.34	9.74%
2016	$6.70	4.49%	$3.83	2.79%	$16.20	9.67%
2017	$6.14	4.11%	$3.75	2.73%	$16.94	10.06%
2018	$5.83	3.90%	$3.70	2.70%	$16.46	9.81%
2019	$5.47	3.66%	$3.65	2.66%	$16.20	9.67%

[9] TECO's DSM Plan was approved pursuant to Order No. PSC-11-0025-CO-EG, issued January 12, 2011. Gulf's DSM Plan was approved pursuant to Order No. PSC-11-0114-PAA-EG, issued February 11, 2011.

The increase to an average residential customer's monthly bill that would result from implementing PEF's Compliance Plan, even without the load control switches, is still disproportionately high (Table 7). Florida Statutes provide a remedy for addressing such cases of conservation plans having an undue impact on customer rates. Section 366.82(7), F.S., states "In approving plans and programs for cost recovery, the commission shall have the flexibility to modify or deny plans or programs that would have an undue impact on the costs passed on to customers." Due to the significant rate impact associated with the initial filing, the Commission encouraged PEF to submit an alternative DSM Plan to lessen the rate impact over the planning period. This resulted in the Rate Mitigation Plan, which is discussed in Issue 2.

Program Standards

Most programs have an administrative component that describes the eligibility requirements, billing practices, etc. Historically, this information is provided to staff for administrative approval after a program has been approved by the Commission. If the Commission denies staff's recommendation and approves the Compliance Plan, staff recommends that PEF file program standards for all its programs within 30 days of the Consummating Order in this docket. In order to provide enhanced energy savings opportunities to its customers without further delay, PEF should implement new or modified programs as soon as possible upon approval of program standards. Existing programs for which no modifications have been proposed may continue without interruption.

Conclusion

Although PEF's Compliance Plan appears to be cost-effective over the life of the programs using the E-TRC test, the implementation of the Compliance Plan would result in increases to residential customer bills that appear to be both excessive and disproportionately high compared with other investor-owned utilities. The Commission has the authority to modify or deny a plan that would have an undue impact on costs passed on to customers per Section 366.82(7), F.S. Based upon undue rate impact, the Commission should not approve the Compliance Plan.

Issue 2: Should the Commission approve the Rate Mitigation Plan filed by PEF on November 29, 2010?

Recommendation: Yes. The Commission should approve the Rate Mitigation Plan with the clarification that approval does not constitute a revision of the goals the Commission previously set for PEF in Order No. PSC-10-0198-FOF-EG. While the Rate Mitigation Plan is not projected to meet all the numeric conservation goals set by the Commission, the reduction in rate impact compared to the Compliance Plan is considerable. PEF should strive to meet the original goals set by the Commission through the implementation of the programs described below and through education and diligent monitoring and analysis of program participation and results on an ongoing basis. Pursuant to Section 366.82(8), F.S., PEF may be eligible for a financial reward should it exceed the Commission's established goals. However, for purposes of determining financial penalties, PEF's achievements should be evaluated against the demand and energy savings projections contained in the Rate Mitigation Plan.

Commission approval of PEF's Rate Mitigation Plan will allow PEF to file for cost recovery. However, PEF must still demonstrate, during the Energy Conservation Cost Recovery clause proceeding, that expenditures in implementing its DSM programs are reasonable and prudent. PEF should be required to file program standards for administrative approval within 30 days of the Consummating Order in this docket. (Lewis, Ellis, Harris)

Staff Analysis: By Order No. PSC-09-0855-FOF-EG, the Commission established annual goals for the FEECA Utilities for the period 2010 through 2019. The annual goals for PEF were modified to eliminate an error caused by an incorrect discovery response, and were revised by Order No. PSC-10-0198-FOF-EG. PEF's approved goals are divided into residential and commercial/industrial goals, with each of these further subdivided into three categories: summer peak demand, winter peak demand, and annual energy.

The Commission directed PEF in Order No. PSC-10-0605-PAA-EG, to file a modified DSM Plan which would be in compliance with the goal-setting Order. The resulting DSM Plan is the Compliance Filing, discussed in Issue 1. In addition, the Commission encouraged PEF to also submit an alternative DSM Plan which would lessen the rate impact over the planning period. This resulted in the Rate Mitigation Plan, which does not fully meet the goals, but substantially reduces rate impact.

The Company's Rate Mitigation Plan does not project achievement of the Commission's approved goals for residential customers. Residential goal achievement is forecast at less than 70 percent for each category, including 64.4 percent for summer peak demand, 69.8 percent for winter peak demand, and 48.8 percent for annual energy. However, goals for commercial/industrial customers are projected to be achieved or exceeded in each category under the Rate Mitigation Plan. Even so, combining the savings from the residential and commercial/industrial categories fails to result in the Rate Mitigation Plan meeting the goals set by the Commission. The projected demand and energy savings stated in the Rate Mitigation Plan, along with the goals approved by the Commission in Order No. PSC-10-0198-FOF-EG, are summarized in Tables 8 and 9.

Table 8 - Comparison of Residential Goals to PEF's Rate Mitigation Plan

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Commission Goals	PEF Rate Mitigation Filing	Commission Goals	PEF Rate Mitigation Filing	Commission Goals	PEF Rate Mitigation Filing
2011	81.5	42.3	86.8	59.6	267.6	98.9
2012	84.5	43.5	90.8	61.3	276.7	104.9
2013	86.5	43.5	93.5	61.9	282.7	102.7
2014	88.4	44.7	96.2	63.9	288.8	102.9
2015	93.8	41.5	100.9	56.4	309.9	97.5
2016	102.3	49.1	111.7	64.6	297.8	99.2
2017	101.9	46.1	111.1	60.5	291.8	91.9
2018	96.4	45.2	103.6	59.6	279.7	90.9
2019	81.9	40.4	79.1	51.1	270.6	91.9
Sum	**817.2**	**396.2**	**873.7**	**538.8**	**2,565.6**	**880.8**

Table 9 - Comparison of Commercial/Industrial Goals to PEF's Rate Mitigation Plan

Year	Summer (MW)		Winter (MW)		Annual Energy (GWh)	
	Commission Goals	PEF Rate Mitigation Filing	Commission Goals	PEF Rate Mitigation Filing	Commission Goals	PEF Rate Mitigation Filing
2011	16.2	28.3	5.3	14.5	33.0	67.8
2012	25.5	32.8	11.4	13.4	35.9	63.6
2013	25.9	32.6	11.5	14.4	37.7	64.4
2014	26.4	34.1	11.5	15.5	39.6	69.7
2015	27.6	33.4	11.7	17.7	46.2	68.3
2016	27.1	31.7	11.6	17.2	42.5	62.9
2017	27.0	28.6	11.6	16.4	40.6	52.8
2018	25.7	28.0	11.4	16.2	36.8	51.0
2019	22.3	24.3	11.3	13.3	34.0	40.4
Sum	**223.7**	**273.6**	**97.3**	**138.5**	**346.3**	**540.9**

Staff is aware that the savings values presented in this docket are projections based upon participation rates which may or may not occur. Staff will continue to monitor and report the actual amount of DSM savings each year, on an annual and cumulative basis, as part of the Commission's annual report addressing progress toward goal achievement (FEECA Report). In the event that a FEECA utility fails to achieve its DSM goals in one or more categories, the utility can submit justification for its failure to meet the annual or cumulative goals. Staff will bring this to the attention of the Commission as part of the annual FEECA Report and the Commission can then consider what actions are appropriate.

Florida Statutes provide the Commission with the authority to financially reward or penalize PEF based on whether its conservation goals are achieved. The Commission considered the establishment of rewards and penalties in the goal-setting dockets. In Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, the Commission concluded that, "We may establish,

through a limited proceeding, a financial reward or penalty for a rate-regulated utility based upon the utility's performance in accordance with Section 366.82(8) and (9), F.S."

The demand and energy savings projected to occur under the Rate Mitigation Plan fall short of meeting the Commission established goals. Therefore, if the Rate Mitigation Plan is approved, the Commission should clarify the standard it intends to hold PEF to when evaluating its performance for purposes of rewards or penalties. Staff believes PEF could face a financial penalty if it fails to achieve the savings projections contained in the Rate Mitigation Plan. Staff believes PEF should be eligible for a financial reward only if actual savings exceed the goals established by the Commission.

Rate Mitigation Plan Programs

PEF's Rate Mitigation Plan contains the same programs as the Compliance Plan, except that the Technical Potential program in the residential portfolio has been replaced with three programs. Two of these programs, Residential Lighting and Appliance Recycling were formerly measures within the Technical Potential program and have simply been converted to stand-alone programs. The third program, Residential Behavior Modification, is a newly designed program which will provide reports to customers that allow them to compare their energy use and consumption patterns with that of neighbors in similar homes. The status of each program in the Rate Mitigation Plan relative to PEF programs currently in effect is indicated in Table 10 below. Staff notes PEF's six solar pilot programs are not included as these programs were previously approved by the Commission in Order No. PSC-10-0605-PAA-EG. A description of the programs contained in PEF's Rate Mitigation Plan is included in Attachment B.

In reviewing PEF's Rate Mitigation Plan, staff analyzed the assumptions made for a variety of aspects of the programs, including, but not limited to: rebate and incentive levels, participation rates, program savings, program costs, and avoided costs. Staff issued multiple data requests, and used previously submitted data from the utility's DSM programs and information from the goal-setting docket to examine each category. Overall, staff believes the assumptions are reasonable for use in evaluating PEF's Rate Mitigation Plan.

Table 10 - Rate Mitigation Plan Programs

Program Name	Program Status
Residential Portfolio	
1. Residential Lighting	New
2. Residential Appliance Recycling	New
3. Residential Behavior Modification	New
4. Home Energy Improvement	Modified
5. Residential New Construction	Modified
6. Neighborhood Energy Saver	Modified
7. Low Income Weatherization Assistance	Modified
8. Home Energy Check	Modified
9. Residential Energy Management	Existing
Commercial/Industrial Portfolio	
1. Business Energy Check	Modified
2. Commercial Green Building	New
3. Business Energy Saver	New
4. Commercial/Industrial New Construction	Modified
5. Better Business	Modified
6. Innovation Incentive	Modified
7. Business Energy Response	New
8. Interruptible Service	Modified
9. Curtailable Service	Modified
10. Standby Generation	Modified
Renewable Portfolio	
1. Qualifying Facilities	Existing
2. Technology Development	Modified

Changes from PEF's Initial DSM Plan filed March 30, 2010

One of the concerns staff raised with regard to PEF's Initial DSM Plan (filed March 30, 2010) was that the incentive amounts to be paid for adopting certain measures appeared to exceed the cost of the measure in some programs. Staff had noted that such overly high incentive levels could contribute to higher costs being passed on to customers. In its Rate Mitigation Plan, PEF capped the incentive levels at no more than 100 percent of the incremental measure cost and in most cases incentives are lower, closer to 50 percent of the incremental costs.[10] This provides a significant reduction in costs.

In its Rate Mitigation Plan, PEF removed the Technical Potential program and replaced it with the following three programs: Lighting Replacement, Appliance Recycling, and Behavior Modification. Lighting Replacement and Appliance Recycling are based on measures previously included in the Technical Potential program. The Behavior Modification program is a completely new program that provides data to customers allowing them to compare their energy use with other customers in similar situations. The three programs that replaced the Technical Potential program account for 24 percent of total energy savings and only 3 percent of total

[10] This cap does not include the rebate for appliance recycling, which is a flat amount.

program cost in PEF's Rate Mitigation Plan. However, the plan as a whole has significantly reduced savings, as noted earlier.

Cost Effectiveness

As illustrated in Table 11, all of the programs in the Rate Mitigation Plan passed the E-TRC and Participants tests. Programs are determined to be cost-effective if the result of the test yields a ratio greater than 1.00. Although Order No. PSC-09-0855-FOF-EG states E-RIM test results shall be considered in evaluating programs, it does not require programs to pass the E-RIM test. Several types of programs are not evaluated for cost-effectiveness. These include audits, which are mandated by the Commission to be available for ratepayers, and pilot programs, which are designed to gather additional information on conservation measures or methods.

Table 11 – Cost Effectiveness Test Results for PEF's Rate Mitigation Plan

Program Name	E-TRC	E-RIM	Participants
Residential Portfolio			
Residential Lighting	3.17	0.72	4.87
Residential Appliance Recycling	5.20	0.68	22.02
Residential Behavior Modification	1.79	0.63	9999
Home Energy Improvement	1.83	1.08	1.94
Residential New Construction	1.70	1.08	1.78
Neighborhood Energy Saver	1.89	0.80	3.02
Low Income Weatherization Assistance	1.91	0.82	3.10
Home Energy Check (Audit)	-	-	-
Residential Energy Management	1.79	1.17	9999
Commercial/Industrial Portfolio			
Business Energy Check (Audit)	-	-	-
Commercial Green Building	1.87	0.86	2.56
Business Energy Saver	2.47	1.01	3.41
Commercial/Industrial New Construction	1.76	1.01	1.94
Better Business	3.30	1.04	4.36
Innovation Incentive (Custom)	-	-	-
Business Energy Response	2.58	1.14	9999
Interruptible Service	33.09	4.70	9999
Curtailable Service	78.80	6.26	9999
Standby Generation	59.68	6.95	9999

It is noteworthy that E-RIM values for programs in PEF's Rate Mitigation Plan are higher than those for programs in PEF's Compliance Plan, as shown on Table 12. The higher cost effectiveness ratio under the E-RIM test for programs in the Rate Mitigation Plan is significant because it means that the programs costs are more evenly spread among ratepayers. This avoids having one group of rate payers subsidizing another, such as non-participating low-income customers subsidizing incentive payments for other customers to purchase pool pumps.

Therefore, the Rate Mitigation Plan not only lowers overall cost but reduces subsidization among different customer categories.

Table 12 – Comparison of E-RIM Cost Effectiveness Ratios

Program Name	Rate Mitigation Plan	Compliance Plan
Residential Portfolio		
Technical Potential Program*	N/A	0.47
Residential Lighting	0.72	N/A
Residential Appliance Recycling	0.68	N/A
Residential Behavior Modification	0.63	N/A
Home Energy Improvement	**1.08**	**0.75**
Residential New Construction	**1.08**	**0.77**
Neighborhood Energy Saver	**0.80**	**0.77**
Low Income Weatherization Assistance	**0.82**	**0.77**
Home Energy Check (Audit)	-	-
Residential Energy Management	1.17	1.17
Commercial/Industrial Portfolio		
Business Energy Check (Audit)	-	-
Commercial Green Building	**0.86**	**0.72**
Business Energy Saver	**1.01**	**0.99**
Commercial/Industrial New Construction	**1.01**	**0.78**
Better Business	**1.04**	**0.85**
Innovation Incentive (Custom)	-	-
Business Energy Response	1.14	1.14
Interruptible Service	4.70	4.70
Curtailable Service	6.26	6.26
Standby Generation	6.95	6.95

Rate Impact

The costs to implement a DSM program consist of administrative, equipment, and incentive payments to the participants, which are recovered by the Company through its ECCR clause. This clause represents a monthly bill impact to customers as part of the non-fuel cost of energy on their bills. As discussed above, if a program passes the E-TRC test it is cost-effective from a system basis. However, utility incentive payments, not included in the E-TRC, are recovered through the utility's ECCR factor and have an immediate impact on customer rates.

Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact but produce savings over time. Table 13 shows the ECCR Expenditures and Rate Impact on a typical residential customer's bill under the Rate Mitigation Plan over ten years. As discussed in Issue 1, the costs associated with load control switches in the Residential Energy Management Program have been removed so that the rate impact is based only on those costs that are associated with the goals. Under the Rate Mitigation

Plan, the monthly bill impact would range from $4.73 in 2011 to $6.13 in 2014, when the Commission is due to revisit the conservation goals as required by Section 366.82(6), F.S.

Table 13 - Estimated Rate Impact of PEF's Rate Mitigation Plan Associated with Goals (1,200 kWh Residential Bill)

Year	ECCR Component ($/mo)	Estimated Residential Bill ($/mo)	Percent of Bill (% Bill)
2010	$3.24	$154.58	2.10%
2011	$4.73	$156.07	3.03%
2012	$5.20	$156.54	3.32%
2013	$5.67	$157.01	3.61%
2014	$6.13	$157.47	3.89%
2015	$5.98	$157.32	3.80%
2016	$5.66	$157.00	3.60%
2017	$5.25	$156.59	3.35%
2018	$5.05	$156.39	3.23%
2019	$4.92	$156.26	3.15%

Staff notes that should the Rate Mitigation Plan be approved, the projected rate impact to an average customer bill (1200 kWh) could be entirely mitigated by participation in either one of two programs offered in the Plan. Either the Neighborhood Energy Saver or the Low Income Weatherization program are both capable of producing sufficient savings to offset a significant portion of any bill increases caused by increased ECCR costs.

Staff also compared the rate impact of PEF's Rate Mitigation plan with the rate impact of the DSM plans the Commission has approved for two other investor-owned utilities, Gulf and TECO. FPL's plan has not been approved at this writing. Table 14 shows that the ECCR charge resulting from PEF's Rate Mitigation Plan is more in line with that of other approved plans. For example, by the year 2014, when the Commission is scheduled to reset conservation goals, the monthly bill impact falls in the middle, with the costs to PEF's customers projected to be slightly lower than Gulf's, but higher than those of TECO.

Table 14 – Comparison of Rate Impact to Florida Utilities (1,200 kWh Residential Bill)

Year	GULF		TECO		PEF	
	Approved Plan		Approved Plan		Rate Mitigation Plan Associated with Goals	
	($/mo)	(% Bill)	($/mo)	(% Bill)	($/mo)	(% Bill)
2010	$1.30	0.87%	$3.05	2.22%	$3.24	2.10%
2011	$5.19	3.48%	$3.53	2.57%	$4.73	3.03%
2012	$5.43	3.64%	$3.61	2.63%	$5.20	3.32%
2013	$5.74	3.84%	$3.79	2.76%	$5.67	3.61%
2014	$6.36	4.26%	$3.89	2.83%	$6.13	3.89%
2015	$7.03	4.71%	$3.88	2.83%	$5.98	3.80%
2016	$6.70	4.49%	$3.83	2.79%	$5.66	3.60%
2017	$6.14	4.11%	$3.75	2.73%	$5.25	3.35%
2018	$5.83	3.90%	$3.70	2.70%	$5.05	3.23%
2019	$5.47	3.66%	$3.65	2.66%	$4.92	3.15%

PEF's programs must not only be cost-effective and capable of producing savings sufficient to meet the goals set by the Commission, but they must avoid excessively increasing the costs potentially passed on to customers through the ECCR clause. In the past, conservation programs have been focused primarily on demand reduction. The new focus on energy efficiency brought about by changes to Florida Statutes requires changes to program design and diligent monitoring. It is important to get new programs in place so that PEF can gain valuable information about customer participation and the elements of program design that are most effective.

The programs contained in the Rate Mitigation Plan are cost-effective and will produce demand and energy savings for participating PEF customers and on a system-wide basis. Approval of the programs will benefit PEF's customers as they will have the opportunity to participate in programs that will help them reduce their energy consumption and potentially lower their total electricity bill.

Program Standards

Most programs have an administrative component that describes the eligibility requirements, billing practices, etc. Historically, this information is provided to staff for administrative approval after a program has been approved by the Commission. Therefore, staff recommends that PEF file program standards for all its programs within 30 days of the Consummating Order in this docket. In order to provide enhanced energy savings opportunities to its customers without further delay, PEF should implement new or modified programs as soon as possible upon approval of program standards. Existing programs for which no modifications have been proposed may continue without interruption.

Conclusion

Staff believes it is important to avoid an excessive impact on customer rates as was projected to occur under PEF's Compliance Plan. Therefore, in order to mitigate customer rate impact, staff recommends the Commission approve the Rate Mitigation Plan with the clarification that approval does not constitute a revision of the goals the Commission set for PEF in Order No. PSC-10-0198-FOF-EG. PEF should strive to meet the original goals set by the Commission through education and diligent monitoring and analysis of program savings results and customer participation on an ongoing basis. Pursuant to Section 366.82(8), F.S., PEF may be eligible for a financial reward should it exceed the Commission's established goals. However, for purposes of determining financial penalties, PEF's achievements should be evaluated against the demand and energy savings projections contained in the Rate Mitigation Plan.

Issue 3: Should this docket be closed?

Recommendation: Yes. If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 says of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification that the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docket may be closed administratively. (Harris, Tan)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action issue files a protest within 21 days of the issuance of the Order, a Consummating Order will be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the Order, the programs should not be implemented until after the resolution of the protest. However, the docket should remain open for staff's verification hat the program standards have been filed by the Utility and approved by staff. When the PAA issues are final and the program standards have been approved, this docketed may be closed administratively.

Description of PEF's Compliance Plan

I. Residential Conservation Programs

A. Home Energy Check Program

An energy audit program that provides residential customers with an analysis of their energy use as well as recommendations on how they can save on their electricity bill. The audit focuses on education and encouraging customers to implement minimal cost energy-saving practices and measures. The audit also provides Progress Energy the opportunity to promote cost effective measures in customers' homes and serves as the foundation other residential Demand Side Management programs. The program offers the following types of energy audits:

- Type 1: Free Walk-Through (free)
- Type 2: Customer-completed Mail-In (free)
- Type 3: Customer Online (Internet Option) (free)
- Type 4: Customer Phone Assisted (free)
- Type 5: Home Energy Check for Kids (free)
- Type 6: Paid Walk-Through ($15)
- Type 7: Home Energy Rating (Class I, II per "Florida Energy Gauge Ratings" tariff)

The customer will receive a residential Energy Efficiency Kit at the time of the onsite Home Energy Check and through the mail following completion of all other types of Home Energy Checks. The kit provides items that are easily implemented for energy efficiency. The contents of the kit will change as needed to achieve high savings impacts while recognizing changes in technology and customer habits. Items that may be included in the kit are energy efficient lighting, thermometers, weatherization items, low-flow devices, as well as education for the customer on the savings associated with the installation of the items in the kit.

B. Home Energy IMPROVEMENT Program

Designed for the existing single family, multi-family and manufactured home customers who want to retrofit with high energy efficiency improvements. All residential customers are eligible to participate in one or more measures included in this program. The program provides incentives for high efficiency HVAC equipment including installation and maintenance, duct repair, attic and wall insulation upgrades, reflective roofing, high performance windows, window film and heat pump water heaters to residential customers in Progress Energy's service territory. The requirements and incentives for many of these measures will be outlined in the Program Participation Standards.

High Efficiency HVAC Systems

Provides an incentive to install a high efficiency HVAC system when customer's existing system fails. The incentive will be awarded on a per unit basis according to efficiency rating and tonnage, regardless of the system type (*PTAC, Mini-Split, Multi-Split, Geothermal Heat Pumps, etc.*). Measure requirements will be outlined in the Program Participation Standards.

HVAC Early Replacement
Provides customers an incentive for replacing their low efficiency HVAC system, prior to it failing, with a high efficiency HVAC system. The incentive will be awarded on a per unit basis according to efficiency rating and tonnage regardless of the system type (*PTAC, Mini-Split, Multi-Split, Geothermal Heat Pumps, etc.*). Measure requirements will be outlined in the Program Participation Standards.

Proper Sizing of High Efficiency HVAC Systems
Encourages the customer to have a new replacement air conditioning system properly sized by the HVAC contractor using industry accepted sizing protocol. The Proper Sizing is performed in conjunction with the installation of a new HVAC system.

Supply and Return Plenum Seal
Encourages the HVAC contractor to seal the supply and return portion of the plenum to a new air handler with mastic. The Supply and Return Plenum Seal measure is performed in conjunction with the installation of a new HVAC system.

HVAC Commissioning
Provides an incentive for the Commissioning of HVAC system(s) in accordance with Progress Energy standards and requirements and is eligible on all Florida Energy Code compliant HVAC systems. The HVAC Commissioning measure is performed in conjunction with the installation of a new HVAC system.

Duct Repair
Promotes energy efficiency through improved duct sealing. To be eligible, a customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump.

Attic Insulation Upgrade
This program measure encourages customers to upgrade their attic insulation by paying a portion of the installed cost. Eligible residences must have whole house electric air conditioning and/or whole house electric heating. The residence must meet the requirements of the Program Participation Standards to qualify for this measure.

Wall Insulation Upgrade
This program measure encourages customers to upgrade the insulation value of the exterior walls of the home by paying a portion of the installed cost.

Reflective Roof Coating
This measure will provide incentives to install an ENERGY STAR ® or Cool Roof Rating Council approved reflective roof coating product to a manufactured home's roof. The product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Reflective Roof
This measure provides an incentive to install an ENERGY STAR ® or Cool Roof Rating Council reflective roof, on Single family, Multi-family, and applicable manufactured homes. The

product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Window Film
The measure awards an incentive for installing high performance window film. Qualifying residences will install window film that meets the specifications as outlined in the Program Participation Standards.

Replacement Windows
This measure awards an incentive for installing high performance windows. Qualifying residences will install windows that meet the specifications as outlined in the Program Participation Standards.

HVAC Tune-up
An HVAC contractor performs a tune-up on the customers' existing HVAC system(s) to include: verifying proper refrigerant charge, proper air flow to the residence, and cleaning indoor/outdoor coils and fan blades. During the performance assessment of the HVAC system, eligible customers will be encouraged to consider participating in the HVAC Early Replacement measure. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

HVAC Quality Installation
The HVAC Quality Installation measure includes a requirement for the proper selection of equipment that is designed to perform efficiently in Florida's hot, humid climate. The Quality Installation measure also includes right-sizing of the equipment, supply and return plenum sealing, air flow verification and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heater
Progress Energy will offer an incentive to install a new heat pump water heater that meets the ENERGY STAR ® electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

Financing
Financing assistance is an alternative to the direct incentive payment. Progress Energy may explore opportunities to collaborate with 3rd party financing institutions to offer eligible program participants a financing option that focuses on achieving a low monthly payment. A potential financing option could be longer amortization schedules that would be utilized to create a monthly payment that corresponds with the monthly energy savings. Another potential feature of financing assistance would be to apply the customer's applicable incentive(s) for the measure(s) installed to the loan to buy-down the amount of the monthly payment.

C. Residential New Construction Program

Designed to improve the energy efficiency of newly constructed residences in the single family, multi-family and manufactured homes segments. Program participation must be influenced by one of Progress Energy's educational opportunities. Provides financial incentives and education to builders and developers for incorporating energy efficient measures into the construction process. To qualify for the program, the residence must be a new metered residence in Progress Energy territory. Renovations and additions will be governed by the current FL Building Code for eligibility as new construction. Additions do not qualify for the residential manufactured and the multi-family home segment. Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. The following measures are proposed to be included with this program:

High Efficiency HVAC Systems

High efficiency heat pumps will be expanded to 3 tiers of classification; 15 to 19+ SEER (*or equivalent EER*). Systems will qualify based on efficiency rating and tonnage regardless of the system type (*PTAC, Mini-Splits, Multi-Splits, Geothermal Heat Pumps, etc.*).

High Performance Windows

An incentive will be provided for the installation of high performance windows. The product must meet the specifications as outlined in the Program Participation Standards.

High Performance Exterior Wall Insulation

An incentive will be provided for the installation of high performance exterior wall insulation that exceeds the current Florida Energy Code by a factor of two. The product must meet the specifications as outlined in the Program Participation Standards.

HVAC Commissioning

An incentive will be provided for the commissioning of HVAC system(*s*) in accordance with Progress Energy standards and requirements, eligible on all Florida Energy Code compliant HVAC systems. The requirements and incentives will be outlined in the Program Participation Standards.

ENERGY STAR ® Certification

Progress Energy will offer the builder an incentive to help offset the cost to have a residence rated to meet the ENERGY STAR ® certification. The incentive is paid if the residence achieves ENERGY STAR ®'s qualifications and at least two Residential New Construction measures are installed. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Code Plus 20 Construction

Progress Energy will offer an incentive to builders that construct a residence exceeding the current Florida Energy Code by at least 20% provided they install at least three Residential New

Construction program measures. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Multi-Family Complexes with Heat Pumps
Multi-family builders and developers that can verify a change in design from A/C systems with electric resistance heat to heat pumps will qualify for a per heat pump system incentive to offset the costs associated with the design change. The requirements and incentives will be outlined in the Program Participation Standards.

HVAC Quality Installation
The Quality Installation measure requires the proper selection of equipment and includes the right-sizing of the equipment, supply and return plenum sealing, air flow verification and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heaters
Progress Energy will offer builders an incentive to install new heat pump water heaters that meet the ENERGY STAR ® electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

D. Neighborhood Energy Saver Program

- A custom energy conservation program designed to assist low-income families with escalating energy costs by making energy efficiency improvements at their residence. Trained professional surveyors and installers representing Progress Energy will offer low-income families in targeted neighborhoods a home energy assessment followed by the installation of specified electric energy conservation measures. While in the home, residents will be provided energy saving tips for improving and sustaining household energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

Program participation is based on the median income guidelines and minimum percentage of households within the Census Block Group meeting those guidelines as calculated from the 2000 and 2010 U.S. Census reports. In the absence of Census data that meets the afore mentioned guidelines, Progress Energy will utilize local municipality defined low-income neighborhood data. Additional requirements are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory.

- Customer must reside in a selected Progress Energy qualifying Census Block Group that meets the definition of a Low-income neighborhood as stated above.

- Multi-family dwellings that meet the above definition are located in the Neighborhood Energy Saver city, but not within the census block may also be eligible to participate in the Neighborhood Energy Saver program if they meet guidelines as presented in the Program Participation Standards.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs
This portion of the program will provide for the installation of a maximum of five (5) compact fluorescent lamps (CFL's) which are in use for an average of at least four (4) hours per day.

Refrigerator Coil Brush
This portion of the program will provide the customer with a coil brush to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer
This measure will provide for the installation of one thermometer in the food compartment and one thermometer in the freezer of the refrigerator.

Change Filter Calendar
This portion of the program will provide each homeowner a Progress Energy magnetic calendar to help remind them to clean or change HVAC filter monthly.

Weatherization Measures
This portion of the program will provide weather stripping, door sweeps, caulk, foam sealant, and clear patch tape which will be used to reduce or stop air infiltration around doors, windows, and where pipes enter the home. Air infiltration reduction is significant to saving energy and customer comfort.

Water heater insulation wrap and insulation for water pipes
This portion of the program will furnish and install a hot water heater wrap and pipe insulation as identified by the Neighborhood Energy Saver program Home Energy Evaluation.

Water conservation shower head and faucet aerators
This portion of the program will provide a maximum of three (3) aerators and two (2) low flow showerheads per household.

Water heater temperature check and adjustment
The portion of the program will provide a temperature check of the hot water heater and perform the turn down adjustment if the customer elects to do so.

HVAC filters
This portion of the program will allow each customer to receive a one year supply of filters (12); one filter may be installed at time of evaluation if needed.

Indoor wall thermometer
This portion of the program will provide the installation of one wall plate thermometer per home.

HVAC winterization kit
This measure will provide for the installation of a winterization HVAC kit for wall/window AC units, if seasonably applicable. The resident will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the weatherization kit as a method of stopping air infiltration in the home.

Attic Insulation Upgrade
This portion of the program will upgrade the customer's insulation from R-0/4 to R-19 if required.

HVAC Maintenance
This portion of the program requires performing basic maintenance on the indoor and outdoor components of the central air and heating unit.

Window Film/Solar Screen
This portion of the program provides installing window film or solar screen on east, west and south oriented windows.

E. Low-Income Weatherization Assistance Program

- Designed to leverage working relationships with providers to integrate Demand Side Management measures and offer energy efficiency with an education component. The Low-income Weatherization Assistance program combines weatherization provider partnerships with energy education and energy efficiency improvements to benefit low-income families.

The program provides incentives for attic insulation upgrades, duct testing and repair, reduced air infiltration, water heater wrap, HVAC maintenance, high efficiency heat pumps, high efficiency electric water heater, low flow showerheads, compact fluorescent light bulbs, faucet aerators, refrigerator coil brush, dedicated heat pump water heaters, window screen/film, reflective roof coating, window air conditioning replacement with window unit winterization kit, and a community energy education component.
The program eligibility requirements to qualify for participation are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory.

- Must meet Florida's weatherization and local home improvement provider low-income criteria, in addition to income requirements determined by the Department of Community Affairs (DCA).
- Homes must be greater than two years old.
- A DCA approved provider or local provider's approved contractors must perform all work.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

Attic Insulation Upgrade
This portion of the program encourages customers to add insulation to the ceiling area by paying a portion of the installed cost. The customer must have either whole house electric cooling or electric heating to be eligible for this program.

Duct Test and Repair
This portion of the program is designed to encourage eligible customers to improve their central duct system by reducing the air leakage rate. This is accomplished by performing a duct leakage test, then offering to repair the leakage that is discovered by the duct test. The home must have central ducted electric cooling and electric heat to participate in this measure.

Reduced Air Infiltration
The provider must demonstrate a minimum reduction of air infiltration into the home of 1500 cfm at 50 pascal's to receive an incentive. The home must not exceed ASHRAE Standard 62 for acceptable indoor air quality.

Water Heater Wrap
This portion of the program will provide and install a water heater wrap as identified in the Program Participation Standards.

High-Efficiency Electric Heat Pumps
For high efficiency electric heat pumps, Progress Energy will provide an incentive per unit. The specific incentive available is dependent upon the efficiency level of the unit installed and the type of electric heat the new equipment is replacing. In order to qualify for an incentive, both the air handler and the outdoor condensing unit shall be replaced, and both units shall be new.

High Efficiency Electric Water Heating
The high efficiency water heating portion of this program promotes technologies that heat water more efficiently than a standard electric water heater and save energy. The incentive depends on the type of technology being installed.

Heating and Air Conditioning Maintenance
To maximize efficiency an incentive will be provided for a heating & air conditioning contractor to perform service/tune-up maintenance on existing electric central heating and air conditioning systems.

Low Flow Showerhead – Aerators
This measure will improve energy efficiency for low-income customers in existing homes. Progress Energy will pay an incentive per showerhead for a maximum of two (2) per home, and an additional incentive per aerator for a maximum of three (3) per home.

Compact Fluorescent Light
This measure will help low-income customers reduce their energy costs by installing up to three (3) compact fluorescent lamps (CFLs) per home.

Refrigerator Coil Brush
This portion of the program will encourage low-income customers to clean the coils on their refrigerator. The local provider will demonstrate coil cleaning techniques and leave one brush with the customer for future use.

Window Film/Screen
The local provider will be responsible for meeting manufacturer's instructions and specifications, and installing this measure on west, southwest and northwest oriented windows only. Jalousie, double/triple pane, frosted/plastic windows and skylights are not eligible.

Roof Coating for Manufactured Homes
This portion of the program can lower cooling cost and extend roof life for manufactured homes by providing an incentive to install an ENERGY STAR® or Cool Roof Rating Council approved reflective roof coating product.

Window AC Replacement/Recycle with HVAC Window Unit Winterization Kit
This measure will provide an incentive for replacement/recycle of one window A/C unit per home. Customer will receive a HVAC window winterization kit. The window A/C unit to be replaced must be in operating condition and the provider must be sure the window A/C unit is removed from the premise and recycled appropriately.

Community Energy Connection
This part of the program will provide low-income residents with energy education training and interactive workstations that focus on assisting low-income families with developing achievable, sustainable strategies to reduce individual energy bills. Each attendee will receive an Energy Conservation Kit. The energy education training will provide a series of Community Energy Connection workshops in low-income communities, designed to partner with low-income providers. These educational workshops will include three stations: Energy Education Presentation, Social Service Agency Presentation, and Expo/Interactive Workstation. The interactive display station will consist of the following: A/C Thermostat, Lighting, Attic Insulation, Air Handler, and Refrigerator Coil Cleaning.

F. Residential Energy Management Program

A voluntary customer program that allows Progress Energy to reduce peak demand and defer generation construction. Peak demand is reduced by interrupting service to selected electrical equipment with radio controlled switches installed on the customers' premises. These controlled interruptions are at Progress Energy's option during specified time periods and coincident with hours of peak demand. It continues to be cost-effective to add new participants to the Residential Year Round Energy Management (RSL-1) and Winter Only (RSL-2) Rate Schedules. Continuing the Residential Energy Management program will increase the summer and winter load control capabilities. In addition to increasing the program's winter effectiveness, the 100% strip control will continue to be offered to any new participants and existing participants requesting a change with heat pump equipment.

This program has grown to be one of the largest direct load control programs in the nation today. Progress Energy will continue to offer this program to residential customers, but major infrastructure maintenance procedures are required to maintain a reliable program. The current direct load control one-way communications and home appliance switching infrastructure that allows Progress Energy to load shed over 700 MW of winter peak demand is becoming obsolete due to the end-of-life of major components in the near future. Major infrastructure maintenance and system upgrades are necessary to continue to ensure the availability of the existing 700 MW of direct load control capacity and support additional capacity in the future.

G. Technical Potential Program

Targets the residential customer segment and promote measures that have a payback period of two years or less. This program is designed to meet a technical potential goal of 1528 GWh by the end of 2019. The measures within this program include but are not limited to the following:

- Installation of water heater blanket
- HVAC annual maintenance
- Installation of solar window screens
- Electronically commutated motors as part of HVAC replacement 16 SEER or higher
- Pool pump replacement - variable speed
- Residential lighting (CFLs)
- Refrigerator and freezer recycling
- Air filter replacement

Progress Energy will continue to pursue measures that will focus on providing savings opportunities for customers who may be unable to make capital investments, but have a desire to focus on low-cost measures or practices that will enable them to achieve their savings goals. Technical Potential is an unprecedented program, and Progress Energy will employ multiple strategies to support goal achievement including: education, traditional incentives and retail partnerships. Also, since many of the measures in the Technical Potential program share the

same general target audience as the Home Energy Improvement program, these measures will be marketed through the Home Energy Improvement Program and other programs as appropriate.

Education

Our educational outreach efforts will consist of multiple delivery channels and will reach all customer segments.

Community Education

- Progress Energy will expand its educational efforts in the local communities. Through local outreach PEF will work with homeowners' associations to provide energy-efficiency workshops. Additionally, the Company will provide energy-related news articles to insert into community newsletters. Technical Potential measures will be included as recommendations during the Home Energy Check, as appropriate. Additionally, community competitions will be developed to raise awareness of energy efficiency among neighbors.

Education Through Behavior Modification

- Progress Energy proposes to incorporate personalized feedback into customer education to motivate customers to adopt behaviors that will support energy efficiency. By using behavior modification tools like those offered by OPOWER and other such vendors, PEF will help the customer better understand their energy usage and help them to see how their energy consumption compares to other similar customers, set personal goals for energy reduction, and obtain feedback on their progress. Studies have shown that similar tools have supported customer's energy usage reductions by about 2%. Energy reductions achieved through these tools will be counted within this program.

- The incorporation of personalized feedback in this tool increases the success of the behavior change. These tools provide customers the opportunity to compare their energy usage to neighbors with similar demographics and similar home size and make informed energy choices. This program gives Progress Energy the opportunity to expand our reach with energy efficiency to all customers segments including low-income and rental communities. All customer groups will be able to take advantage of this education and benefit from it.

Education of Low-Income Customers

Low-income customers are typically the hardest to motivate to participate in energy efficiency measures due to cost barriers and lack of access to energy education information. Progress Energy has successfully utilized its Neighborhood Energy Saver program as a means to weatherize the homes of thousands of low-income Progress Energy customers. Tied in with the weatherization efforts, Progress Energy has also offered in-home energy education at the time of the Neighborhood Energy Saver visit to teach customers about regularly changing their air filters, using CFL bulbs, and the benefits of insulating their water heaters, as well as many other energy-saving behaviors.

To increase our educational outreach efforts, Progress Energy has developed an educational video that highlights simple behavioral changes customers can make to save energy throughout the home. This video will be shown at weatherization agency offices throughout the service territory. In addition, PEF will be conducting energy education workshops that will include seminars, product demonstrations and question and answer sessions for customer to learn about cost-effective ways to save energy now and in the future.

Student Education

Progress Energy will reach out to local schools and youth organizations to expose students to no-cost and low-cost energy-efficient behaviors and improvements that they and their families can do in their homes. As part of this effort, Progress Energy will expand the Home Energy Check for Kids program to incorporate all grade levels. In addition, PEF has started to pilot an after-school program with a YMCA in Clearwater, Florida where high school students will develop a "green club" with the goal of mentoring younger students about energy efficiency. Progress Energy's employees will act as mentors, assist with energy education for the club and participate as guest speakers at student events. Our goal is to expand this program to other YMCAs and youth organizations through our service territory.

Education of External Influencers

Developing partnerships with external parties that help influence our customers is important to ensuring that the energy efficiency message is heard. Contractors, builders, retailers, realtors and local businesses are just a few of those external parties who act as an extension of Progress Energy to help educate our customers about being energy efficient. These partnerships will include training seminars, follow-up communications including newsletters and email blasts, and the development of co-op and joint advertising strategies to ensure the greatest impact.

General Customer Education

Progress Energy will utilize campaigns like the Save-the-Watts themed campaign to educate and inform customers about the energy efficiency programs that PEF offers. Progress Energy will provide online content and mass media messaging to ensure customers have the tools they need to make informed decisions regarding energy efficiency.

Traditional Incentives

Educating our customers will be a strategy that is utilized throughout the life of the program, but in order to move the market and achieve Progress Energy's GWh reduction goal, PEF will also employ the use of traditional customer incentives.

Customer Incentives

As most product adoption bell curves indicate, there is a steep incline in participation early in the lifecycle of the program (participants are called 'early adopters'), a point where participation flattens out ('early and late majority'), followed by a steady decline

('laggards'). Incentives will be offered on measures at some point during the lifecycle of the program, and will be used to drive participation in the measures that may require more motivation due to higher initial out-of-pocket cost to the customer, such as: appliance recycling, HVAC replacement and pool pump replacement.

Contractor Incentives

Progress Energy will also offer financial incentives for contractors who install measures as part of this program. The incentives serve to motivate the contractor to make energy efficient recommendations and encourage them to document installation of the measure for verification.

Retail Partnerships

Many of the measures that make up the Technical Potential program lend themselves naturally to partnerships with retailers.

- ***Do-it-yourself Measures***
  Measures such as air filters, water heater blankets and CFL bulbs can be purchased and installed directly by the customer. By developing partnerships with retailers, Progress Energy can ensure that customers who are in stores and in a buying mode receive the education they need about these products. Through ongoing contractor education, PEF will ensure store staff is educated about energy efficiency measures so that they can act as an extension of Progress Energy and answer questions that customers may have about the energy-saving benefits of the measures.

- ***Financial Incentives***
  Progress Energy will offer financial incentives to the customers when they purchase qualifying measures from the retail store. These incentives will be administered through buy-downs (where Progress Energy pays a portion of the item cost so that it will have a lower price in the store) as well as mail-in rebates where customers will receive money back once proof of purchase has been verified.

Marketing Tactics

Progress Energy will employ a variety of standard marketing strategies to drive customer participation in the Technical Potential program. Some of these marketing tactics include:

- Mass Media
- Market Segmentation
- Direct Marketing
- Event Marketing

Implementation Approach

To meet the Commission's aggressive implementation of goal achievement, Progress Energy will attempt to deploy strategies and expenditures to support this achievement. PEF will also continue to research and monitor emerging technologies (like LED lighting) that may offer greater energy savings for our customers versus what is currently available in the market. The program eligibility requirements to qualify for participation are as follows:

- The residence must be in Progress Energy's service area and be an active residentially-metered Progress Energy customer.

- Existing or newly constructed residential single-family, multifamily or manufactured homes.
- Specific eligibility requirements for each item installed in this program will be presented in the Program Participation Standards and are subject to revision based on changes in market conditions such as baseline, code revisions, updated measure and valuation analysis, or technological advances.
-

The program will encourage customers to implement the following program measures:

Water Heater Blanket
This measure encourages the purchase and installation of water heater blankets on electric waters heaters. This measure will be promoted through the consumer and retail channels in order to generate awareness and participation.

HVAC Annual Maintenance
This measure encourages the annual cleaning of outdoor coils in the HVAC system in order to ensure the system will continue to function as efficiently as possible. Education directly to the customers and through the contractor channels will be used to generate awareness of and participation in this measure.

Installation of Solar Window Screens
Solar window screens are a more affordable alternative to window film and provide the customer with many of the same benefits. This measure will be promoted through education to both consumers and through the contractor channels to generate awareness and participation.

Electronically Commutated Motors as part of HVAC Replacement 16 SEER or Higher
Electronically Commutated Motors are the standard air handler motor on the higher efficiency HVAC systems (typically 16 SEER or higher) and offer significant energy savings compared to other motor types. This measure will be promoted through education to both consumers and through the contractor channels to generate awareness and participation.

Pool Pump Replacement (variable speed)
This measure will encourage customers to upgrade to a variable speed pool pump. Progress Energy will educate consumers, contractors, pool builders, and pool maintenance service companies about the energy savings of variable speed pool pump motors.

Residential Lighting (CFLs)
The residential lighting measure will provide incentives and marketing support through retailers to encourage greater Progress Energy customer adoption of CFL lighting. Progress Energy will partner with various manufacturers and retailers across its service territory to offer a wide selection of products to customers.

Refrigerator and freezer recycling
The refrigerator and freezer recycling measure are designed to remove less efficient refrigerators and freezers that are operating within residences across the Progress Energy service territory. The program will include scheduling and free appliance pick-up at the customer's location, transportation to a recycling facility, and recovery and recycling of appliance materials.

Air filter replacement
Progress Energy will encourage customers to regularly replace air filters on central HVAC systems that have standard air filtration. Continuous education and awareness marketing will play a key role in encouraging customers to adopt this energy-saving behavior.

II. Commercial/Industrial Conservation Programs

A. Business Energy Check Program

An energy audit program that provides commercial customers with an analysis of their energy use as well as recommendations on how they can save on their electricity bill. The audit focuses on education and encouraging customers to implement minimal cost energy-saving practices and measures. The audit also provides Progress Energy the opportunity to promote cost effective measures in customers' facilities. The Business Energy Check program serves as the foundation for participation in other commercial, industrial and governmental Demand Side Management programs. The program offers the following types of energy audits:

Type 1: Free Walk-Through (free)

Type 2: Paid Walk-Through

Type 3: Customer Online (Internet Option free)

Type 4: Customer Phone Assisted. (free)

All commercial, industrial, and governmental customers of Progress Energy are eligible to receive any of the above mentioned audit types conducted on commercial metered buildings located in Progress Energy's service territory. When a customer requests a Business Energy Check, they will be given the option of any of the above offered audit types. Progress Energy reserves the option to work with other agencies and/or companies as an extension of the Business Energy Check service. The specific details on the procedures for each type of audit will be presented in the Program Participation Standards.

Customers participating in all audit types will be provided with sustainable educational and behavioral energy saving examples of easily installed energy conservation measures to reduce energy consumption. The program promotes continued customer involvement by demonstrating sustainable and measureable energy reduction in the business' energy consumption by the implementation of low-cost energy conservation measures. The customer will receive a Commercial Energy Efficiency Kit at the time of the onsite Business Energy Check or through the mail following completion of the online or phone assisted audit.

Progress Energy is proposing to include the following measures with this program:

Energy Conservation Measure Kit

Lighting
Provide customers with up to three (3) compact fluorescent light bulbs to upgrade an existing incandescent fixture located in their facility. This demonstration will encourage additional lighting energy conservation measures changes within the facility.

Indoor room Thermometer
Provide one room thermometer per business. This measure will establish a reference point for customers to select an energy savings setting for the HVAC system thermostat.

Refrigerator Thermometer
Provide one thermometer in the food or freezer compartment of the refrigerator. This measure will establish a reference point for customers to select an energy savings setting for the refrigeration system thermostat.

Power Conservation Strip
Provide a power conservation strip to reduce idle energy use when appliances are not in operation. The ease of installation and the demonstration of immediate energy reduction will encourage additional customer participation.

Change Filter Calendar
Provide each business a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly to facilitate optimal HVAC performance.

Additional Kit Components
Includes educational tools that will assist the business owner in making decisions about their energy use. Examples of these educational tools include, but are not limited to the following:

> ***Energy Use Data Sheet***
> A common appliance and equipment energy use data sheet will be provided to the customer. This will demonstrate to the customer examples where energy is being utilized within their facility, encouraging the customer to make behavior changes to reduce energy consumption.
>
> ***Facility Setback Procedure***
> This measure will provide a suggested setback process for relative facilities. The process can be used as behavior modification training for employees or as a poster located at entrances and exits of the facility. It will provide a point of reference to remind employees to choose the best energy saving setting for the facility when shutting down.

B. Better Business Program

Designed for existing Commercial, Industrial and Governmental customers who want to retrofit with high efficiency improvements. All business customers are eligible for this program. The Better Business program builds on customer awareness, utilizing the various audit types, contractor participation, and Progress Energy promotion to educate customers on cost effective measures relevant to their businesses. The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy's educational opportunities.
- The facility must be a commercially metered customer in Progress Energy service territory.

Commercial multi-family is defined as commercially metered accounts of multi-family residential apartments or condominiums, or assisted living residential apartment units. Any multi-family residential dwellings that are metered (referred to as "Domestic/Commercial") shall be eligible to participate in this program and will be provided the more appropriate residential energy efficiency kit in lieu of the commercial kit.

Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments. Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

HVAC Equipment & Heat Pump Water Heaters

Provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners including heat pump water heaters, hybrid desiccant and geothermal units, thermal energy storage systems, package terminal heat pumps and package terminal air conditioners, water-cooled chillers, air-cooled chillers, EMS Chiller Optimization, and high efficiency straight cool air conditioners 14 to 19+ SEER. The Better Business HVAC measures also provide PEF customers with a one-time incentive to maintain/recommission and/or repair their current rooftop package DX units. The incentives will be based on a per unit basis. PTAC/PTHP coil cleaning is also a one-time incentive to stimulate the annual maintenance of customer's equipment. Hotel AC sensors for controlling HVAC systems during unoccupied periods in hotel rooms will be offered as a per room incentive. Variable Speed Drive controls and Variable Speed Drives for Chiller and Cooling Tower Pump incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes / Exhaust Hood Optimization

The program promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must

meet qualifications outlined in the Program Participation Standards. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using *C02* sensors. Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. Heat Pipe technology for pre-conditioning fresh air will also be incented and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Duct Leakage Test and Repair
Designed to promote energy efficiency through improved duct system sealing. This program component applies to HVAC equipment and systems that are no larger than 65,000 Btu/h. A customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump, to be eligible for this program.

Efficient Indoor lighting
Provides customers with an incentive to upgrade their lighting systems to an approved lighting technology. The following technologies will be included: Premium T-8's and T-5's, occupancy sensors, ceramic metal halides, LED display lighting, Induction/Cold cathode, CFL lamps with integral ballast, and CFL hardwire fixtures. The Program Participation Standards will outline the incentive adjustments due to code changes.

Ceiling Insulation Upgrade
Encourages customers to add insulation to the conditioned ceiling area by paying for a portion of the installed cost. The facility must meet the Program Participation Standard requirements in order to qualify for this measure.

Cool Roof / Green Roof/ Roof Insulation
Provides customers with an incentive to install an approved "*cool roof*" providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Compressed Air System
Provides an incentive to encourage business customers to utilize a proactive approach to increase the efficiency of compressed air systems. The customer must provide a pre- and post-analysis of the system in order to be eligible for incentives.

Efficient Motors
Promotes the installation of certain high efficiency polyphase motors through a simple incentive structure based on the motor size and a specified $/hp. The specific incentive amount will be a function of the motor size and efficiency.

Window Film / Solar Screen
Provides an incentive to install window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration
Provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. The eligible devices include vending machine controls, and high efficiency ice makers.

Building Commissioning
Provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Program Participation Standards. Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in the market conditions, such as baseline or code revisions, updated measures and valuation analysis or technological advances.

C. Commercial/Industrial New Construction Program

Designed to improve the energy efficient construction of commercial buildings. The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy's educational opportunities.
- Equipment and measures must be installed in facilities that are commercially metered in Progress Energy service territory.
- Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments.
- The owner/builder or manufacturer must meet the requirements listed in the Program Participation Standards and comply with all state, local and federal codes.

Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measures, and valuation analysis or technological advances. Progress Energy is proposing to include the following measures with this program:

HVAC Equipment
Provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners, hybrid desiccant and geothermal units, high efficient straight cool air conditioners, thermal energy storage, package terminal heat pumps, and water-cooled and air-cooled chillers. The incentive is calculated for each unit based on the KW difference between the high efficiency unit and the program-specified baseline efficiency. Variable Speed Drive controls and Variable Speed Drives for Chiller and Cooling Tower Pumps incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes
Promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must meet Program Participation Standards qualifications. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using *C02* sensors. Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. An incentive will be offered for Heat Pipe technology for pre-conditioning fresh air and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Cool Roof / Green Roof/ Roof Insulation
The cool roof measure will provide customers with an incentive to install an approved "*cool roof*" providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Indoor lighting
Provides customers with an incentive to install lighting systems which are above code. The following technologies will be included: Premium T-8's and T-5's, occupancy sensors, ceramic metal halides, LED display lighting and Induction/Cold cathode. The Program Participation Standards will outline the incentive adjustments due to code changes.

Window Film / Solar Screen
Promotes the purchase of windows that meet Progress Energy requirements for window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration
Provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. These devices include vending machine controls and high efficiency ice makers.

Building Commissioning
Provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Participation Standards.

Efficient Motors
Promotes the installation of certain high efficiency polyphase motors through a simple incentive structure based on the motor size and a specified $/hp. The specific incentive amount will be a function of the motor size and efficiency.

D. Business Energy Saver Program

Designed to encourage and educate business customers located in low-income areas by demonstration and installation of sustainable energy conservation measures to help control and reduce energy consumption within their business. The business must be located within the surrounding area of the Progress Energy qualifying Census Block Group that meets the definition of a low-income neighborhood. Trained, professional surveyors and installers representing Progress Energy will offer businesses an energy assessment followed by the installation of specified electric energy conservation measures. While in the business, the owner will be provided energy saving tips for improving and sustaining energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants. The program eligibility requirements to qualify for participation are as follows:

- The business must be a Progress Energy metered customer within Progress Energy service territory.
- Business must be in a selected Progress Energy qualifying Census Block Group which meets the definition of a low-income neighborhood and surrounding area.
- National and Chain Accounts are not eligible for participation in the Business Energy Saver program.
- All installations must be accessible for verification by a Progress Energy representative.
- A State of Florida General Licensed Contractor selected and approved by Progress Energy must be used to implement the Business Energy Saver program measures.
- The business energy consumption shall be within Progress Energy defined standards.
- The business will have been in operation for at least one year within Progress Energy service territory.
- The business must meet the licensing requirement as established by the local municipality and state regulatory agencies.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs

This measure will install in the business up to five (5) compact fluorescent bulbs to replace incandescent bulbs with comparable lumens output.

Refrigerator Coil Brush

Provides the customer with a coil brush and demonstration how to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer
Install one thermometer in the food or freezer compartment of the refrigerator to provide a reference temperature for efficient operation of the appliance.

Change Filter Calendar
Provides each business with a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly.

Weatherization Measures
Install weather stripping, door sweeps, caulk, foam sealant, and clear patch tape where needed to reduce air infiltration around doors, windows, and where pipes enter the business.

Water Heater Insulation Wrap and Insulation for Water Pipes
Install a water heater wrap and pipe insulation as identified to improve the efficiency of the water heating system. Foam insulated water heaters will be excluded from this measure.

Water Conservation Faucet Aerators
Install a maximum of two (2) aerators per business. This measure will reduce energy consumption related to the water heater system.

Water Heater Temperature Check and Adjustment
Provide a temperature check of the water heater and inform the customer of the possibility for reducing temperatures within manufacturer's recommendation and code requirements.

HVAC Filters
Provide each customer with a one-year supply of filters (12) for the main HVAC system. One filter may be installed at time of evaluation if needed.

Indoor Wall Thermometer
Install one wall plate thermometer per business to encourage the business owner to be aware of thermostat setting.

HVAC Window Unit Winterization Kit
Install a winterization HVAC kit on wall/window AC units, if seasonably applicable. The business will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the winterization kit as a method of stopping air infiltration in the business.

HVAC Maintenance
Provides basic maintenance on the condensing and air handling units to increase energy efficiency through proper operational maintenance of mechanical equipment.

Attic Insulation Upgrade
Upgrade the customer's ceiling insulation up to R-30 as building code will allow. This measure will improve the efficiency of the business' building envelope.

Window Film/Solar Screen
Install window film or solar screen on south, east, or west oriented windows to reduce solar heat gain within the building.

E. Commercial Green Building New Construction

- Designed for commercial, industrial, and governmental customers who are building new facilities to achieve optimal energy efficiency. The program is designed to encourage the energy efficient construction of new commercial facilities according to guidelines set forth by LEED-NC. The LEED-NC rating system for commercial buildings focuses on improving energy efficiency, reducing carbon emissions, and addressing other environmental and human-health outcomes. The general eligibility requirements are as follows:

- Qualification is limited to LEED-NC certified buildings only.

- Incentive based on LEED-NC registration and certification fees.

- Building must have installed a minimum number of Progress Energy Commercial New Construction program measures as outlined in the Program Participation Standards.

- Commercial Green Building New Construction program incentive will be paid in addition to Commercial New Construction program incentives.

- This program will offer a capped incentive in the amount of 50% of the registration and certification fees for obtaining a LEED-NC certificate for a New Construction building.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, technological advances, or changes to the structure in the LEED-NC registration and certification fees.

F. Innovation Incentive Program

Designed to encourage customers to make capital investments for the installation of energy efficiency measures which reduce peak KW and energy on the Progress Energy system. This program offers customized incentives specifically designed for individual innovative projects which are not otherwise addressed by Progress Energy Demand Side Management programs. Representative examples of energy efficient technologies that would be considered under this program include, but are not limited to, refrigeration equipment replacement and new lighting technologies. The timeline of the Innovation Incentive program can range from six months to one year depending on the project. The steps included are application, monitoring, data

collection, analysis of data, inspection, and processing incentive to the customer. Program eligibility requirements to qualify for participation are as follows:

- Participant must be located in the Progress Energy service territory and be a commercially metered customer.

- Participant must be willing to allow Progress Energy to monitor and inspect the installations of all measures and equipment.

Specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards. Progress Energy will perform a customer-specific cost-effectiveness analysis for each project being considered under the Innovation Incentive program, using the Commission-approved cost-effectiveness tests described in Rule 25-17.008, Florida Administrative Code. The customer's incentive shall be based on the energy saved and/or demand reduction achieved, but shall not exceed 50% of the project cost or reduce the payback to less than two years. The maximum incentive for one project is $500,000 per year. For complex engineering projects, Progress Energy reserves the right to stage the total incentive amount when necessary to confirm energy efficiency savings of the project. After Progress Energy has reviewed and approved the project, an application will be executed between Progress Energy and the customer.

G. Standby Generation Program

A demand control program that will reduce Progress Energy's demand based upon the control of customer equipment. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to reduce their Progress Energy demand when deemed necessary. The program is offered through the General Service Load Management-2 (GSLM-2) rate schedule.

Progress Energy may have direct control of the customer equipment or will rely upon the customer to initiate the generation upon being notified by Progress Energy and continue running it until Progress Energy notifies the customer that the generation is no longer needed. Progress Energy does not restrict other use of the equipment by the customer.

Program participants receive a monthly credit on their energy bill according to the demonstrated ability of the customer to reduce demand at Progress Energy's request. An additional credit will be based on the KWh the customer provides. The credits are based upon the load served by the customer's generator, which would have been served by Progress Energy if the Standby Generation program were not in operation. By compensating the customer for the use of their on-site generation, Progress Energy can impact the commercial and industrial market while minimizing rate impacts. The incentive will be based on a per KW credit per month plus an additional compensation per KWh to support customer O&M associated with run time requested by the company.

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the GS-1, GST-1, GSD-1 or GSDT-1 Rate Schedules.
- Customer must have standby generation that will allow facility demand reduction at the request of Progress Energy.
- Customer's Standby Generation Capacity calculation must be at least 50 KW.
- Customer must be within the range of Progress Energy's load management system.

H. Interruptible Service Program

A direct load control program that reduces Progress Energy's demand at times of capacity shortage during peak or emergency conditions. The program is available throughout the entire territory served by Progress Energy to any non-residential customer who is willing to have their power interrupted. The program is currently offered through the Interruptible General Service (IS-2) and Interruptible General Service Time of Use (IST-2) rate schedules. The IS-1 and IST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will have remote control of the circuit breaker or disconnect switch supplying the customer's equipment. If purchased power is available at the time of potential interruption, customers who choose not to have their load interrupted will be assessed at the price of that purchased power supplied. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit based on their billing demand and billing load factor. The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the IS-2 or IST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more.
- Available at primary, transmission and secondary service voltages.

I. Curtailable Service Program

An indirect load control program that will reduce Progress Energy's demand at times of capacity shortage during peak or emergency conditions. The program is available throughout the entire territory served by Progress Energy to any non-residential customer who agrees to curtail 25% of their average monthly billing demand for CS-2 and CST-2 and a minimum of 2000 KW for CS-3 and CST-3. The program is currently offered through the Curtailable General Service (CS-2) and Curtailable General Service Time of Use (CST-2) rate schedules. The CS-1 and CST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will notify customers when off-system power purchases may begin in support of their service. If purchased power is available at the time of notification, customers who choose

not to reduce their load will be assessed charges as set forth in the applicable tariff. Additionally, Progress Energy will provide notification of curtailment request. Upon curtailment request, customers choosing not to comply with their curtailment responsibility will be assessed penalties as described in the applicable tariff. Customers participating in the Curtailable Service program receive a monthly curtailable demand credit based on their curtailable demand and billing load factor. The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the CS-2 or CST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more for CS-2 and CST-2.
- Available at primary, transmission and secondary service voltages.

J. Business Energy Response Program

Provides participating non-residential customers with prompt time-of-use energy information, enabling the customer to utilize current energy usage data to identify opportunities to reduce electric consumption during high peak/rate periods. Additionally, these customers will have the opportunity to take advantage of the critical peak rebate incentive that will be offered upon approval of this demand response program and associated tariff sheet (GSDR). This critical peak rebate will be provided to the qualifying non-residential customers during critical peak times to encourage the customer to reduce load during these peak events by allowing direct load control of their air-conditioning systems and/or interfacing with their energy management systems.

There will be a phased infrastructure enhancement plan and implementation that will enable advanced remote metering, direct load control & energy management system demand response interfaces, provide customers with more frequent interval meter data including the addition of a two-way communications network, and a Meter Data Management System with a customer-accessible energy usage and reporting web portal.

Incentives will be based on measured demand reduction compared to a benchmark average demand established over a period just prior to the critical peak event day. The program eligibility requirements to qualify for participation are as follows:

General Requirements:

- Meet program specific requirements to ensure needed technology is compatible and expected load reduction is feasible as will be indicated in the GSDR tariff sheet.
- The building/facility must be a Progress Energy non-residential tariff type with a time of use or demand rate or have an existing time of use or demand meter.

- The building/facility must have an approved Progress Energy "smart meter" that is connected to the Progress Energy Advanced Metering Infrastructure/Demand Response network with two-way communications active (provided by Progress Energy).

- The metering and DR equipment/installation must be considered cost effective by Progress Energy.

- The non-residential participant must agree to participate for a minimum number of control events if demand response equipment is installed.

- Exceptions to the non-residential tariff type requirement may be made in the event the commercial customer is out of our AMI range, resulting in the need to install meters/gateways to complete the two-way communications network to the customer or if interval data is needed on that residential customer for research purposes.

- Participant must allow Progress Energy and/or its contractor access to all equipment on this program when required by Progress Energy.

- Incentive Levels and specific eligibility requirements for each feature promoted in this program will be presented in the Program Participation Standards.

III. Technology Development Program

The purpose of this program is to establish a system for meeting the goals in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. Progress Energy will undertake certain research and demonstration projects which provide support for the development of cost-effective demand reduction, energy efficiency, and alternative energy programs. Technical and operational knowledge for the advances in the energy field may come from field demonstration projects, research partnerships, webinars, general education, etc. The Technology Development program is designed to allow Progress Energy to investigate technologies and support the development of new programs from initial concept through submittal to the Commission for consideration and approval. In general, each research and demonstration project that is proposed and investigated will proceed as follows:

- Project concept or idea development.

- Project research and design, including estimated costs and benefits.

- Conduct field testing, pilot program, modeling, general research, and theoretical testing.

- Evaluation of collected data, including cost-effectiveness.

- Acceptance or rejection of project for continuation as a program.

- If accepted for continuation, application will be made to the Commission for approval to implement the program.

Eligible customers will be dependent on the type of project proposed and investigated as determined during the project research and design phase. Each project that is proposed and investigated will have to meet one or more of the goals identified in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. If not, the project will not proceed beyond the project concept or idea phase.

IV. Qualifying Facilities Program

The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Part III of Chapter 25-17, Florida Administrative Code, regarding the purchase of as-available energy and firm energy and capacity from qualifying facilities pursuant to standard offer and negotiated contracts.
Under the Qualifying Facilities program, Progress Energy develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.

Description of PEF's Rate Mitigation Plan

IV. RESIDENTIAL CONSERVATION PROGRAMS

A. Home Energy Check Program

An energy audit program that provides residential customers with an analysis of their energy use as well as recommendations on how they can save on their electricity bill. The audit focuses on education and encouraging customers to implement minimal cost energy-saving practices and measures. The audit also provides Progress Energy the opportunity to promote cost effective measures in customers' homes and serves as the foundation for other residential Demand Side Management Programs. The following types of energy audits are offered:

- Type 1: Free Walk-Through (free)
- Type 2: Customer-completed Mail-In (free)
- Type 3: Customer Online (Internet Option – free)
- Type 4: Customer Phone Assisted (free)
- Type 5: Home Energy Check for Kids (free)
- Type 6: Paid Walk-Through ($15)
- Type 7: Home Energy Rating (Class I, II per "Florida Energy Gauge Ratings" tariff)

Customers participating in all audit types will be provided with energy efficiency tips and examples of easily installed energy efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable energy reductions in energy usage through the implementation of low cost energy efficiency measures.

The customer will receive a residential Energy Efficiency Kit at the time of the onsite Home Energy Check or through the mail following completion of all other types of Home Energy Checks. The kit provides items that are easily implemented for energy efficiency. The contents of the kit will change as needed to achieve high savings impacts while recognizing changes in technology and customer habits. Items that may be included in the kit are energy efficient lighting, thermometers, weatherization items, low-flow devices, as well as education for the customer on the savings associated with the installation of the items in the kit.

The Free Walk Through audit has been enhanced to include a mobile delivery method that will help guide the company's improvements in its residential energy audits. This enhanced delivery of the Free Walk-Through provides the energy auditor with a more effective way to input information about the customer's home. The mobile device will address customer needs immediately through online information, and it may print a copy of the report while at the customer's home emphasizing the steps that the customer should focus on for improving energy efficiency. The mobile audit also allows the upload of the energy audit results to the company's

customer database. The company intends to build on the benefits of this platform to increase the value it provides as well as to ensure customer satisfaction with this energy audit.

All residential customers of Progress Energy are eligible to receive any of the above energy audits conducted on residentially metered buildings, located in Progress Energy's service territory. There is no charge for Type 1 through Type 5 home energy checks, while there is a $15 customer charge for the Type 6 Home Energy Check. When a customer requests a Home Energy Check, they will be given the option of receiving a Type 2 Home Energy Check survey in the mail, a Type 4 Phone Assisted Home Energy Check or the option of scheduling a Type 1 or Type 6 Walk-through Home Energy Check. A Progress Energy auditor will usually conduct the Walk-through Home Energy Check, although Progress Energy reserves the option to work with other agencies and/or utilities as an extension of the Home Energy Check service. An approved energy auditor from another organization may conduct the Home Energy Check. The Home Energy Rating as outlined in Progress Energy's "Florida Energy Gauge Ratings" tariff is available to all eligible Progress Energy customers upon request.

B. Home Energy Improvement Program

Designed for the existing single family, multi-family and manufactured home customers who want to retrofit with high energy efficiency improvements. All residential customers are eligible to participate in one or more measures included in this program. The program builds on customer awareness by utilizing various audit types, contractor participation and Progress Energy influence to educate customers on cost-effective measures relevant to their residence. Program participation must be influenced by one of Progress Energy's educational opportunities. The program provides incentives for high efficiency HVAC equipment including installation and maintenance, duct repair, attic and wall insulation upgrades, reflective roofing, high performance windows, window film and heat pump water heaters to residential customers in Progress Energy's service territory.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measure and verification analysis or technological advances. Progress Energy is proposing to include the following measures with this program:

High Efficiency HVAC Systems

Provides customers an incentive to install a high efficiency HVAC system when replacing their existing system. The incentive will be awarded on a per unit basis according to efficiency rating and tonnage, regardless of the system type (*PTAC, Mini-Split, Multi-Split, Geothermal Heat Pumps, etc.*). Measure requirements will be outlined in the Program Participation Standards.

Proper Sizing of High Efficiency HVAC Systems

Encourages the customer to have a new replacement air conditioning system properly sized by the HVAC contractor using industry accepted sizing protocol. The Proper Sizing of High

Efficiency HVAC Systems measure is performed in conjunction with the installation of a new HVAC system.

Supply and Return Plenum Seal
Encourages the HVAC contractor to seal the supply and return portion of the plenum to a new air handler with mastic. The Supply and Return Plenum Seal measure is performed in conjunction with the installation of a new HVAC system.

HVAC Commissioning
An incentive will be provided for the Commissioning of HVAC system(s) in accordance with Progress Energy standards and requirements, eligible on all Florida Energy Code compliant HVAC systems. The requirements and incentives will be outlined in the Program Participation Standards. The HVAC Commissioning measure is performed in conjunction with the installation of a new HVAC system.

Duct Repair
Designed to promote energy efficiency through improved duct sealing. A customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump, to be eligible for this program. The requirements and incentives will be outlined in the Program Participation Standards.

Attic Insulation Upgrade
Encourages customers to upgrade their attic insulation by paying a portion of the installed cost. Eligible residences must have whole house electric air conditioning and/or whole house electric heating. The residence must meet the requirements of the Program Participation Standards to qualify for this measure.

Wall Insulation Upgrade
Encourages customers to upgrade the insulation value of the exterior walls of the home by paying a portion of the installed cost. The requirements and incentives will be outlined in the Program Participation Standards.

Reflective Roof Coating
Provides incentives to install an ENERGY STAR® or Cool Roof Rating Council approved reflective roof coating product to a manufactured home's roof. The product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Reflective Roof
Provides incentives to install an ENERGY STAR® or Cool Roof Rating Council approved reflective roof. The product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Window Film

Awards an incentive for installing high performance window film. Qualifying residences will install window film that meets the specifications as outlined in the Program Participation Standards.

Replacement Windows
Awards an incentive for installing high performance windows. Qualifying residences will install windows that meet the specifications as outlined in the Program Participation Standards.

HVAC Tune-up
An HVAC contractor performs a tune-up on the customers' existing HVAC system(s) to include: verifying proper refrigerant charge, proper air flow to the residence, and cleaning indoor/outdoor coils and fan blades. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

HVAC Quality Installation
Includes a requirement for the proper selection of equipment that is designed to perform efficiently in Florida's hot, humid climate. The Quality Installation measure also includes right-sizing of the equipment, supply and return plenum sealing, air flow verification and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heater
Offers an incentive to install a new heat pump water heater that meets the ENERGY STAR® electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

Financing
Financing assistance is an alternative to the direct incentive payment. Progress Energy may explore opportunities to collaborate with 3rd party financing institutions to offer eligible program participants a financing option that focuses on achieving a low monthly payment. A potential financing option could be longer amortization schedules that would be utilized to create a monthly payment that corresponds with the monthly energy savings. Another potential feature of financing assistance would be to apply the customer's applicable incentive(s) for the measure(s) installed to the loan to buy-down the amount of the monthly payment.

C. Residential New Construction Program

Designed to improve the energy efficiency of newly constructed residences in the single family, multi-family and manufactured homes segments. Program participation must be influenced by one of Progress Energy's educational opportunities. The program will provide financial incentives and education to builders and developers for incorporating energy efficient measures into the construction process. To qualify for the program, the residence must be a new metered residence in Progress Energy territory.

Renovations and additions will be governed by the current Florida building code for eligibility as new construction. Additions do not qualify for the residential manufactured and the multi-family home segment. Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

High Efficiency HVAC Systems
High efficiency heat pumps will be expanded to 3 tiers of classification; 15 to 19+ SEER (*or equivalent EER*). Systems will qualify based on efficiency rating and tonnage regardless of the system type (*PTAC, Mini-Splits, Multi-Splits, Geothermal Heat Pumps, etc.*).

High Performance Windows
An incentive will be provided for the installation of high performance windows. The product must meet the specifications as outlined in the Program Participation Standards.

High Performance Exterior Wall Insulation
An incentive will be provided for the installation of high performance exterior wall insulation that exceeds the current Florida Energy Code by a factor of two. The product must meet the specifications as outlined in the Program Participation Standards.

HVAC Commissioning
An incentive will be provided for the commissioning of HVAC system(*s*) in accordance with Progress Energy standards and requirements, eligible on all Florida Energy Code compliant HVAC systems. The requirements and incentives will be outlined in the Program Participation Standards.

ENERGY STAR® Certification
Offers the builder an incentive to help offset the cost to have a residence rated to meet the ENERGY STAR® certification. The incentive is paid if the residence achieves ENERGY STAR®'s qualifications and at least two Residential New Construction measures are installed. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Code Plus 20 Construction
Offers an incentive to builders that construct a residence exceeding the current Florida Energy Code by at least 20% provided they install at least three Residential New Construction program measures. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Multi-Family Complexes with Heat Pumps
Multi-family builders and developers that can verify a change in design from A/C systems with electric resistance heat to heat pumps will qualify for a per heat pump system incentive to offset

the costs associated with the design change. The requirements and incentives will be outlined in the Program Participation Standards.

HVAC Quality Installation
Requires the proper selection of equipment and includes the right-sizing of the equipment, supply and return plenum sealing, air flow verification, and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heaters
Offers builders an incentive to install new heat pump water heaters that meet the ENERGY STAR® electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

D. Neighborhood Energy Saver Program

A custom energy conservation program designed to assist low-income families with escalating energy costs by making energy efficiency improvements at their residence. Trained professional surveyors and installers representing Progress Energy will offer low-income families in targeted neighborhoods a home energy assessment followed by the installation of specified electric energy conservation measures. While in the home, residents will be provided energy saving tips for improving and sustaining household energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

Program participation is based on the median income guidelines and minimum percentage of households within the Census Block Group meeting those guidelines as calculated from the 2000 and 2010 U.S. Census reports. In the absence of Census data that meets the afore mentioned guidelines, Progress Energy will utilize local municipality defined low-income neighborhood data. Additional requirements are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory.
- Customer must reside in a selected Progress Energy qualifying Census Block Group that meets the definition of a Low-income neighborhood as stated above.
- Multi-family dwellings that meet the above definition are located in the Neighborhood Energy Saver city, but not within the census block may also be eligible to participate in the Neighborhood Energy Saver program if they meet guidelines as presented in program participation standards.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs
Provides for the installation of a maximum of five (5) compact fluorescent lamps (CFLs) which are in use for an average of at least four (4) hours per day.

Refrigerator Coil Brush
Provides the customer with a coil brush to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer
Provides for the installation of one thermometer in the food compartment and one thermometer in the freezer of the refrigerator.

Change Filter Calendar
Provides each homeowner a Progress Energy magnetic calendar to help remind them to clean or change HVAC filter monthly.

Weatherization Measures
Provides weather stripping, door sweeps, caulk, foam sealant, and clear patch tape which will be used to reduce or stop air infiltration around doors, windows, and where pipes enter the home; Air infiltration reduction is significant to saving energy and customer comfort.

Water heater insulation wrap and insulation for water pipes
Furnishes and install a hot water heater wrap and pipe insulation as identified by the Neighborhood Energy Saver program Home Energy Evaluation.

Water conservation shower head and faucet aerators
Provides a maximum of three (3) aerators and two (2) low flow showerheads per household.

Water heater temperature check and adjustment
Provides a temperature check of the hot water heater and perform the turn down adjustment if the customer elects to do so.

HVAC filters
Allows each customer to receive a one year supply of filters (12); One filter may be installed at time of evaluation if needed.

Indoor wall thermometer
Provides the installation of one wall plate thermometer per home.

HVAC winterization kit
Provides for the installation of a winterization HVAC kit for wall/window AC units, if seasonably applicable; The resident will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the weatherization kit as a method of stopping air infiltration in the home.

Attic Insulation Upgrade
Upgrades the customer's insulation from R-0/4 to R-19 if required.

HVAC Maintenance
Requires performing basic maintenance on the indoor and outdoor components of the central air and heating unit.

Window Film/Solar Screen
Provides installing window film or solar screen on east, west and south oriented windows.

E. Low Income Weatherization Assistance Program

Designed to leverage working relationships with providers to integrate Demand Side Management measures and offer energy efficiency with an education component. The program combines weatherization provider partnerships with energy education and energy efficiency improvements to benefit low-income families. The program provides incentives for attic insulation upgrades, duct testing and repair, reduced air infiltration, water heater wrap, HVAC maintenance, high efficiency heat pumps, high efficiency electric water heater, low flow showerheads, compact fluorescent light bulbs, faucet aerators, refrigerator coil brush, dedicated heat pump water heaters, window screen/film, reflective roof coating, window air conditioning replacement with window unit winterization kit, and a community energy education component. The program eligibility requirements to qualify for participation are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory
- Must meet Florida's weatherization and local home improvement provider low-income criteria, in addition to income requirements determined by the Department of Community Affairs (DCA)0
- Homes must be greater than two years old0
- A DCA-approved provider or local provider's approved contractors must perform all work.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

Attic Insulation Upgrade
Encourages customers to add insulation to the ceiling area by paying a portion of the installed cost. The customer must have either whole house electric cooling or electric heating to be eligible for this program.

Duct Test and Repair
Designed to encourage eligible customers to improve their central duct system by reducing the air leakage rate. This is accomplished by performing a duct leakage test, then offering to repair the leakage that is discovered by the duct test. The home must have central ducted electric cooling and electric heat to participate in this measure.

Reduced Air Infiltration
The provider must demonstrate a minimum reduction of air infiltration into the home of 1500 cfm at 50 pascal's to receive an incentive. The home must not exceed ASHRAE Standard 62 for acceptable indoor air quality.

Water Heater Wrap
Provides and installs a water heater wrap as identified in the Program Participation Standards.

High-Efficiency Electric Heat Pumps
For high-efficiency electric heat pumps, Progress Energy will provide an incentive per unit. The specific incentive available is dependent upon the efficiency level of the unit installed and the type of electric heat the new equipment is replacing. In order to qualify for an incentive, both the air handler and the outdoor condensing unit shall be replaced, and both units shall be new.

High-Efficiency Electric Water Heating
Promotes technologies that heat water more efficiently than a standard electric water heater and save energy. The incentive depends on the type of technology being installed.

Heating and Air Conditioning Maintenance
To maximize efficiency an incentive will be provided for a heating & air conditioning contractor to perform service/tune-up maintenance on existing electric central heating and air conditioning systems.

Low Flow Showerhead – Aerators
To improve energy efficiency for low-income customers in existing homes, Progress Energy will pay an incentive per showerhead for a maximum of two (2) per home, and an additional incentive per aerator for a maximum of three (3) per home.

Compact Fluorescent Light
Helps low-income customers reduce their energy costs by installing up to three (3) compact fluorescent lamps (CFLs) per home.

Refrigerator Coil Brush
Encourages low-income customers to clean the coils on their refrigerator. The local provider will demonstrate coil cleaning techniques and leave one brush with the customer for future use.

Window Film/Screen
The local provider will be responsible for meeting manufacturer's instructions and specifications, and installing this measure on west, southwest and northwest oriented windows only. Jalousie, double/triple pane, frosted/plastic windows and skylights are not eligible.

Roof Coating for Manufactured Homes
Lowers cooling cost and extend roof life for manufactured homes by providing an incentive to install an ENERGY STAR® or Cool Roof Rating Council approved reflective roof coating product.

Window AC Replacement with Window Unit Winterization Kit
Provides an incentive for replacement/recycle of one window A/C unit per home. Customers will receive a window unit winterization kit. The window A/C unit to be replaced must be in operating condition and the provider must be sure the window A/C unit is removed from the premise and recycled appropriately.

Community Energy Connection
Provides low-income residents with energy education training and interactive workstations that focus on assisting low-income families with developing achievable, sustainable strategies to reduce individual energy bills. Each attendee will receive an Energy Conservation Kit. The energy education training will provide a series of Community Energy Connection workshops in low-income communities, designed to partner with low-income providers. These educational workshops will include three stations: Energy Education Presentation, Social Service Agency Presentation, and Expo/Interactive Workstation. The interactive display station will consist of the following: A/C Thermostat, Lighting, Attic Insulation, Air Handler, and Refrigerator Coil Cleaning.

F. Residential Energy Management Program

A voluntary customer program that allows Progress Energy to reduce peak demand and defer generation construction. Peak demand is reduced by interrupting service to selected electrical equipment with radio controlled switches installed on the customers' premises. These controlled interruptions are at Progress Energy's option during specified time periods and coincident with hours of peak demand.

It continues to be cost-effective to add new participants to the Residential Year Round Energy Management (RSL-1) and Winter Only (RSL-2) Rate Schedules. Continuing the Residential Energy Management program will increase the summer and winter load control capabilities. In addition to increasing the program's winter effectiveness, the 100% strip control will continue to be offered to any new participants and existing participants requesting a change with heat pump equipment.

This program has grown to be one of the largest direct load control programs in the nation today. Progress Energy will continue to offer this program to residential customers, but major infrastructure maintenance procedures are required to maintain a reliable program. The current direct load control one-way communications and home appliance switching infrastructure that allows Progress Energy to load shed over 700 MW of winter peak demand is becoming obsolete due to the end-of-life of major components in the near future. Major infrastructure maintenance and system upgrades are necessary to continue to ensure the availability of the existing 700 MW of direct load control capacity and support additional capacity in the future.

G. Residential Lighting Program

Provides incentives and marketing support through retailers to encourage greater PEF customer adoption of ENERGY STAR® qualified or other high efficiency lighting products. The program utilizes a retailer-based approach to simplify consumer participation and provide customers with an instant rebate at the cash register of participating retail outlets. The program targets the purchase of high efficiency lighting products through in-store and on-line promotions, while promoting greater awareness through special retail and community events. The first few years of the program focus on compact fluorescent light bulbs (CFLs), with the intent to add newer lighting technologies as they mature. PEF will partner with various manufacturers and retailers across its entire service territory to offer a wide selection of products to customers.

The program provides incentives for high efficiency lighting to customers in Progress Energy's territory. Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, update measure and verification analysis or technological advances. Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Light bulbs (CFLs)

Initially, the program will provide customers with a discount per bulb for select ENERGY STAR® qualified CFLs. PEF intends to offer a wide selection of bulbs including the standard twist, in addition to specialty bulbs such as A-lines, globes, reflectors, pars, vanity-bulbs, 3-ways, and dimmable.

Other Lighting Technologies

As technology advances and other lighting products with higher efficiencies become available, PEF will seek Commission approval to add other relevant measures leveraging the resources and market channels of this program. Future offerings could include energy efficient light fixtures, LEDs, or other high efficiency lighting products.

H. Residential Behavior Modification Program

Designed to reduce residential electrical consumption by applying behavioral science principles in which eligible customers receive reports which compare their energy use with neighbors in similar homes. Participants will be periodically mailed the individualized reports and can elect to switch to on-line reports at any time during the duration of the program. In addition to the household comparative analysis the reports will provide specific recommendations to motivate participants to reduce their energy consumption. PEF will also deploy an interactive web portal that gives customers greater insight into their energy consumption and actions they can take to become more energy efficient. The web portal will include monthly customer billing data, goal setting and tracking, as well as personalized and community recommended energy efficiency tips. Customers with a minimum of twelve months billing history will be eligible to participate in the program. Participants will be determined using statistical methods and represent a cross-section of PEF's high energy usage residential customers.

I. Residential Appliance Recycling Program

Designed to reduce energy usage by removing less efficient refrigerators and freezers that are operating within residences across the PEF service territory. The program will include scheduling and free appliance pick-up at the customer's location, transportation to a recycling facility, and recovery and recycling of appliance materials. The program provides residential customers free pick-up and an incentive for allowing PEF to collect and recycle their less efficient refrigerator or freezer; permanently removing the unit from service. All PEF residential customers will be eligible to participate. Customers will receive free removal and recycling of their appliance, as well as a $50 incentive per appliance for participation, with a limit of two units recycled per year per account. Customers must own the appliance and each must be between 10-30 cubic feet, accessible, plugged-in, cooling, and empty to qualify for the program.

Commercial/Industrial Conservation Programs

J. Business Energy Check Program

An energy audit program that provides commercial customers with an analysis of their energy use as well as recommendations on how they can save on their electricity bill. The audit focuses on education and encouraging customers to implement minimal cost energy-saving practices and measures. The audit also provides Progress Energy the opportunity to promote cost effective measures in customers' facilities. The Business Energy Check program serves as the foundation for other commercial, industrial and governmental Demand Side Management programs. The Business Energy Check program offers the following types of energy audits:

Type 1: Free Walk-Through

Type 2: Paid Walk-Through

Type 3: Free Customer Online (Internet Option)

Type 4: Free Customer Phone-Assisted

All commercial, industrial, and governmental customers of Progress Energy are eligible to receive any of the above mentioned audit types conducted on commercial metered buildings located in Progress Energy's service territory. When a customer requests a Business Energy Check, they will be given the option of any of the above offered audit types. Progress Energy reserves the option to work with other agencies and/or companies as an extension of the Business Energy Check service. The specific details on the procedures for each type of audit will be presented in the Program Participation Standards. Customers participating in all audit types will be provided with sustainable educational and behavioral energy saving examples of easily installed energy conservation measures to reduce energy consumption. The program promotes continued customer involvement by demonstrating sustainable and measureable energy reduction in the business' energy consumption by the implementation of low-cost energy conservation measures.

- The customer will receive a Commercial Energy Efficiency Kit at the time of the onsite Business Energy Check or through the mail following completion of the online or phone assisted audit.

Progress Energy is proposing to include the following measures with this program:

Lighting
Provides customers with up to three (3) compact fluorescent light bulbs to upgrade an existing incandescent fixture located in their lighting systems. This demonstration will encourage additional lighting energy conservation measures changes within the facility.

Indoor Room Thermometer
Provides one room thermometer per business. This measure will establish a reference point for customers to select an energy savings setting for the HVAC system thermostat.

Refrigerator Thermometer
Provides one thermometer in the food or freezer compartment of the refrigerator. This measure will establish a reference point for customers to select an energy savings setting for the refrigeration system thermostat.

Power Conservation Strip
Provides a power conservation strip to reduce idle energy use when appliances are not in operation. The ease of installation and the demonstration of immediate energy reduction will encourage additional customer participation.

Change Filter Calendar
Provides each business a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly to facilitate optimal HVAC performance.

Additional Kit Components
The energy conservation measure kit will also include educational tools that will assist the business owner in making decisions about their energy use. Examples of these educational tools include, but are not limited to the following:

Energy Use Data Sheet
A common appliance and equipment energy use data sheet will be provided to the customer. This will demonstrate to the customer examples where energy is being utilized within their facility, encouraging the customer to make behavior changes to reduce energy consumption.

Facility Setback Procedure
Provides a suggested setback process for relative facilities. The process can be used as behavior modification training for employees or as a poster located at entrances and exits of the facility. It will provide a point of reference to remind employees to choose the best energy saving setting for the facility when shutting down.

K. Better Business Program

Designed for existing Commercial, Industrial, and Governmental customers who want to retrofit with high efficiency improvements. All business customers are eligible. The program builds on customer awareness, utilizing the various audit types, contractor participation, and Progress Energy promotion to educate customers on cost effective measures relevant to their businesses. The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy's educational opportunities.
- The facility must be a commercially metered customer in Progress Energy service territory.

Commercial multi-family is defined as commercially metered accounts of multi-family residential apartments or condominiums, or assisted living residential apartment units. Any multi-family residential dwellings that are metered (referred to as "Domestic/Commercial") shall be eligible to participate in this program. Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments. Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

HVAC Equipment & Heat Pump Water Heaters

Provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners including heat pump water heaters, hybrid desiccant and geothermal units, thermal energy storage systems, package terminal heat pumps and package terminal air conditioners, water-cooled chillers, air-cooled chillers, EMS Chiller Optimization, and high efficiency straight cool air conditioners 14 to 19+ SEER. The Better Business HVAC measures also provide PEF customers with a one-time incentive to maintain/recommission and/or repair their current rooftop package DX units. The incentives will be based on a per unit basis. PTAC/PTHP coil cleaning is also a one-time incentive to stimulate the annual maintenance of customer's equipment. Hotel AC sensors for controlling HVAC systems during unoccupied periods in hotel rooms will be offered as a per room incentive. Variable Speed Drive controls and Variable Speed Drives for Chiller and Cooling Tower Pump incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes / Exhaust Hood Optimization

Promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must meet qualifications outlined in the Program Participation Standards. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using *C02* sensors.

Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. Heat Pipe technology for pre-conditioning fresh air will also be incented and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Duct Leakage Test and Repair
Designed to promote energy efficiency through improved duct system sealing. This program component applies to HVAC equipment and systems that are no larger than 65,000 Btu/h. A customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump, to be eligible for this program.

Efficient Indoor lighting
Provides customers with an incentive to upgrade their lighting systems to an approved lighting technology. The following technologies will be included: Premium T-8's and T-5's, occupancy sensors, ceramic metal halides, LED display lighting, Induction/Cold cathode, CFL lamps with integral ballast, and CFL hardwire fixtures. The Program Participation Standards will outline the incentive adjustments due to code changes.

Ceiling Insulation Upgrade
Encourages customers to add insulation to the conditioned ceiling area by paying for a portion of the installed cost. The facility must meet the Program Participation Standard requirements in order to qualify for this measure.

Cool Roof / Green Roof/ Roof Insulation
Provides customers with an incentive to install an approved "*cool roof*" providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Compressed Air System
Provides an incentive to encourage business customers to utilize a proactive approach to increase the efficiency of compressed air systems. The customer must provide a pre- and post-analysis of the system in order to be eligible for incentives.

Efficient Motors
Promotes the installation of certain high efficiency polyphase motors through a simple incentive structure based on the motor size and a specified $/hp. The specific incentive amount will be a function of the motor size and efficiency.

Window Film / Solar Screen
Provides an incentive to install window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration
Provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. The eligible devices include vending machine controls, and high efficiency ice makers.

Building Commissioning
Provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Program Participation Standards.\

Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in the market conditions, such as baseline or code revisions, updated measures and valuation analysis or technological advances.

L. Commercial/Industrial New Construction Program

Designed to improve the energy efficient construction of commercial buildings. The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy's educational opportunities.
- Equipment and measures must be installed in facilities that are commercially metered in Progress Energy service territory.
- Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments.
- The owner/builder or manufacturer must meet the requirements listed in the Program Participation Standards and comply with all state, local and federal codes.

Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measures, and valuation analysis or technological advances. Progress Energy is proposing to include the following measures with this program:

HVAC Equipment
Provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners, hybrid desiccant and geothermal units, high efficient straight cool air conditioners, thermal energy storage, package terminal heat pumps, and water-cooled and air-cooled chillers. The incentive is calculated for each unit based on the KW difference between the high efficiency unit and the program-specified baseline efficiency. Variable Speed Drive controls and Variable Speed Drives for Chiller and Cooling Tower Pumps incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes
Promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must meet Program Participation Standards qualifications. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using *C02* sensors. Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. An incentive will be offered for Heat Pipe technology for pre-conditioning fresh air and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Cool Roof / Green Roof/ Roof Insulation
Provides customers with an incentive to install an approved "*cool roof*" providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Indoor lighting
Provides customers with an incentive to install lighting systems which are above code. The following technologies will be included: Premium T-8's and T-5's, occupancy sensors, ceramic metal halides, LED display lighting, and Induction/Cold cathode. The Program Participation Standards will outline the incentive adjustments due to code changes.

Window Film / Solar Screen
Promotes the purchase of windows that meet Progress Energy requirements for window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration
Provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. These devices include vending machine controls and high efficiency ice makers.

Building Commissioning
Provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Participation Standards.

Efficient Motors
Promotes the installation of certain high efficiency polyphase motors through a simple incentive structure based on the motor size and a specified $/hp. The specific incentive amount will be a function of the motor size and efficiency.

M. Business Energy Saver Program

Designed to encourage and educate business customers located in low-income areas by demonstration and installation of sustainable energy conservation measures to help control and reduce energy consumption within their business. The business must be located within the surrounding area of the Progress Energy qualifying Census Block Group that meets the definition of a low-income neighborhood. Trained professional surveyors and installers representing Progress Energy will offer businesses an energy assessment followed by the installation of specified electric energy conservation measures. While in the business, the owner will be provided energy saving tips for improving and sustaining energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

The program eligibility requirements to qualify for participation are as follows:

- The business must be a Progress Energy metered customer within Progress Energy service territory.
- Business must be in a selected Progress Energy qualifying Census Block Group which meets the definition of a low-income neighborhood and surrounding area.
- National and Chain Accounts are not eligible for participation in the Business Energy Saver program.
- All installations must be accessible for verification by a Progress Energy representative.
- A State of Florida General Licensed Contractor selected and approved by Progress Energy must be used to implement the Business Energy Saver program measures.
- The business energy consumption shall be within Progress Energy defined standards
- The business will have been in operation for at least one year within Progress Energy service territory.
- The business must meet the licensing requirement as established by the local municipality and state regulatory agencies.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances. Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs

Installs up to five (5) compact fluorescent bulbs to replace incandescent bulbs with comparable lumens output in the business.

Refrigerator Coil Brush
Provides the customer with a coil brush and demonstration how to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer
Installs one thermometer in the food or freezer compartment of the refrigerator to provide a reference temperature for efficient operation of the appliance.

Change Filter Calendar
Provides each business with a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly.

Weatherization Measures
Installs weather stripping, door sweeps, caulk, foam sealant, and clear patch tape where needed to reduce air infiltration around doors, windows, and where pipes enter the business.

Water Heater Insulation Wrap and Insulation for Water Pipes
Installs a water heater wrap and pipe insulation as identified to improve the efficiency of the water heating system. Foam insulated water heaters will be excluded from this measure.

Water Conservation Faucet Aerators
Installs a maximum of two (2) aerators per business. This measure will reduce energy consumption related to the water heater system.

Water Heater Temperature Check and Adjustment
Provides a temperature check of the water heater and inform the customer of the possibility for reducing temperatures within manufacturer's recommendation and code requirements.

HVAC Filters
Provides each customer with a one-year supply of filters (12) for the main HVAC system. One filter may be installed at time of evaluation if needed.

Indoor Wall Thermometer
Installs one wall plate thermometer per business to encourage the business owner to be aware of thermostat setting.

HVAC Window Unit Winterization Kit
Installs a winterization HVAC kit on wall/window AC units if seasonably applicable. The business will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the winterization kit as a method of stopping air infiltration in the business.

HVAC Maintenance
Provides basic maintenance on the condensing and air handling units to increase energy efficiency through proper operational maintenance of mechanical equipment.

Attic Insulation Upgrade
Upgrades the customer's ceiling insulation up to R-30 as building code will allow. This measure will improve the efficiency of the business' building envelope.

Window Film/Solar Screen
Installs window film or solar screen on south, east, or west oriented windows to reduce solar heat gain within the building.

N. Commercial Green Building New Construction

Designed for commercial, industrial, and governmental customers who are building new facilities to achieve optimal energy efficiency. The program is designed to encourage the energy efficient construction of new commercial facilities according to guidelines set forth by LEED-NC. The LEED-NC rating system for commercial buildings focuses on improving energy efficiency, reducing carbon emissions, and addressing other environmental and human-health outcomes. The general eligibility requirements are as follows:

- Qualification is limited to LEED-NC certified buildings only.
- Incentive based on LEED-NC registration and certification fees.
- Building must have installed a minimum number of Progress Energy Commercial New Construction program measures as outlined in the Program Participation Standards.
- Commercial Green Building New Construction program incentive will be paid in addition to Commercial New Construction program incentives.
- This program will offer a capped incentive in the amount of 50% of the registration and certification fees for obtaining a LEED-NC certificate for a New Construction building.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, technological advances, or changes to the structure in the LEED-NC registration and certification fees.

O. Innovation Incentive Program

Designed to encourage customers to make capital investments for the installation of energy efficiency measures which reduce peak KW and energy on the Progress Energy system. This program offers customized incentives specifically designed for individual innovative projects which are not otherwise addressed by Progress Energy Demand Side Management programs. Representative examples of energy efficient technologies that would be considered under this program include, but are not limited to, refrigeration equipment replacement and new lighting technologies. The timeline of the Innovation Incentive program can range from six months to

one year depending on the project. The steps included are application, monitoring, data collection, analysis of data, inspection, and processing incentive to the customer. Program eligibility requirements to qualify for participation are as follows:

- Participant must be located in the Progress Energy service territory and be a commercially metered customer.

- Participant must be willing to allow Progress Energy to inspect the installations of all measures and equipment.

Specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards.

Progress Energy will perform a customer-specific cost-effectiveness analysis for each project being considered under the Innovation Incentive program, using the Commission-approved cost-effectiveness tests described in Rule 25-17.008, Florida Administrative Code. The customer's incentive shall be based on the energy saved and/or demand reduction achieved, but shall not exceed 50% of the project cost or reduce the payback to less than two years. The maximum incentive for the project is $500,000 per year. For complex engineering projects, Progress Energy reserves the right to stage the total incentive amount when necessary to confirm energy efficiency of the project.

After Progress Energy has reviewed and approved the project, an application will be executed between Progress Energy and the customer.

P. Standby Generation Program

A demand control program that will reduce Progress Energy's demand based upon the control of customer equipment. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to reduce their Progress Energy demand when deemed necessary. The program is offered through the General Service Load Management-2 (GSLM-2) rate schedule.

Progress Energy may have direct control of the customer equipment or will rely upon the customer to initiate the generation upon being notified by Progress Energy and continue running it until Progress Energy notifies the customer that the generation is no longer needed. Progress Energy does not restrict other use of the equipment by the customer.

Standby Generation program participants receive a monthly credit on their energy bill according to the demonstrated ability of the customer to reduce demand at Progress Energy's request. An additional credit will be based on the KWh the customer provides. The credits are based upon the load served by the customer's generator, which would have been served by Progress Energy if the Standby Generation program were not in operation. By compensating the customer for the use of their on-site generation, Progress Energy can impact the commercial and industrial market while minimizing rate impacts. The incentive will be based on a per KW credit per month plus

an additional compensation per KWh to support customer O&M associated with run time requested by the company.

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the GS-1, GST-1, GSD-1 or GSDT-1 Rate Schedules.
- Customer must have standby generation that will allow facility demand reduction at the request of Progress Energy.
- Customer's Standby Generation Capacity calculation must be at least 50 KW.
- Customer must be within the range of Progress Energy's load management system.

Q. Interruptible Service Program

A direct load control program that reduces Progress Energy's demand at times of capacity shortage during peak or emergency conditions. The program is available throughout the entire territory served by Progress Energy to any non-residential customer who is willing to have their power interrupted. The program is currently offered through the Interruptible General Service (IS-2) and Interruptible General Service Time of Use (IST-2) rate schedules. The IS-1 and IST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will have remote control of the circuit breaker or disconnect switch supplying the customer's equipment. If purchased power is available at the time of potential interruption, customers who choose not to have their load interrupted will be assessed at the price of that purchased power supplied. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit based on their billing demand and billing load factor.

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the IS-2 or IST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more.
- Available at primary, transmission and secondary service voltages.

R. Curtailable Service Program

An indirect load control program that will reduce Progress Energy's demand at times of capacity shortage during peak or emergency conditions. The program is available throughout the entire territory served by Progress Energy to any non-residential customer who agrees to curtail 25% of

their average monthly billing demand for CS-2 and CST-2 and a minimum of 2000 KW for CS-3 and CST-3. The program is currently offered through the Curtailable General Service (CS-2) and Curtailable General Service Time of Use (CST-2) rate schedules. The CS-1 and CST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will notify customers when off-system power purchases may begin in support of their service. If purchased power is available at the time of notification, customers who choose not to reduce their load will be assessed charges as set forth in the applicable tariff. Additionally, Progress Energy will provide notification of curtailment request. Upon curtailment request, customers choosing not to comply with their curtailment responsibility will be assessed penalties as described in the applicable tariff. Customers participating in the Curtailable Service program receive a monthly curtailable demand credit based on their curtailable demand and billing load factor. The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the CS-2 or CST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more for CS-2 and CST-2.
- Available at primary, transmission and secondary service voltages.

S. Business Energy Response Program

This program will provide participating non-residential customers with prompt time-of-use energy information, enabling the customer to utilize current energy usage data to identify opportunities to reduce electric consumption during high peak/rate periods. Additionally, these customers will have the opportunity to take advantage of the critical peak rebate incentive that will be offered upon approval of this demand response program and associated tariff sheet (GSDR). This critical peak rebate will be provided to the qualifying non-residential customers during critical peak times to encourage the customer to reduce load during these peak events by allowing direct load control of their air-conditioning systems and/or interfacing with their energy management systems.

There will be a phased infrastructure enhancement plan and implementation that will enable advanced remote metering, direct load control & energy management system demand response interfaces, provide customers with more frequent interval meter data including the addition of a two-way communications network, and a Meter Data Management System with a customer-accessible energy usage and reporting web portal.

Incentives will be based on measured demand reduction compared to a benchmark average demand established over a period just prior to the critical peak event day. The program eligibility requirements to qualify for participation are as follows:

- Meet program specific requirements to ensure needed technology is compatible and expected load reduction is feasible as will be indicated in the GSDR tariff sheet.

- The building/facility must be a Progress Energy non-residential tariff type with a time of use or demand rate or have an existing time of use or demand meter.

- The building/facility must have an approved Progress Energy "smart meter" that is connected to the Progress Energy Advanced Metering Infrastructure/Demand Response network with two-way communications active (provided by Progress Energy).

- The metering and DR equipment/installation must be considered cost effective by Progress Energy.

- The non-residential participant must agree to participate for a minimum number of control events if demand response equipment is installed.

- Exceptions to the non-residential tariff type requirement may be made in the event the commercial customer is out of our AMI range, resulting in the need to install meters/gateways to complete the two-way communications network to the customer or if interval data is needed on that residential customer for research purposes.

- Participant must allow Progress Energy and/or its contractor access to all equipment on this program when required by Progress Energy.

- Incentive Levels and specific eligibility requirements for each feature promoted in this program will be presented in the Program Participation Standards.

V. Technology Development Program

The purpose of this program is to establish a system for meeting the goals in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. Progress Energy will undertake certain research and demonstration projects which provide support for the development of cost-effective demand reduction, energy efficiency, and alternative energy programs. Technical and operational knowledge for the advances in the energy field may come from field demonstration projects, research partnerships, webinars, general education, etc. The Technology Development program is designed to allow Progress Energy to investigate technologies and support the development of new programs from initial concept through submittal to the Commission for consideration and approval.

In general, each research and demonstration project that is proposed and investigated will proceed as follows:

- Project concept or idea development.

- Project research and design, including estimated costs and benefits.

- Conduct field testing, pilot program, modeling, general research, and theoretical testing.
- Evaluation of collected data, including cost-effectiveness.
- Acceptance or rejection of project for continuation as a program.
- If accepted for continuation, application will be made to the Commission for approval to implement the program.

Eligible customers will be dependent on the type of project proposed and investigated as determined during the project research and design phase. Each project that is proposed and investigated will have to meet one or more of the goals identified in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. If not, the project will not proceed beyond the project concept or idea phase.

VI. Qualifying Facilities Program

The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Part III of Chapter 25-17, Florida Administrative Code, regarding the purchase of as-available energy and firm energy and capacity from qualifying facilities pursuant to standard offer and negotiated contracts.
Under the Qualifying Facilities program, Progress Energy develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.