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March 16, 2015

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

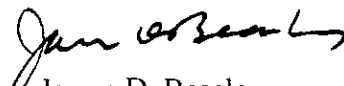
Re: Approval of Demand Side Management Plan for Tampa Electric Company

Dear Ms. Stauffer:

Submitted herewith for filing is Tampa Electric Company's Petition for Approval of Demand Side Management Plan together with the company's proposed plan. By separate transmittal letter we are also delivering three CDs containing the electronic version of the company's filing in the appropriate format (pdf. for text, excel for spreadsheets), along with five hard copies of the company's filing.

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Attachment

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Approval of Demand Side)
Management Plan for Tampa)
Electric Company.)
_____)

DOCKET NO. _____

FILED: March 16, 2015

**TAMPA ELECTRIC COMPANY'S PETITION
FOR APPROVAL OF DEMAND SIDE MANAGEMENT PLAN**

Tampa Electric Company ("Tampa Electric" or "the company") hereby petitions the Commission for approval of its Demand Side Management ("DSM") Plan designed to meet the numeric goals established by the Commission for Tampa Electric in Order No. PSC-14-0696-FOF-EU issued December 16, 2014 in Docket No. 130201-EI. In support of this petition the company states:

1. Notices and communications with respect to this petition in the above docket should be addressed to:

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2. On December 16, 2014 the Commission entered its Order No. 14-0696 which, in part, established numeric conservation goals for Tampa Electric for the period 2015 – 2024.

3. Tampa Electric has prepared and submits herewith its proposed DSM Plan that contains the necessary conservation programs designed to achieve the numeric conservation goals established in Order No. 14-0696.

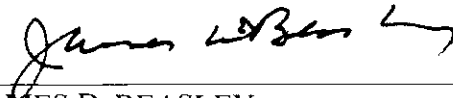
4. Tampa Electric believes that its proposed programs are consistent with Order No. 14-0696 and the numeric conservation goals set forth therein.

5. Tampa Electric is not aware of any disputed issues of material fact relating to the matters addressed herein.

WHEREFORE, Tampa Electric Company requests that the Commission enter its order approving the company's proposed DSM Plan for achieving the goals set by the Commission for the period 2015 – 2024.

DATED this 16th day of March 2015.

Respectfully submitted,



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ATTORNEYS FOR TAMPA ELECTRIC COMPANY



Tampa Electric Company

Ten-Year DSM Plan

2015-2024

March 16, 2015

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Tampa Electric's 2015–2024 Demand Side Management Plan

Executive Summary

Tampa Electric's 2015-2024 Demand Side Management Plan ("DSM Plan" or "Plan") provides a balanced, achievable, and comprehensive approach to meet the Demand Side Management ("DSM") goals recently prescribed by the Commission in Docket No. 130201-EU, Order No. PSC-14-0696-FOF-EU, issued December 16, 2014. The plan is based upon the Rate Impact Measure test ("RIM") thus providing benefits to all rate classes regardless of participation and recognizes that all individual programs contribute some amount of energy and demand savings. By having the DSM Plan RIM based, it ensures that all of Tampa Electric's customers will receive the intended benefits of conservation programs. The Plan includes notes on data and assumptions, new programs, discontinued programs, modifications to existing programs, and energy education/awareness and low income customer initiatives.

The company will continue to offer the renewable technologies program that encompasses incentives for residential and commercial photovoltaic ("PV") installations, solar water heating ("SWH") for residential and low income customers, and PV installations for emergency shelter schools in the company's service area through 2015.

In addition, this 2015-2024 Plan complements prior DSM Plans by continuing to provide customers with cost-effective programs for a total offering of 15 residential and 24 commercial/industrial DSM programs. Highlights of the Plan are detailed below:

Executive Summary Table of Contents:

- **Data, Assumptions and Cost-Effectiveness**
- **New Programs**
- **Discontinued Programs**
- **Discontinued Programs Cost-Effectiveness Summary**
- **Modifications to Existing Programs**
- **Low Income Program Initiatives**
- **Completion of Renewable Energy Systems Initiative**
- **Program Standards**
- **Research and Development (R&D)**
- **2015-2024 Proposed Programs**
- **Cost-Effectiveness Summary with proposed Modifications**
- **Cost and Impact of Proposed DSM Programs**

Data, Assumptions and Cost-Effectiveness

Data used for the cost-effectiveness inputs for energy kWh savings and summer and winter demand kW saving came from four potential sources:

1. Itron data: The 2009 Itron Technical Potential Study was updated as part of the order establishing procedure for the recent numeric conservation goals docket. When this updated information contains the specific measures that are contained in the proposed DSM program, this data is considered an accurate source of information and may be used for cost-effectiveness tests.
2. Historical data: Tampa Electric has cost-effectively offered DSM programs for over 30 years. The company captures data regarding the programs offered and when a substantial amount of history has been gained, this information is used in cost-effectiveness tests.
3. Load research data: Tampa Electric utilized its internal Load Research Department to analyze specific measures or programs where similar customers can be clearly separated into two control groups. These control groups are those that have participated in the specific measure or program and those that have not participated in any DSM program during the monitoring period. The difference in the two control groups' usage data provided inputs for cost-effectiveness tests.
4. DOE2 software: Energy Gauge software produced by the Florida Solar Energy Center was used to evaluate residential building energy improvements. In these simulations, the resulting data was used for cost-effectiveness tests.

In the individual program descriptions throughout this plan, the source of the energy kWh savings and summer and winter demand kW savings will be stated. With the exception of updated measure costs, all other data and assumptions used for the Plan's cost-effectiveness tests and those used to develop the proposed numeric conservation goals were the same. Measure costs were updated to be current with the beginning of the Plan period.

New Programs

Tampa Electric will add the following commercial/industrial DSM programs to its DSM portfolio:

- **Thermal Energy Storage ("TES"):** A program designed to save customers' demand and energy costs by reducing or shifting the afternoon demand peak caused by conventional air conditioning equipment to other non-coincidental peak hours. The measure will save demand on the company's system and depending on the actual system installed, may provide energy savings. TES systems have been rebated historically in the past under the Conservation Value Program. The company has had sufficient participation to justify a stand-alone program. The rebate for TES systems will be \$200 per kW reduced.

Discontinued Programs

Tampa Electric will discontinue the following residential programs from the company's DSM portfolio:

- **Heating, Ventilating, and Air Conditioning ("HVAC") Re-Commissioning:** This program is not cost-effective to offer based on the RIM and the Total Resource Cost ("TRC") tests. The main driver causing this program to fail these tests is: a shortened useful life of five years as compared to the prior goal setting period.
- **Window Film:** This program is not cost-effective to offer based on the RIM and TRC tests. The main drivers causing this program to fail these tests are: a reduction in demand savings of 41 percent, a reduction in annual energy savings of 11 percent and a shortened useful life of ten-years as compared to the prior goal setting period.

Tampa Electric will discontinue the following commercial/industrial programs from the company's DSM portfolio:

- **Energy Recovery Ventilation ("ERV"):** This program is not cost-effective to offer based on the RIM, Participant Cost test ("PCT") and TRC tests. The main drivers causing this program to fail these tests are: a reduction in demand savings of 59 percent and a reduction in annual energy savings of 67 percent as compared to the prior goal setting period. The program was not cost-effective under RIM in the prior goal setting period.
- **Lighting Exit Signs:** The Florida Commercial Energy Efficiency Building Code Section 505.4 requires all internally illuminated exit signs shall not exceed five watts per side. This building code now supersedes offering rebates for exit signs.
- **HVAC Re-Commissioning:** This program is not cost-effective to offer based on the RIM test. The main drivers causing this program to fail the RIM test are: a reduction in demand savings of 49 percent and a shortened useful life of six years as compared to the prior goal setting period. The program was not cost-effective under RIM in the prior goal setting period.
- **Motors:** This program is not cost-effective to offer based on the RIM, PCT and TRC tests. The main drivers causing this program to fail these tests are: a reduction in demand savings of 43 percent and a reduction in annual energy savings of 30 percent as compared to the prior goal setting period.
- **Commercial Cooling-Packaged Terminal Air Conditioner ("PTAC"):** This program is not cost-effective to offer based on the RIM, PCT and TRC tests. The main drivers causing this program to fail these tests are: a reduction in demand savings by 65 percent and a reduction in annual energy savings of 60 percent as compared to the prior goal setting period.
- **Roof Insulation:** This program is not cost-effective to offer based on the RIM, PCT and TRC tests. The main drivers causing this program to fail these tests are: a reduction in demand savings of 81 percent and a reduction in annual energy savings of 80 percent as compared to the prior goal setting period.
- **Window Film:** This program is not cost-effective to offer based on the RIM and TRC tests. The main drivers causing this program to fail these tests are: a shortened

useful life of ten-years and a 136 percent increase in incremental installation cost for commercial facilities as compared to the prior goal setting period.

Discontinued Programs Cost-Effectiveness Summary

Discontinued DSM Programs Summary			
Program	RIM Value	PCT Value	TRC Value
Residential HVAC Re-Commissioning	0.41	337	0.62
Residential Window Film	0.83	34	0.81
Commercial ERV	0.86	-1	0.65
Commercial HVAC Re-Commissioning	0.70	1,816	2.72
Commercial Motors	0.90	-26	0.28
Commercial Cooling PTAC	1.00 ⁽¹⁾	-66	0.20
Commercial Roof Insulation	0.84	-1	0.61
Commercial Window Film	0.70	1,823	0.89
⁽¹⁾ RIM score of 1.00 with zero rebate in cost-effectiveness test			

Modifications to Existing Programs

Tampa Electric has made needed modifications to its existing residential, commercial and industrial DSM programs that will be offered with the company's 2015–2024 DSM Plan. Below is a summary of the modifications made in each of the remaining programs.

Residential Program Modifications

- **Residential Walk-Through Energy Audit (Free Energy Check):** Discontinued the eight free compact fluorescent lamps ("CFL") mailed to customers upon the completion of an audit. These were discontinued due to the phased in changes effecting incandescent bulbs and the associated reduction in incremental energy savings that came from the Energy Independence and Security Act of 2007.
- **Phone Assisted and Online Energy Audits:** These two programs will be combined into one program for ease of facilitation to customers. The new combined program will be called *Residential Customer Assisted Energy Audits*. This program discontinued the eight free CFLs mailed to customers upon the completion of the audit for the reason previously stated.

- **Residential Computer Assisted Energy Audit (RCS-Paid Audit):** Discontinued the eight free CFLs mailed to customers upon the completion of the audit for the reason previously stated.
- **Residential Ceiling Insulation:** Changed from a three tiered program to one standard rebate with the total rebate based upon the square footage of insulation installed. The program will require residences insulate over conditioned space to the level required by building code (R-30) unless there is limited space where the insulation must obtain at least an R-19. In both cases the minimum R-value installed must be greater than or equal to an R-11. The rebate was lowered from an average of \$0.148 to \$0.140 per square foot of installed insulation.
- **Residential Duct Repair:** Florida Residential Energy Efficiency Building Code Section 403.2 mandates duct sealing and duct tightness be completed and verified for new homes and be tested to ASHRAE Standard 152. Customers whose homes received a certificate of occupancy after March 15, 2012 will no longer be eligible for this program. The rebate was lowered from \$183 to \$165 per air distribution system ("ADS") repaired.
- **Residential Electronically Commutated Motors ("ECM"):** The rebate was lowered from \$135 to \$115 per ECM installed.
- **Energy Education Outreach:** Will merge with the company's existing Agency Outreach initiative removing Agency Outreach from Neighborhood Weatherization. The energy efficiency kit and education portions of these programs are identical. The new program will be called *Energy Education, Awareness and Agency Outreach*.
- **New Construction:** This program will be modified to become the Energy Star for New Homes program. The Energy Star for New Homes program will offer a rebate of \$850 per new residence receiving the Energy Star Certificate.
- **Residential Heating and Cooling:** Due to the new amended energy conservation standard dated June 27, 2011 for residential air conditioners and heat pumps, the new minimum Seasonal Energy Efficiency Ratio ("SEER") rating for heat pumps will be 14. This new SEER rating will go into effect for all heat pumps manufactured on or after January 1, 2015. The tiered rebate was discontinued due to the PCT being negative for any SEER rating higher than 15 because of the larger incremental cost. The rebate was lowered from an average rebate of \$289 to \$135 per HVAC unit installed.
- **Neighborhood Weatherization and Agency Outreach:** Agency Outreach will now be facilitated through the Energy Education, Awareness and Agency Outreach program as stated above.
- **Residential Wall Insulation:** The rebate was lowered from \$0.31 to \$0.11 per square foot of installed insulation.
- **Residential Window Replacement:** The rebate was lowered from \$2.65 to \$2.20 per square foot of installed window film.

- **Energy Planner, Renewable Energy and Renewable Energy Systems Initiative:** There were no necessary modifications to these programs.

Commercial Program Modifications

- **Commercial/Industrial Audit (Free):** Discontinued the eight free CFLs mailed to customers upon the completion of an audit for the reason previously stated.
- **Comprehensive Commercial/Industrial Audit (Paid):** Discontinued the eight free CFLs that were mailed to customers upon the completion of the audit for the reason previously stated.
- **Commercial Ceiling Insulation:** The rebate was lowered from \$0.25 to \$0.15 per square foot of installed insulation.
- **Commercial Chiller:** The rebate was lowered from \$175 to \$146 per kW reduced above the baseline equipment.
- **Conservation Value:** The rebate was lowered from up to \$275 to up to \$200 per kW reduced above the baseline.
- **Cool Roof:** Discontinued the eligibility for paint on cool roof applications which has a short useful life of five years; polyvinyl chloride ("PVC") membrane will continue to be eligible. The rebate was lowered from \$0.60 to \$0.30 per square foot of installed cool roof membrane.
- **Commercial Cooling-Direct Expansion ("DX"):** The rebate was lowered from \$50 to \$11 per ton installed.
- **Commercial Duct Repair:** Florida Commercial Energy Efficiency Building Code Section 503.2.7 mandates duct sealing in accordance with Table 503.2.7.2. Commercial/Industrial facilities constructed after March 15, 2012 will no longer be eligible for this program. The rebate was lowered from \$300 to \$150 per ADS repaired.
- **Commercial Electronically Commutated Motors ("ECM"):** This program will continue to rebate both refrigeration and air conditioning ECM motors. The new rebate will be based upon a per horsepower ("HP") basis versus a three-tiered approach. The rebate was lowered from an average rebate of \$1,028 to \$200 for each HP of ECM installed.
- **Industrial Load Management:** This program required updating of language to be consistent with the current tariff.
- **Lighting Conditioned Space:** The rebate was lowered from \$175 to \$146 per kW reduced.
- **Lighting Non-Conditioned Space:** The rebate was lowered from \$175 to \$75 per kW reduced.
- **Lighting Occupancy Sensors:** The rebate was lowered from \$25 to \$20 per installed occupancy sensor.

- **Refrigeration Anti-Condensate Control:** The rebate was lowered from \$0.65 to \$0.35 per linear foot of door heater controlled by an anti-condensate controller.
- **Commercial Wall Insulation:** The rebate was lowered from \$0.40 to \$0.12 per square foot of installed insulation.
- **Commercial Water Heating:** The rebate was raised from \$0.116 to \$0.250 per Btu of installed water heating system.
- **Commercial Load Management, Standby Generator, Cogeneration, Renewable Energy and Renewable Energy Systems Initiative:** There were no necessary modifications to these programs.

Low Income Program Initiatives

Tampa Electric's Low Income Programs have always been a leader in Florida. It is recognized there may be times where customers may not have the financial resources to install energy efficient technologies. To maximize the help provided to these customers, the company believes in providing a multi-program approach. This approach involves offering neighborhood weatherization, energy education, awareness and agency outreach and free energy audit programs where needed.

Tampa Electric's Neighborhood Weatherization program will continue to offer the same comprehensive energy efficiency kit and energy education to assist low income residential customers in becoming more energy efficient. The comprehensive energy efficiency kit includes 15 energy savings measures:

- Eight CFLs
- HVAC filter whistle
- Installation of up to three low flow faucet aerators
- Installation of up to two low flow shower heads
- Installation of a water heater blanket, if necessary
- Installation of a wall plate thermometer
- A water heating check card for adjustment of the water heater
- Installation of hot water pipe insulation, if necessary
- Installation of weather stripping, if necessary
- Installation of caulking to seal windows, if necessary
- Installation of sealing foam to seal air infiltration issues, if necessary
- Refrigerator coil cleaning brush
- Installation of ceiling insulation, if needed
- Repair of duct seal, if needed
- Energy savings education handout

Energy Education, Awareness and Agency Outreach program will continue to offer a subset of the comprehensive energy efficiency kit to assist low income customers in becoming more energy efficient. Tampa Electric commits to continue partnering with neighborhood service centers to ensure customers who need this assistance in reducing their energy usage and associated cost will receive the appropriate energy education and guidance. The smaller subset kit includes six energy savings measures:

- Four CFLs
- HVAC filter whistle
- Two low flow faucet aerators

- Wall plate thermometer
- Water heating check card for adjustment of the water heater
- Energy savings education handout

Energy audits continue to provide energy education and awareness to low income residential customers. Combining Agency Outreach with Energy Education will bolster the company's education and awareness efforts for these customers.

Tampa Electric believes this multi-program approach will provide enhanced energy education and awareness as well as offering some measures free of charge that can make an immediate impact to their energy consumption based upon the appliances installed and the physical condition in these residences.

Completion of Renewable Energy Systems Initiative

The Commission required Tampa Electric to offer a five year renewable energy systems pilot program incenting the installation of renewable technologies such as PV and SWH. This pilot program contained in this DSM Plan will retire at the end of 2015.

Conservation Research and Development ("R&D")

Rule 25-17.001(5)(f), Florida Administrative Code ("F.A.C.") requires aggressive R&D projects to be "...an ongoing part of the practice of every well managed utility's programs." Tampa Electric has conducted R&D projects on conservation and demand response technologies in the past which have led to the successful launch of DSM programs. Therefore, the company will continue its R&D efforts over the next five years at an estimated cost of \$200,000 per year.

Program Standards

Tampa Electric will file program standards 30 days after the issuance of the Commission order approving its DSM Plan.

2015–2024 Proposed Programs

Residential

1. Residential Walk-Through Energy Audit
2. Residential Customer Assisted Energy Audit
3. Residential Computer Assisted Energy Audits (RCS)
4. Residential Ceiling Insulation
5. Residential Duct Repair
6. Residential Electronically Commutated Motors (ECM)
7. Energy Education, Awareness and Agency Outreach
8. Energy Star for New Homes
9. Residential Heating and Cooling
10. Neighborhood Weatherization
11. Residential Price Responsive Load Management (Energy Planner)
12. Residential Wall Insulation
13. Residential Window Replacement
14. Renewable Energy Program
15. Renewable Energy Systems Initiative

Commercial

1. Commercial/Industrial Audit (Free)
2. Comprehensive Commercial/Industrial Audit (Paid)
3. Commercial Ceiling Insulation
4. Commercial Chiller
5. Cogeneration
6. Conservation Value
7. Cool Roof
8. Commercial Cooling
9. Demand Response
10. Commercial Duct Repair
11. Commercial Electronically Commutated Motors (ECM)
12. Industrial Load Management (GSLM 2&3)
13. Lighting Conditioned Space
14. Lighting Non-Conditioned Space
15. Lighting Occupancy Sensors
16. Commercial Load Management (GSLM 1)
17. Refrigeration Anti-condensate Control
18. Standby Generator
19. Thermal Energy Storage
20. Commercial Wall Insulation
21. Commercial Water Heating
22. Conservation Research and Development (R&D)
23. Renewable Energy Program
24. Renewable Energy Systems Initiative

Cost-Effectiveness Summary with Proposed Modifications

Residential Programs			
Program	RIM Value	PCT Value	TRC Value
Residential Ceiling Insulation	1.11	2,373.18	1.49
Residential Duct Repair	1.13	648.71	1.53
Residential Electronically Commutated Motors (ECM)	1.07	2.55	0.78
Energy Education, Awareness and Agency Outreach	0.87	568.58	4.68
Energy Star for New Homes	1.05	1,318.96	1.19
Residential Heating and Cooling	1.25	851.02	1.51
Neighborhood Weatherization	0.76	31,763.34	6.80
Residential Price Responsive Load Management (Energy Planner)	4.08	3,470.59	4.96
Residential Wall Insulation	1.02	24.89	1.11
Residential Window Replacement	1.28	2,140.25	2.07

Commercial Programs			
Program	RIM Value	PCT Value	TRC Value
Commercial Ceiling Insulation	1.17	1,245.99	3.43
Commercial Chiller	1.05	864.08	1.71
Conservation Value	1.16	915.81	2.31
Cool Roof	1.02	1,027.62	0.77
Commercial Cooling	1.02	656.52	1.47
Demand Response	1.53	1,857.84	115.61
Commercial Duct Repair	1.28	6,017.69	8.59
Commercial Electronically Commutated Motors (ECM)	1.17	49.34	3.57
Lighting Conditioned Space	1.34	7,009.39	5.41
Lighting Non-Conditioned Space	1.03	196.95	0.61
Lighting Occupancy Sensors	1.04	1,831.67	6.96
Commercial Load Management GSLM 1 Cyclic	2.65	10.87	6.05
Commercial Load Management GSLM 1 Extended	2.84	154.83	54.87
Refrigeration Anti-Condensate Control	1.15	37.14	2.94
Standby Generator	13.73	13.36	9.41
Thermal Energy Storage	1.21	1,180.57	2.37
Commercial Wall Insulation	1.04	3.48	1.18
Commercial Water Heating	1.05	9.91	1.54

Cost and Impact of Proposed DSM Programs

Tampa Electric's 2015-2024 DSM Programs are designed to meet the new established DSM Goals by the Florida Public Service Commission and will decrease costs to customers. The cost incurred to offer these DSM Programs to achieve these goals will be collected through the Energy Conservation Cost Recovery ("ECCR") Clause. Tampa Electric's current 2015 residential ECCR cost at 1,200 kWh per month is \$3.06 (\$2.55 per 1,000 kWh). With the approval of this Plan to support the new established goals and other spending requirements, the residential ECCR cost at 1,200 kWh per month is projected to decrease to \$2.54 for 2016 and \$2.35 by 2024. The table that follows provides the detail of the various impacts over the ten-year period.

DSM Cost Estimates							
Tampa Electric Company							
DSM Plan Reductions (GWh) (1)			DSM Plan Cost (2)		Residential ECCR Impacts @ 1200 kWh (3)	Non-Fuel Revenue Impact (4) (1b x \$/MWH)	DSM Plan Costs and Non-Fuel Revenue Impacts (2a + 2b + 4)
Year	Annual (1a)	Cumulative (1b)	Energy Efficiency and Demand Response (2a)	Renewables (2b)			
Current	22.8	22.8	\$41,124,064	\$1,531,018	\$3.06	\$1,429,372	\$44,084,454
2016	23.4	46.2	\$40,422,041	\$0	\$2.54	\$2,896,726	\$43,318,766
2017	24.2	70.5	\$38,018,886	\$0	\$2.34	\$4,416,819	\$42,435,705
2018	25.0	95.4	\$39,139,385	\$0	\$2.35	\$5,981,931	\$45,121,316
2019	27.3	122.7	\$40,420,373	\$0	\$2.38	\$7,694,150	\$48,114,523
2020	29.1	151.8	\$41,110,569	\$0	\$2.36	\$9,518,727	\$50,629,296
2021	29.1	180.9	\$42,013,367	\$0	\$2.36	\$11,343,304	\$53,356,671
2022	29.0	210.0	\$42,905,658	\$0	\$2.36	\$13,163,808	\$56,069,466
2023	29.0	239.0	\$43,834,206	\$0	\$2.35	\$14,981,847	\$58,816,053
2024	29.0	267.9	\$44,784,361	\$0	\$2.35	\$16,797,421	\$61,581,781
TOTALS	267.9	267.9	\$413,772,909	\$1,531,018		\$88,224,105	\$503,528,032
Total Measure Impacts ⁽¹⁾		2,679				\$167,974,205	
⁽¹⁾ Assumes average 10 year life of measures implemented each year of Plan.							

Residential Market Sector Demand and Energy Data
(At the Generator)

Year	Projected Summer Demand Savings (MW)		Commission Approved Summer MW Goal (Cum.)	Projected Winter Demand Savings (MW)		Commission Approved Winter MW Goal (Cum.)	Projected Annual Energy Savings (GWH)		Commission Approved Annual GWH Goal (Cum.)
	Incr.	Cum.		Incr.	Cum.		Incr.	Cum.	
2015	4.85	4.85	1.1	6.82	6.82	2.6	12.54	12.54	1.8
2016	4.92	9.77	2.7	7.13	13.96	6.7	13.22	25.76	5.3
2017	5.07	14.84	4.9	7.32	21.28	11.9	13.99	39.74	10.1
2018	5.19	20.03	7.6	7.49	28.76	18.4	14.62	54.37	16.2
2019	5.89	25.92	10.7	8.55	37.32	26.0	15.38	69.75	23.1
2020	5.89	31.81	14.0	8.55	45.87	33.6	15.38	85.13	30.5
2021	5.89	37.70	17.3	8.55	54.42	41.6	15.38	100.51	38.2
2022	5.87	43.57	20.3	8.48	62.90	49.0	15.30	115.81	45.1
2023	5.86	49.42	23.2	8.45	71.35	55.8	15.26	131.07	51.4
2024	5.85	55.27	25.7	8.41	79.76	61.9	15.22	146.30	56.9

**Commercial / Industrial Market Sector Demand and Energy Data
(At the Generator)**

Year	Projected Summer Demand Savings (MW)		Commission Approved Summer MW Goal (Cum.)	Projected Winter Demand Savings (MW)		Commission Approved Winter MW Goal (Cum.)	Projected Annual Energy Savings (GWH)		Commission Approved Annual GWH Goal (Cum.)
	Incr.	Cum.		Incr.	Cum.		Incr.	Cum.	
2015	4.16	4.16	1.7	2.29	2.29	1.2	10.26	10.26	3.9
2016	4.32	8.48	4.2	2.29	4.58	2.5	10.18	20.45	9.9
2017	4.53	13.01	6.9	2.30	6.88	4.1	10.26	30.71	17.9
2018	4.92	17.93	10.2	2.30	9.18	5.8	10.35	41.06	27.1
2019	5.27	23.20	13.5	2.57	11.75	7.4	11.93	52.99	37.0
2020	5.47	28.67	17.0	2.85	14.60	9.1	13.72	66.71	47.3
2021	5.47	34.14	20.6	2.85	17.45	11.0	13.72	80.43	57.7
2022	5.47	39.61	23.9	2.85	20.31	12.9	13.74	94.17	67.9
2023	5.47	45.09	27.4	2.85	23.16	14.7	13.74	107.91	77.8
2024	5.47	50.56	30.6	2.85	26.02	16.4	13.74	121.65	87.4

Combined Residential & Commercial/Industrial Market Sector Demand & Energy Data (At the Generator)									
Year	Projected Summer Demand Savings (MW)		Commission Approved Summer MW Goal (Cum.)	Projected Winter Demand Savings (MW)		Commission Approved Winter MW Goal (Cum.)	Projected Annual Energy Savings (GWH)		Commission Approved Annual GWH Goal (Cum.)
	Incr.	Cum.		Incr.	Cum.		Incr.	Cum.	
2015	9.01	9.01	2.8	9.11	9.11	3.8	22.80	22.80	5.7
2016	9.24	18.25	6.9	9.42	18.54	9.2	23.41	46.21	15.2
2017	9.59	27.85	11.8	9.62	28.15	16.0	24.25	70.45	28.0
2018	10.12	37.97	17.8	9.79	37.94	24.2	24.97	95.42	43.3
2019	11.16	49.13	24.2	11.12	49.07	33.4	27.31	122.73	60.1
2020	11.36	60.48	31.0	11.40	60.47	42.7	29.10	151.84	77.8
2021	11.36	71.84	37.9	11.40	71.88	52.6	29.10	180.94	95.9
2022	11.34	83.18	44.2	11.34	83.21	61.9	29.04	209.98	113.0
2023	11.33	94.51	50.6	11.30	94.51	70.5	29.00	238.98	129.2
2024	11.32	105.82	56.3	11.26	105.77	78.3	28.96	267.94	144.3

Program: Residential Walk-Through Audit (Free Energy Check)

Program Start Date: May 1981

Program Description

A conservation program adopted by Florida under Chapter 366.82(5), Florida Statutes, and Rule 25-17.003 F.A.C. This program is offered to all residential customers and is designed to save demand and energy by increasing customer awareness of energy use in personal residences. Savings are dependent on the customer implementing energy saving recommendations. Recommendations are the same as the Computer Assisted Audit but are standardized and include an estimated range of savings.

The audit is conducted by a trained residential energy analyst who will perform the following at a minimum:

1. Identify, note and recommend those conservation measures and practices that apply to the specific residence.
2. Encourage customer participation in available conservation programs in which the specific residence and customer will benefit.
3. Identify and communicate to the customer identified no-cost, low-cost conservation measures and practices including those that have less than a two-year payback.

Audits are kept on file with the company for three years. There is no charge to the customer for the Residential Walk-Through Audit.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

The kWh billing histories of customers who received these audits were examined in comparison to those of matched customers without audits. Customers included in the analysis did not participate in any other DSM programs. Consumption before and after the audit was compared for both sets of customers to estimate the impact associated with the audit. Based on this load research data, the analysis yielded the following expected savings per customer participant:

Summer demand:	0.070 kW
Winter demand:	0.081 kW
Annual energy:	395 kWh

Program Costs

Based on historical costs, the administrative cost per audit is estimated to be \$161.00. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL WALK-THROUGH AUDIT (FREE ENERGY CHECK)

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	630,869	6,000	1.0%	6,000
2016	640,735	640,735	6,000	1.9%	12,000
2017	650,702	650,702	6,000	2.8%	18,000
2018	660,594	660,594	6,000	3.6%	24,000
2019	670,381	670,381	6,000	4.5%	30,000
2020	680,041	680,041	6,000	5.3%	36,000
2021	689,544	689,544	6,000	6.1%	42,000
2022	698,908	698,908	6,000	6.9%	48,000
2023	708,128	708,128	6,000	7.6%	54,000
2024	717,339	717,339	6,000	8.4%	60,000

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL WALK-THROUGH AUDIT (FREE ENERGY CHECK)

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	395	0.081	0.070	2.370	0.486	0.420
2016	395	0.081	0.070	4.740	0.972	0.840
2017	395	0.081	0.070	7.110	1.458	1.260
2018	395	0.081	0.070	9.480	1.944	1.680
2019	395	0.081	0.070	11.850	2.430	2.100
2020	395	0.081	0.070	14.220	2.916	2.520
2021	395	0.081	0.070	16.590	3.402	2.940
2022	395	0.081	0.070	18.960	3.888	3.360
2023	395	0.081	0.070	21.330	4.374	3.780
2024	395	0.081	0.070	23.700	4.860	4.200

PROGRAM NAME: RESIDENTIAL WALK-THROUGH AUDIT (FREE ENERGY CHECK)

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	419	0.086	0.075	2.512	0.518	0.448
2016	419	0.086	0.075	5.024	1.036	0.895
2017	419	0.086	0.075	7.537	1.554	1.343
2018	419	0.086	0.075	10.049	2.072	1.791
2019	419	0.086	0.075	12.561	2.590	2.239
2020	419	0.086	0.075	15.073	3.108	2.686
2021	419	0.086	0.075	17.585	3.627	3.134
2022	419	0.086	0.075	20.098	4.145	3.582
2023	419	0.086	0.075	22.610	4.663	4.029
2024	419	0.086	0.075	25.122	5.181	4.477

Program: Residential Customer Assisted Energy Audit

Program Start Date: June 2002

Program Description

A conservation program designed to save demand and energy by increasing residential customer awareness of energy use in personal residences. This program allows for residential customers to engage in the energy audit either through a phone call or completing an online energy questionnaire. Savings are dependent on the customer implementing energy conservation measure and practice recommendations. Recommendations are the same as the Computer-Assisted Audit but are standardized and include an estimated range of savings.

To access this free audit, customers can either call or go to Tampa Electric's internet site to link to the audit. Customers will answer questions about their home and energy usage. Personalized audit results are either emailed, provided by the phone team or immediately displayed on the customer's computer for review and implementation. The audit recommendations are based on the customers' answers to the questions and their actual energy consumption.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Energy and demand savings are estimated to be 25 percent less than the Residential Walk-Through Audit. Therefore, savings per participant are as follows:

Summer Demand:	0.053 kW
Winter Demand:	0.061 kW
Annual Energy:	296 kWh

Program Costs

Based on historical costs, the administrative cost per audit is estimated to be \$36. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL CUSTOMER ASSISTED ENERGY AUDIT

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	630,869	500	0.1%	500
2016	640,735	640,235	500	0.2%	1,000
2017	650,702	650,202	500	0.2%	1,500
2018	660,594	660,094	500	0.3%	2,000
2019	670,381	669,881	500	0.4%	2,500
2020	680,041	679,541	500	0.4%	3,000
2021	689,544	689,044	500	0.5%	3,500
2022	698,908	698,408	500	0.6%	4,000
2023	708,128	707,628	500	0.6%	4,500
2024	717,339	716,839	500	0.7%	5,000

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL CUSTOMER ASSISTED ENERGY AUDIT

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	296	0.061	0.053	0.148	0.031	0.027
2016	296	0.061	0.053	0.296	0.061	0.053
2017	296	0.061	0.053	0.444	0.092	0.080
2018	296	0.061	0.053	0.592	0.122	0.106
2019	296	0.061	0.053	0.740	0.153	0.133
2020	296	0.061	0.053	0.888	0.183	0.159
2021	296	0.061	0.053	1.036	0.214	0.186
2022	296	0.061	0.053	1.184	0.244	0.212
2023	296	0.061	0.053	1.332	0.275	0.239
2024	296	0.061	0.053	1.480	0.305	0.265

PROGRAM NAME: RESIDENTIAL CUSTOMER ASSISTED ENERGY AUDIT						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	314	0.065	0.056	0.157	0.033	0.028
2016	314	0.065	0.056	0.314	0.065	0.056
2017	314	0.065	0.056	0.471	0.098	0.085
2018	314	0.065	0.056	0.628	0.130	0.113
2019	314	0.065	0.056	0.784	0.163	0.141
2020	314	0.065	0.056	0.941	0.195	0.169
2021	314	0.065	0.056	1.098	0.228	0.198
2022	314	0.065	0.056	1.255	0.260	0.226
2023	314	0.065	0.056	1.412	0.293	0.254
2024	314	0.065	0.056	1.569	0.325	0.282

Program: Residential Computer Assisted Energy Audit (RCS)

Program Start Date: January 1981

Program Description

A conservation program originally developed in response to the Energy Policy Act (1978) and adopted by Florida under Chapter 366.82(5), Florida Statutes, and Rule 25-17.003, F.A.C. The program is designed to save demand and energy and is offered to all residential customers. Savings are achieved by increasing residential customer awareness of the energy use in personal residences. Savings are dependent on customers implementing conservation measures and practices. The audit is performed by a trained residential analyst who collects specific data about the structure of the home and the customer's energy usage patterns. Using Energy Gauge software, the analyst will simulate different conservation measures and practices on the customer's residence to identify potential savings that can be achieved.

Analysts identify, note and recommend only those conservation measures and practices that apply to the specific residence. The following information is then provided on the applicable conservation measures and practices:

1. Estimated cost for contractor installation
2. Estimated cost for do-it-yourself installation
3. Payback period for customer investment
4. Estimated first-year energy savings

Audit findings are kept on file with the utility for three years. The audit charge to the customer is \$15.00.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings for the Residential Computer Assisted Audit are assumed to be the same as the Residential Walk-Through Audit. The savings per participant are as follows:

Summer Demand:	0.070 kW
Winter Demand:	0.081 kW
Annual Energy:	395 kWh

Program Costs

There are no rebates or incentives for this program.

The estimated administrative cost per audit is \$285.00.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL COMPUTER ASSISTED ENERGY AUDIT (RCS)

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	630,869	1	0.0%	1
2016	640,735	640,735	1	0.0%	2
2017	650,702	650,702	1	0.0%	3
2018	660,594	660,594	1	0.0%	4
2019	670,381	670,381	1	0.0%	5
2020	680,041	680,041	1	0.0%	6
2021	689,544	689,544	1	0.0%	7
2022	698,908	698,908	1	0.0%	8
2023	708,128	708,128	1	0.0%	9
2024	717,339	717,339	1	0.0%	10

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL COMPUTER ASSISTED ENERGY AUDIT (RCS)

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	395	0.081	0.070	0.000	0.000	0.000
2016	395	0.081	0.070	0.001	0.000	0.000
2017	395	0.081	0.070	0.001	0.000	0.000
2018	395	0.081	0.070	0.002	0.000	0.000
2019	395	0.081	0.070	0.002	0.000	0.000
2020	395	0.081	0.070	0.002	0.000	0.000
2021	395	0.081	0.070	0.003	0.001	0.000
2022	395	0.081	0.070	0.003	0.001	0.001
2023	395	0.081	0.070	0.004	0.001	0.001
2024	395	0.081	0.070	0.004	0.001	0.001

PROGRAM NAME: RESIDENTIAL COMPUTER ASSISTED ENERGY AUDIT (RCS)

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	419	0.086	0.075	0.000	0.000	0.000
2016	419	0.086	0.075	0.001	0.000	0.000
2017	419	0.086	0.075	0.001	0.000	0.000
2018	419	0.086	0.075	0.002	0.000	0.000
2019	419	0.086	0.075	0.002	0.000	0.000
2020	419	0.086	0.075	0.003	0.001	0.000
2021	419	0.086	0.075	0.003	0.001	0.001
2022	419	0.086	0.075	0.003	0.001	0.001
2023	419	0.086	0.075	0.004	0.001	0.001
2024	419	0.086	0.075	0.004	0.001	0.001

Program: Residential Ceiling Insulation

Program Start Date: November 1982

Program Description

The Residential Ceiling Insulation Program is designed to encourage customers to make cost-effective improvements to existing residences. The goal is to offer customer rebates for installing ceiling insulation to help reduce their energy consumption while reducing Tampa Electric's weather sensitive peak demand. Ceiling insulation is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for a rebate based upon the total square footage of insulation installed over conditioned space. Customers will receive a certificate that is used as partial payment for the ceiling insulation installed.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Savings

Savings were determined using historical participation characteristics of residences and utilizing DOE2 building simulations for insulation changes. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.259 kW
Winter Demand:	0.372 kW
Annual Energy:	848 kWh

Program Costs

Rebate: \$0.14 per square foot of installed qualifying insulation.

The estimated administrative cost per participant is \$51.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL CEILING INSULATION

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	512,396	1,000	0.2%	1,000
2016	640,735	521,262	1,000	0.4%	2,000
2017	650,702	530,229	1,000	0.6%	3,000
2018	660,594	539,121	1,000	0.7%	4,000
2019	670,381	547,408	1,500	1.0%	5,500
2020	680,041	555,568	1,500	1.3%	7,000
2021	689,544	563,571	1,500	1.5%	8,500
2022	698,908	571,435	1,500	1.7%	10,000
2023	708,128	579,155	1,500	2.0%	11,500
2024	717,339	586,866	1,500	2.2%	13,000

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL CEILING INSULATION						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	848	0.372	0.259	0.848	0.372	0.259
2016	848	0.372	0.259	1.696	0.744	0.518
2017	848	0.372	0.259	2.544	1.116	0.777
2018	848	0.372	0.259	3.392	1.488	1.036
2019	848	0.372	0.259	4.664	2.046	1.425
2020	848	0.372	0.259	5.936	2.604	1.813
2021	848	0.372	0.259	7.208	3.162	2.202
2022	848	0.372	0.259	8.480	3.720	2.590
2023	848	0.372	0.259	9.752	4.278	2.979
2024	848	0.372	0.259	11.024	4.836	3.367

PROGRAM NAME: RESIDENTIAL CEILING INSULATION

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	899	0.397	0.276	0.899	0.397	0.276
2016	899	0.397	0.276	1.798	0.793	0.552
2017	899	0.397	0.276	2.697	1.190	0.828
2018	899	0.397	0.276	3.596	1.586	1.104
2019	899	0.397	0.276	4.944	2.181	1.519
2020	899	0.397	0.276	6.292	2.776	1.933
2021	899	0.397	0.276	7.640	3.371	2.347
2022	899	0.397	0.276	8.989	3.966	2.761
2023	899	0.397	0.276	10.337	4.560	3.175
2024	899	0.397	0.276	11.685	5.155	3.589

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Residential Ceiling Insulation				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.372	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.326	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	898	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	848	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	20	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	51.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	562.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	271.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	1.49	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	2,373.18	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.11	

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Residential Ceiling Insulation									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	PARTICIPANT PROGRAM COSTS	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT BENEFITS	AVOIDED T & D BENEFITS	FUEL SAVINGS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	51	562	0	613	0	0	18	0	18	(595)	(595)
2016	0	52	575	0	628	0	31	50	0	81	(546)	(1,104)
2017	0	53	589	0	643	0	32	75	0	107	(536)	(1,569)
2018	0	55	603	0	658	0	33	114	0	146	(512)	(1,983)
2019	0	0	0	0	0	135	34	137	0	305	305	(1,753)
2020	0	0	0	0	0	139	35	147	0	320	320	(1,528)
2021	0	0	0	0	0	145	36	158	0	339	339	(1,307)
2022	0	0	0	0	0	151	37	168	0	356	356	(1,090)
2023	0	0	0	0	0	157	37	177	0	371	371	(879)
2024	0	0	0	0	0	162	38	191	0	392	392	(672)
2025	0	0	0	0	0	170	39	205	0	414	414	(468)
2026	0	0	0	0	0	179	40	211	0	430	430	(271)
2027	0	0	0	0	0	188	42	218	0	448	448	(80)
2028	0	0	0	0	0	197	43	227	0	466	466	106
2029	0	0	0	0	0	205	44	244	0	492	492	289
2030	0	0	0	0	0	214	45	252	0	511	511	465
2031	0	0	0	0	0	224	46	267	0	537	537	638
2032	0	0	0	0	0	233	47	282	0	562	562	807
2033	0	0	0	0	0	242	48	297	0	587	587	971
2034	0	0	0	0	0	252	50	302	0	603	603	1,128
NOMINAL	0	211	2,330	0	2,542	2,990	757	3,739	0	7,486	4,945	
NPV:	0	190	2,098	0	2,288	1,310	381	1,725	0	3,416	1,128	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					1.49				

			PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
			PROGRAM:	Residential Ceiling Insulation							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	40	0	271	0	311	562	0	0	562	(251)	(251)
2016	122	0	271	0	393	575	0	0	575	(183)	(421)
2017	204	0	271	0	475	589	0	0	589	(114)	(520)
2018	293	0	271	0	564	603	0	0	603	(40)	(552)
2019	344	0	0	0	344	0	0	0	0	344	(293)
2020	354	0	0	0	354	0	0	0	0	354	(45)
2021	360	0	0	0	360	0	0	0	0	360	190
2022	367	0	0	0	367	0	0	0	0	367	414
2023	377	0	0	0	377	0	0	0	0	377	628
2024	386	0	0	0	386	0	0	0	0	386	832
2025	393	0	0	0	393	0	0	0	0	393	1,025
2026	399	0	0	0	399	0	0	0	0	399	1,208
2027	404	0	0	0	404	0	0	0	0	404	1,381
2028	411	0	0	0	411	0	0	0	0	411	1,544
2029	420	0	0	0	420	0	0	0	0	420	1,700
2030	427	0	0	0	427	0	0	0	0	427	1,848
2031	436	0	0	0	436	0	0	0	0	436	1,988
2032	447	0	0	0	447	0	0	0	0	447	2,122
2033	460	0	0	0	460	0	0	0	0	460	2,251
2034	471	0	0	0	471	0	0	0	0	471	2,373
NOMINAL	7,113	0	1,084	0	8,197	2,330	0	0	2,330	5,867	
NPV:	3,493	0	978	0	4,471	2,098	0	0	2,098	2,373	
In service year of gen unit:		2019		2.1314231							
Discount rate:		0.0734									

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Residential Ceiling Insulation								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED				NET BENEFITS	CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	TO ALL CUSTOMERS	NET BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	51	271	24	0	346	18	0	0	0	18	(328)	(328)
2016	0	52	271	72	0	395	50	31	0	0	81	(314)	(620)
2017	0	53	271	121	0	445	75	32	0	0	107	(338)	(913)
2018	0	55	271	171	0	496	114	33	0	0	146	(350)	(1196)
2019	0	0	0	197	0	197	271	34	0	0	305	108	(1114)
2020	0	0	0	199	0	199	286	35	0	0	320	121	(1029)
2021	0	0	0	201	0	201	303	36	0	0	339	138	(939)
2022	0	0	0	203	0	203	319	37	0	0	356	153	(846)
2023	0	0	0	205	0	205	334	37	0	0	371	166	(752)
2024	0	0	0	207	0	207	353	38	0	0	392	185	(654)
2025	0	0	0	209	0	209	375	39	0	0	414	205	(553)
2026	0	0	0	211	0	211	390	40	0	0	430	219	(452)
2027	0	0	0	213	0	213	406	42	0	0	448	234	(352)
2028	0	0	0	215	0	215	424	43	0	0	466	251	(252)
2029	0	0	0	217	0	217	449	44	0	0	492	275	(150)
2030	0	0	0	220	0	220	466	45	0	0	511	291	(50)
2031	0	0	0	222	0	222	491	46	0	0	537	315	52
2032	0	0	0	224	0	224	515	47	0	0	562	338	153
2033	0	0	0	226	0	226	539	48	0	0	587	361	254
2034	0	0	0	229	0	229	554	50	0	0	603	375	352
NOMINAL	0	211	1,084	3,784	0	5,080	6,729	757	0	0	7,486	2,407	
NPV:	0	190	978	1,896	0	3,064	3,035	381	0	0	3,416	352	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.11				

Program: Residential Duct Repair

Program Start Date: September 1992

Program Description

The Residential Duct Repair Program is a conservation rebate program designed to reduce demand and energy by decreasing the load on residential HVAC equipment helping the customer reduce their energy consumption and reducing Tampa Electric's peak demand. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the ADS. The ADS is defined as the air handler, air ducts, return plenums, supply plenums and any connecting structure.

Customers call Tampa Electric to request appointments for duct repair and an HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the residence. Tampa Electric's rebate is included in the payment to the participating contractor performing ADS repairs.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using ITRON data for systems across all eligible residential structures and participants. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.171 kW
Winter Demand:	0.217 kW
Annual Energy:	298 kWh

Program Costs

Rebate: \$165 per HVAC system that has its ADS repaired.

The estimated administrative cost per participant is \$29.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL DUCT REPAIR

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	526,770	750	0.1%	750
2016	640,735	526,020	750	0.3%	1,500
2017	650,702	525,270	750	0.4%	2,250
2018	660,594	524,520	750	0.6%	3,000
2019	670,381	523,770	500	0.7%	3,500
2020	680,041	523,270	500	0.8%	4,000
2021	689,544	522,770	500	0.9%	4,500
2022	698,908	522,270	500	1.0%	5,000
2023	708,128	521,770	500	1.1%	5,500
2024	717,339	521,270	500	1.2%	6,000

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL DUCT REPAIR						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	298	0.217	0.171	0.224	0.163	0.128
2016	298	0.217	0.171	0.447	0.326	0.257
2017	298	0.217	0.171	0.671	0.488	0.385
2018	298	0.217	0.171	0.894	0.651	0.513
2019	298	0.217	0.171	1.043	0.760	0.599
2020	298	0.217	0.171	1.192	0.868	0.684
2021	298	0.217	0.171	1.341	0.977	0.770
2022	298	0.217	0.171	1.490	1.085	0.855
2023	298	0.217	0.171	1.639	1.194	0.941
2024	298	0.217	0.171	1.788	1.302	1.026

PROGRAM NAME: RESIDENTIAL DUCT REPAIR						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	316	0.231	0.182	0.237	0.173	0.137
2016	316	0.231	0.182	0.474	0.347	0.273
2017	316	0.231	0.182	0.711	0.520	0.410
2018	316	0.231	0.182	0.948	0.694	0.547
2019	316	0.231	0.182	1.106	0.810	0.638
2020	316	0.231	0.182	1.264	0.925	0.729
2021	316	0.231	0.182	1.421	1.041	0.820
2022	316	0.231	0.182	1.579	1.157	0.911
2023	316	0.231	0.182	1.737	1.272	1.003
2024	316	0.231	0.182	1.895	1.388	1.094

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Residential Duct Repair				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I.	(1) CUSTOMER KW REDUCTION AT THE METER	0.217 KW /CUST	IV.	(1) BASE YEAR	2015
I.	(2) GENERATOR KW REDUCTION PER CUSTOMER	0.206 KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I.	(3) KW LINE LOSS PERCENTAGE	7.3 %	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I.	(4) GENERATION KWH REDUCTION PER CUSTOMER	316 KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I.	(5) KWH LINE LOSS PERCENTAGE	5.6 %	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I.	(6) GROUP LINE LOSS MULTIPLIER	1	IV.	(6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I.	(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV.	(7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I.	(8)* CUSTOMER KWH REDUCTION AT METER	298 KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
ECONOMIC LIFE & K FACTORS			IV.	(9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II.	(1) STUDY PERIOD FOR CONSERVATION PROGRAM	18 YEARS	IV.	(10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II.	(2) GENERATOR ECONOMIC LIFE	25 YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II.	(3) T & D ECONOMIC LIFE	25 YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE	2.4 %
II.	(4) K FACTOR FOR GENERATION	1.4625	IV.	(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II.	(5) K FACTOR FOR T & D	1.4625	IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
	(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1	IV.	(15) GENERATOR CAPACITY FACTOR	13.2 %
UTILITY & CUSTOMER COSTS			IV.	(16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III.	(1) UTILITY NONRECURRING COST PER CUSTOMER	29.00 \$/CUST	IV.	(17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
III.	(2) UTILITY RECURRING COST PER CUSTOMER	0 \$/CUST/YR	IV.	(18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
III.	(3) UTILITY COST ESCALATION RATE	2.4 %	IV.	(19)* CAPACITY COST ESCALATION RATE	0 %
III.	(4) CUSTOMER EQUIPMENT COST	233.00 \$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III.	(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V.	(1) NON-FUEL COST IN CUSTOMER BILL	5.578 CENTS/KWH
III.	(6) CUSTOMER O & M COST	0 \$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE	1 %
III.	(7) CUSTOMER O & M ESCALATION RATE	2.4 %	V.	(3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO
III.	(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE	1 %
III.	(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL	1.00
III.	(10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR			
III.	(11)* SUPPLY COSTS ESCALATION RATE	0 %			
III.	(12)* UTILITY DISCOUNT RATE	0.0734			
III.	(13)* UTILITY AFUDC RATE	0.0645			
III.	(14)* UTILITY NON RECURRING REBATE/INCENTIVE	165.00 \$/CUST	CALCULATED BENEFITS AND COSTS		
III.	(15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR		(1)* TRC TEST - BENEFIT/COST RATIO	1.53
III.	(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %		(2)* PARTICIPANT NET BENEFITS (NPV)	648.71
				(3)* RIM TEST - BENEFIT/COST RATIO	1.13

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Residential Duct Repair									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	22	175	0	197	0	0	5	0	5	(192)	(192)
2016	0	22	179	0	201	0	14	13	0	27	(174)	(354)
2017	0	23	183	0	206	0	14	20	0	34	(172)	(503)
2018	0	23	188	0	211	0	15	30	0	45	(166)	(638)
2019	0	0	0	0	0	64	15	36	0	115	115	(552)
2020	0	0	0	0	0	66	15	39	0	120	120	(468)
2021	0	0	0	0	0	68	16	42	0	126	126	(385)
2022	0	0	0	0	0	71	16	44	0	132	132	(305)
2023	0	0	0	0	0	74	17	47	0	137	137	(227)
2024	0	0	0	0	0	77	17	50	0	144	144	(151)
2025	0	0	0	0	0	80	17	54	0	152	152	(76)
2026	0	0	0	0	0	84	18	56	0	158	158	(4)
2027	0	0	0	0	0	89	18	58	0	165	165	67
2028	0	0	0	0	0	93	19	60	0	172	172	135
2029	0	0	0	0	0	97	19	64	0	180	180	202
2030	0	0	0	0	0	101	20	66	0	188	188	267
2031	0	0	0	0	0	106	20	70	0	196	196	330
2032	0	0	0	0	0	110	21	74	0	205	205	392
NOMINAL	0	90	725	0	815	1,180	292	828	0	2,299	1,485	
NPV:	0	81	652	0	733	556	157	412	0	1,125	392	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				1.53					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Residential Duct Repair							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	BILL \$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	11	0	124	0	134	175	0	0	175	(40)	(40)
2016	32	0	124	0	156	179	0	0	179	(23)	(62)
2017	54	0	124	0	178	183	0	0	183	(6)	(67)
2018	77	0	124	0	201	188	0	0	188	13	(56)
2019	91	0	0	0	91	0	0	0	0	91	12
2020	93	0	0	0	93	0	0	0	0	93	78
2021	95	0	0	0	95	0	0	0	0	95	140
2022	97	0	0	0	97	0	0	0	0	97	198
2023	99	0	0	0	99	0	0	0	0	99	255
2024	102	0	0	0	102	0	0	0	0	102	309
2025	104	0	0	0	104	0	0	0	0	104	360
2026	105	0	0	0	105	0	0	0	0	105	408
2027	106	0	0	0	106	0	0	0	0	106	453
2028	108	0	0	0	108	0	0	0	0	108	496
2029	111	0	0	0	111	0	0	0	0	111	537
2030	113	0	0	0	113	0	0	0	0	113	576
2031	115	0	0	0	115	0	0	0	0	115	613
2032	118	0	0	0	118	0	0	0	0	118	649
NOMINAL	1,629	0	495	0	2,124	725	0	0	725	1,400	
NPV:	854	0	447	0	1,301	652	0	0	652	649	
In service year of gen unit:			2019	1.9946286							
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Residential Duct Repair									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED					NET	CUMULATIVE	
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED	
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET	
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	22	124	6	0	152	5	0	0	0	5	(147)	(147)	
2016	0	22	124	19	0	165	13	14	0	0	27	(138)	(275)	
2017	0	23	124	32	0	178	20	14	0	0	34	(144)	(401)	
2018	0	23	124	45	0	192	30	15	0	0	45	(148)	(520)	
2019	0	0	0	52	0	52	100	15	0	0	115	63	(473)	
2020	0	0	0	52	0	52	104	15	0	0	120	67	(425)	
2021	0	0	0	53	0	53	110	16	0	0	126	73	(378)	
2022	0	0	0	53	0	53	116	16	0	0	132	78	(330)	
2023	0	0	0	54	0	54	121	17	0	0	137	83	(283)	
2024	0	0	0	55	0	55	127	17	0	0	144	90	(235)	
2025	0	0	0	55	0	55	134	17	0	0	152	97	(188)	
2026	0	0	0	56	0	56	140	18	0	0	158	102	(141)	
2027	0	0	0	56	0	56	146	18	0	0	165	108	(94)	
2028	0	0	0	57	0	57	153	19	0	0	172	115	(49)	
2029	0	0	0	57	0	57	161	19	0	0	180	123	(3)	
2030	0	0	0	58	0	58	168	20	0	0	188	130	42	
2031	0	0	0	58	0	58	176	20	0	0	196	138	86	
2032	0	0	0	59	0	59	184	21	0	0	205	146	130	
NOMINAL	0	90	495	878	0	1,463	2,007	292	0	0	2,299	837		
NPV:	0	81	447	467	0	995	968	157	0	0	1,125	130		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.13					

Program: Residential Electronically Commutated Motors (ECM)

Program Start Date: November 2011

Program Description

The Residential ECM Program is designed to encourage customers to make cost-effective improvements to existing residences. The goal is to offer customer rebates for installing an ECM to help reduce their energy consumption and reduce Tampa Electric's peak demand. ECM motors are designed to help residential customers improve the overall efficiency of their existing HVAC equipment by replacing the current induction motor in the air-handler with an ECM.

Program Participation Standard

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using ITRON data for systems across all eligible residential structures and participants. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.150 kW
Winter Demand:	0.142 kW
Annual Energy:	388 kWh

Program Costs

Rebate: \$115 for each air handler motor replaced with a qualifying ECM.

The estimated administrative cost per participant is \$10.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	630,869	630,868	5	0.0%	5
2016	640,735	640,730	10	0.0%	15
2017	650,702	650,692	20	0.0%	35
2018	660,594	660,574	35	0.0%	70
2019	670,381	670,346	40	0.0%	110
2020	680,041	680,001	40	0.0%	150
2021	689,544	689,504	40	0.0%	190
2022	698,908	698,868	40	0.0%	230
2023	708,128	708,088	40	0.0%	270
2024	717,339	717,299	40	0.0%	310

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	388	0.142	0.150	0.002	0.001	0.001
2016	388	0.142	0.150	0.006	0.002	0.002
2017	388	0.142	0.150	0.014	0.005	0.005
2018	388	0.142	0.150	0.027	0.010	0.011
2019	388	0.142	0.150	0.043	0.016	0.017
2020	388	0.142	0.150	0.058	0.021	0.023
2021	388	0.142	0.150	0.074	0.027	0.029
2022	388	0.142	0.150	0.089	0.033	0.035
2023	388	0.142	0.150	0.105	0.038	0.041
2024	388	0.142	0.150	0.120	0.044	0.047

PROGRAM NAME: RESIDENTIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	411	0.151	0.160	0.002	0.001	0.001
2016	411	0.151	0.160	0.006	0.002	0.002
2017	411	0.151	0.160	0.014	0.005	0.006
2018	411	0.151	0.160	0.029	0.011	0.011
2019	411	0.151	0.160	0.045	0.017	0.018
2020	411	0.151	0.160	0.062	0.023	0.024
2021	411	0.151	0.160	0.078	0.029	0.030
2022	411	0.151	0.160	0.095	0.035	0.037
2023	411	0.151	0.160	0.111	0.041	0.043
2024	411	0.151	0.160	0.127	1.110	0.050

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Residential Electronically Commutated Motors (ECM)			PAGE 1 OF 1	
			RUN DATE: March 9, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I.	(1) CUSTOMER KW REDUCTION AT THE METER	0.150 KW /CUST	IV.	(1) BASE YEAR 2015
I.	(2) GENERATOR KW REDUCTION PER CUSTOMER	0.163 KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT 2019
I.	(3) KW LINE LOSS PERCENTAGE	7.3 %	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D 2016
I.	(4) GENERATION KWH REDUCTION PER CUSTOMER	411 KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST 650.64 \$/KW
I.	(5) KWH LINE LOSS PERCENTAGE	5.6 %	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST 11.92 \$/KW
I.	(6) GROUP LINE LOSS MULTIPLIER	1	IV.	(6) BASE YEAR DISTRIBUTION COST 57.96 \$/KW
I.	(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV.	(7) GEN, TRAN, & DIST COST ESCALATION RATE 3.0 %
I.	(8)* CUSTOMER KWH REDUCTION AT METER	388 KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST 11.95 \$/KW/YR
ECONOMIC LIFE & K FACTORS			IV.	(9) GENERATOR FIXED O&M ESCALATION RATE 2.4 %
II.	(1) STUDY PERIOD FOR CONSERVATION PROGRAM	15 YEARS	IV.	(10) TRANSMISSION FIXED O & M COST 2.92 \$/KW/YR
II.	(2) GENERATOR ECONOMIC LIFE	25 YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST 11.69 \$/KW/YR
II.	(3) T & D ECONOMIC LIFE	25 YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE 2.4 %
II.	(4) K FACTOR FOR GENERATION	1.4625	IV.	(13) AVOIDED GEN UNIT VARIABLE O & M COSTS 0.180 CENTS/KWH
II.	(5) K FACTOR FOR T & D	1.4625	IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE 2.4 %
	(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1	IV.	(15) GENERATOR CAPACITY FACTOR 13.2 %
UTILITY & CUSTOMER COSTS			IV.	(16) AVOIDED GENERATING UNIT FUEL COST 4.70 CENTS/KWH
III.	(1) UTILITY NONRECURRING COST PER CUSTOMER	10.00 \$/CUST	IV.	(17) AVOIDED GEN UNIT FUEL ESCALATION RATE 5.21 %
III.	(2) UTILITY RECURRING COST PER CUSTOMER	0 \$/CUST/YR	IV.	(18)* AVOIDED PURCHASE CAPACITY COST PER KW 0 \$/KW/YR
III.	(3) UTILITY COST ESCALATION RATE	2.4 %	IV.	(19)* CAPACITY COST ESCALATION RATE 0 %
III.	(4) CUSTOMER EQUIPMENT COST	400.00 \$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III.	(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V.	(1) NON-FUEL COST IN CUSTOMER BILL 5.578 CENTS/KWH
III.	(6) CUSTOMER O & M COST	0 \$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE 1 %
III.	(7) CUSTOMER O & M ESCALATION RATE	2.4 %	V.	(3) CUSTOMER DEMAND CHARGE PER KW 0.000 \$/KW/MO
III.	(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE 1 %
III.	(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT
III.	(10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR	FACTOR FOR CUSTOMER BILL 1.00	
III.	(11)* SUPPLY COSTS ESCALATION RATE	0 %		
III.	(12)* UTILITY DISCOUNT RATE	0.0734		
III.	(13)* UTILITY AFUDC RATE	0.0645	CALCULATED BENEFITS AND COSTS	
III.	(14)* UTILITY NON RECURRING REBATE/INCENTIVE	115.00 \$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO 0.78	
III.	(15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV) 2.55	
III.	(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %	(3)* RIM TEST - BENEFIT/COST RATIO 1.07	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Residential Electronically Commutated Motors (ECM)										Page 1 of 1
													March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	2	0	2	0	0	0	0	0	0	(2)	(2)
2016	0	0	4	0	4	0	0	0	0	0	0	(4)	(6)
2017	0	0	8	0	9	0	0	0	0	0	1	(8)	(13)
2018	0	0	15	0	15	0	0	1	0	1	(14)	(24)	
2019	0	0	0	0	0	1	0	1	0	2	2	(22)	
2020	0	0	0	0	0	1	0	1	0	3	3	(20)	
2021	0	0	0	0	0	1	0	1	0	3	3	(19)	
2022	0	0	0	0	0	1	0	1	0	3	3	(17)	
2023	0	0	0	0	0	1	0	1	0	3	3	(15)	
2024	0	0	0	0	0	1	0	2	0	3	3	(13)	
2025	0	0	0	0	0	1	0	2	0	3	3	(12)	
2026	0	0	0	0	0	2	0	2	0	4	4	(10)	
2027	0	0	0	0	0	2	0	2	0	4	4	(9)	
2028	0	0	0	0	0	2	0	2	0	4	4	(7)	
2029	0	0	0	0	0	2	0	2	0	4	4	(6)	
NOMINAL	0	1	30	0	30	16	4	18	0	37	7		
NPV:	0	1	25	0	26	8	2	10	0	20	-6		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				0.78						

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Residential Electronically Commutated Motors (ECM)							Page 1 of 1
											March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	1	0	1	2	0	0	2	(1)	(1)
2016	0	0	1	0	2	4	0	0	4	(3)	(4)
2017	1	0	2	0	3	8	0	0	8	(5)	(8)
2018	2	0	4	0	6	15	0	0	15	(9)	(15)
2019	3	0	0	0	3	0	0	0	0	3	(13)
2020	3	0	0	0	3	0	0	0	0	3	(11)
2021	3	0	0	0	3	0	0	0	0	3	(10)
2022	3	0	0	0	3	0	0	0	0	3	(8)
2023	3	0	0	0	3	0	0	0	0	3	(6)
2024	3	0	0	0	3	0	0	0	0	3	(4)
2025	3	0	0	0	3	0	0	0	0	3	(3)
2026	3	0	0	0	3	0	0	0	0	3	(1)
2027	3	0	0	0	3	0	0	0	0	3	(0)
2028	3	0	0	0	3	0	0	0	0	3	1
2029	3	0	0	0	3	0	0	0	0	3	3
NOMINAL	37	0	8	0	45	30	0	0	30	16	
NPV:	21	0	7	0	28	25	0	0	25	3	
In service year of gen unit:			2019		1.1010379						
Discount rate:			0.0734								

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Residential Electronically Commutated Motors (ECM)								Page 1 of 1
													March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED T & D				NET BENEFITS TO ALL CUSTOMERS	CUMULATIVE DISCOUNTED NET BENEFIT
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS		REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS		
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2016	0	0	1	0	0	1	0	0	0	0	0	(1)	(2)
2017	0	0	2	1	0	3	0	0	0	0	1	(2)	(4)
2018	0	0	4	1	0	6	1	0	0	0	1	(5)	(7)
2019	0	0	0	2	0	2	2	0	0	0	2	1	(7)
2020	0	0	0	2	0	2	2	0	0	0	3	1	(6)
2021	0	0	0	2	0	2	3	0	0	0	3	1	(5)
2022	0	0	0	2	0	2	3	0	0	0	3	1	(5)
2023	0	0	0	2	0	2	3	0	0	0	3	1	(4)
2024	0	0	0	2	0	2	3	0	0	0	3	2	(3)
2025	0	0	0	2	0	2	3	0	0	0	3	2	(2)
2026	0	0	0	2	0	2	3	0	0	0	4	2	(1)
2027	0	0	0	2	0	2	3	0	0	0	4	2	(0)
2028	0	0	0	2	0	2	4	0	0	0	4	2	0
2029	0	0	0	2	0	2	4	0	0	0	4	2	1
NOMINAL	0	1	8	20	0	29	34	4	0	0	37	8	
NPV:	0	1	7	11	0	19	18	2	0	0	20	1	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.07				

Program: Energy Education, Awareness and Agency Outreach

Program Start Date: March 2010

Program Description

The Energy Education, Awareness and Agency Outreach Program is comprised of three distinct initiatives:

- 1) Public energy education
- 2) Energy awareness
- 3) Agency outreach

Energy Education and Awareness

This portion of the program is designed to establish opportunities for engaging groups of customers and students in energy-efficiency related discussions in an organized setting. Tampa Electric recognizes the importance of educating students and motivating customers through participation in its energy audits, and this program will provide the opportunity to accomplish both initiatives for large groups in one setting.

In order to create an awareness of this offering, the company will establish participation avenues through its Speakers' Bureau and Community Relations teams.

By working with local civic groups, churches, government sponsored public forums, homeowners associations, trade shows, rental property management groups, etc., Tampa Electric will establish informative presentations that help educate customers on no-cost practices they can implement to reduce their energy consumption, low-cost improvements to increase the efficiency of their homes and incentives available for making larger, long-term investments. This type of forum will allow for dialogue with customers in such a setting that many customers will simultaneously benefit from the discussion.

Additionally, this program will focus on opportunities to promote energy efficiency education through local school systems. Students will be educated on ways to become active participants in saving energy at home and at school through the use of theater, educational modules, videos or other learning tools that support Sunshine State Standards and are approved by school authorities.

Participants will be provided with an energy efficiency kit containing the following energy saving devices and supporting information appropriate for the audience.

- **CFLs**
This provides four CFLs to replace incandescent bulbs with similar lumen output.
- **Water Heater Temperature Check and Adjustment**
This provides a temperature check of the water heater temperature setting and informs the customer of the possibility for turn-down adjustment.
- **Low Flow Faucet Aerator**
This provides two low flow faucet aerators to reduce the amount of hot water used.

- **Wall Plate Thermometer**
This provides one wall plate thermometer to check the accuracy of the installed thermostat.
- **Air Filter Whistle**
This provides one filter whistle to help remind to clean or change filter monthly.
- **Energy Savings Education Handout**
This provides the content and directions for installation for all of the measures within the kit. The handout also includes several no-cost energy conservation tips that provide an immediate payback.

Agency Outreach

This portion of the program will allow for delivery of energy efficiency kits that will help educate agency clients on practices that help to reduce energy consumption. The suggested practices will mirror the recommendations provided to customers who participate in a free energy audit.

Customer eligibility is confirmed through the utilization of census data to identify eligible customer geographic regions of low income customers or by referrals through direct customer contact, distributed literature and communication through key community contacts or local community assistance agencies which serve low income households.

As a means to encourage adoption of the recommendations, agency clients who are seeking energy-related assistance will be provided with the same energy efficiency kit above.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were obtained using ITRON data. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.025 kW
Winter Demand:	0.046 kW
Annual Energy:	342 kWh

Program Costs

The estimated administrative cost per participant is \$38. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: ENERGY EDUCATION, AWARENESS AND AGENCY OUTREACH

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	630,869	500	0.1%	500
2016	640,735	640,735	500	0.2%	1,000
2017	650,702	650,702	500	0.2%	1,500
2018	660,594	660,594	500	0.3%	2,000
2019	670,381	670,381	500	0.4%	2,500
2020	680,041	680,041	500	0.4%	3,000
2021	689,544	689,544	500	0.5%	3,500
2022	698,908	698,908	500	0.6%	4,000
2023	708,128	708,128	500	0.6%	4,500
2024	717,339	717,339	500	0.7%	5,000

* Previous participation levels not included.

PROGRAM NAME: ENERGY EDUCATION, AWARENESS AND AGENCY OUTREACH

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	342	0.046	0.025	0.171	0.023	0.013
2016	342	0.046	0.025	0.342	0.046	0.025
2017	342	0.046	0.025	0.513	0.069	0.038
2018	342	0.046	0.025	0.684	0.092	0.050
2019	342	0.046	0.025	0.855	0.115	0.063
2020	342	0.046	0.025	1.026	0.138	0.075
2021	342	0.046	0.025	1.197	0.161	0.088
2022	342	0.046	0.025	1.368	0.184	0.100
2023	342	0.046	0.025	1.539	0.207	0.113
2024	342	0.046	0.025	1.710	0.230	0.125

PROGRAM NAME: ENERGY EDUCATION, AWARENESS AND AGENCY OUTREACH

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	363	0.049	0.027	0.181	0.025	0.013
2016	363	0.049	0.027	0.363	0.049	0.027
2017	363	0.049	0.027	0.544	0.074	0.040
2018	363	0.049	0.027	0.725	0.098	0.053
2019	363	0.049	0.027	0.906	0.123	0.067
2020	363	0.049	0.027	1.088	0.147	0.080
2021	363	0.049	0.027	1.269	0.172	0.093
2022	363	0.049	0.027	1.450	0.196	0.107
2023	363	0.049	0.027	1.631	0.221	0.120
2024	363	0.049	0.027	1.813	0.245	0.133

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Energy Education, Awareness and Agency Outreach			PAGE 1 OF 1	
			RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.046	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.035	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	362	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	342	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	15	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	38.19	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	0.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578 CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	4.68
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	568.58
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	0.87

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Energy Education, Awareness and Agency Outreach										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	19	0	0	19	0	0	4	0	4	(15)	(15)	
2016	0	20	0	0	20	0	2	10	0	12	(8)	(23)	
2017	0	20	0	0	20	0	2	15	0	17	(3)	(25)	
2018	0	21	0	0	21	0	2	23	0	25	4	(22)	
2019	0	0	0	0	0	7	2	28	0	37	37	6	
2020	0	0	0	0	0	7	2	30	0	39	39	34	
2021	0	0	0	0	0	8	2	32	0	42	42	61	
2022	0	0	0	0	0	8	2	34	0	44	44	88	
2023	0	0	0	0	0	8	2	36	0	46	46	114	
2024	0	0	0	0	0	9	2	38	0	50	50	140	
2025	0	0	0	0	0	9	2	41	0	53	53	166	
2026	0	0	0	0	0	10	2	43	0	55	55	191	
2027	0	0	0	0	0	10	3	44	0	57	57	216	
2028	0	0	0	0	0	11	3	46	0	59	59	239	
2029	0	0	0	0	0	11	3	49	0	63	63	262	
NOMINAL	0	79	0	0	79	98	31	472	0	601	522		
NPV:	0	71	0	0	71	52	19	263	0	334	262		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					4.68					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Energy Education, Awareness and Agency Outreach											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	8	0	0	0	8	0	0	0	0	8	8
2016	25	0	0	0	25	0	0	0	0	25	31
2017	41	0	0	0	41	0	0	0	0	41	67
2018	59	0	0	0	59	0	0	0	0	59	114
2019	69	0	0	0	69	0	0	0	0	69	167
2020	71	0	0	0	71	0	0	0	0	71	217
2021	73	0	0	0	73	0	0	0	0	73	264
2022	74	0	0	0	74	0	0	0	0	74	309
2023	76	0	0	0	76	0	0	0	0	76	352
2024	78	0	0	0	78	0	0	0	0	78	393
2025	79	0	0	0	79	0	0	0	0	79	432
2026	80	0	0	0	80	0	0	0	0	80	469
2027	81	0	0	0	81	0	0	0	0	81	504
2028	83	0	0	0	83	0	0	0	0	83	537
2029	85	0	0	0	85	0	0	0	0	85	569
NOMINAL	982	0	0	0	982	0	0	0	0	982	
NPV:	569	0	0	0	569	0	0	0	0	569	
In service year of gen unit: 2019											
Discount rate: 0.0734											

RATE IMPACT TEST													PSC FORM CE 2.5
PROGRAM: Energy Education, Awareness and Agency Outreach													Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT UNIT & FUEL BENEFITS	AVOIDED T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS TO ALL CUSTOMERS	CUMULATIVE DISCOUNTED NET BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	19	0	5	0	24	4	0	0	0	4	(20)	(20)
2016	0	20	0	14	0	34	10	2	0	0	12	(22)	(41)
2017	0	20	0	24	0	44	15	2	0	0	17	(27)	(64)
2018	0	21	0	34	0	55	23	2	0	0	25	(30)	(89)
2019	0	0	0	40	0	40	35	2	0	0	37	(3)	(91)
2020	0	0	0	40	0	40	37	2	0	0	39	(1)	(92)
2021	0	0	0	41	0	41	40	2	0	0	42	1	(91)
2022	0	0	0	41	0	41	42	2	0	0	44	3	(89)
2023	0	0	0	41	0	41	44	2	0	0	46	5	(86)
2024	0	0	0	42	0	42	47	2	0	0	50	8	(82)
2025	0	0	0	42	0	42	50	2	0	0	53	11	(76)
2026	0	0	0	43	0	43	52	2	0	0	55	12	(71)
2027	0	0	0	43	0	43	54	3	0	0	57	14	(65)
2028	0	0	0	43	0	43	56	3	0	0	59	15	(59)
2029	0	0	0	44	0	44	60	3	0	0	63	19	(52)
NOMINAL	0	79	0	537	0	616	570	31	0	0	601	-15	
NPV:	0	71	0	314	0	386	315	19	0	0	334	-52	
Discount rate:			0.0734			Benefit/Cost Ratio - [col (12)/col (7)]:			0.87				

Program: ENERGY STAR for New Homes

Program Start Date: TBD

Program Description

The ENERGY STAR for New Homes Program is a residential new construction conservation program designed to reduce the growth of peak demand and energy in the residential new construction market. The program utilizes a rebate to encourage the construction of new homes to meet the requirements to achieve the ENERGY STAR certified new home label. By receiving this certificate, the new home will use less energy and demand which will help reduce the growth of Tampa Electric's peak demand.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using historical participation characteristics of residences and utilizing DOE2 building simulations for a home that would meet the current minimum Florida Building Code compared to a new home that would meet the requirements of ENERGY STAR Certified Homes, Version 3.1 (Rev. 05) Program Requirements for the State of Florida. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.531 kW
Winter Demand:	0.490 kW
Annual Energy:	2,489 kWh

Program Costs

Rebate: \$850 for a qualifying home receiving the ENERGY STAR Certificate.

The estimated administrative cost per participant is \$22.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: ENERGY STAR FOR NEW HOMES

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	4,500	1,350	100	7.4%	100
2016	4,635	1,391	200	21.6%	300
2017	4,774	1,432	250	38.4%	550
2018	4,917	1,475	250	54.2%	800
2019	5,065	1,519	250	69.1%	1,050
2020	5,217	1,565	250	83.1%	1,300
2021	5,373	1,612	250	96.2%	1,550
2022	5,534	1,660	250	108.4%	1,800
2023	5,700	1,710	250	119.9%	2,050
2024	5,871	1,761	250	130.6%	2,300

* Previous participation levels not included.

PROGRAM NAME: ENERGY STAR FOR NEW HOMES

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,489	0.490	0.531	0.249	0.049	0.053
2016	2,489	0.490	0.531	0.747	0.147	0.159
2017	2,489	0.490	0.531	1.369	0.270	0.292
2018	2,489	0.490	0.531	1.991	0.392	0.425
2019	2,489	0.490	0.531	2.613	0.515	0.558
2020	2,489	0.490	0.531	3.236	0.637	0.690
2021	2,489	0.490	0.531	3.858	0.760	0.823
2022	2,489	0.490	0.531	4.480	0.882	0.956
2023	2,489	0.490	0.531	5.102	1.005	1.089
2024	2,489	0.490	0.531	5.725	1.127	1.221

PROGRAM NAME: ENERGY STAR FOR NEW HOMES

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,638	0.522	0.566	0.264	0.052	0.057
2016	2,638	0.522	0.566	0.792	0.157	0.170
2017	2,638	0.522	0.566	1.451	0.287	0.311
2018	2,638	0.522	0.566	2.111	0.418	0.453
2019	2,638	0.522	0.566	2.770	0.548	0.594
2020	2,638	0.522	0.566	3.430	0.679	0.736
2021	2,638	0.522	0.566	4.089	0.810	0.877
2022	2,638	0.522	0.566	4.749	0.940	1.019
2023	2,638	0.522	0.566	5.409	1.071	1.160
2024	2,638	0.522	0.566	6.068	1.201	1.302

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Energy Star for New Homes			PAGE 1 OF 1	
			RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.531	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.574	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	2.637	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	2.489	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	22.00	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	2187.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578 CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	850.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	1.19
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	1,318.96
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	1.05

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Energy Star for New Homes										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET		NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS		BENEFITS
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	2	219	0	221	0	0	5	0	5	(216)		(216)
2016	0	5	448	0	452	0	6	20	0	26	(426)		(613)
2017	0	6	573	0	579	0	7	37	0	44	(535)		(1,077)
2018	0	6	587	0	593	0	7	64	0	71	(522)		(1,499)
2019	0	0	0	0	0	75	12	80	0	167	167		(1,373)
2020	0	0	0	0	0	73	12	86	0	171	171		(1,253)
2021	0	0	0	0	0	72	12	93	0	177	177		(1,137)
2022	0	0	0	0	0	71	12	99	0	181	181		(1,027)
2023	0	0	0	0	0	69	12	104	0	185	185		(922)
2024	0	0	0	0	0	68	12	112	0	192	192		(820)
2025	0	0	0	0	0	68	12	120	0	200	200		(722)
2026	0	0	0	0	0	67	12	124	0	203	203		(628)
2027	0	0	0	0	0	67	12	128	0	208	208		(540)
2028	0	0	0	0	0	67	12	133	0	213	213		(455)
2029	0	0	0	0	0	67	12	143	0	222	222		(373)
2030	0	0	0	0	0	67	12	148	0	227	227		(294)
2031	0	0	0	0	0	67	12	157	0	236	236		(218)
2032	0	0	0	0	0	67	12	166	0	244	244		(145)
2033	0	0	0	0	0	66	12	174	0	253	253		(74)
2034	0	0	0	0	0	67	12	177	0	256	256		(8)
2035	0	0	0	0	0	67	13	194	0	273	273		59
2036	0	0	0	0	0	66	13	205	0	283	283		123
2037	0	0	0	0	0	66	13	221	0	300	300		186
2038	0	0	0	0	0	65	13	241	0	318	318		248
2039	0	0	0	0	0	65	13	257	0	335	335		310
NOMINAL	0	18	1,827	0	1,845	1,425	279	3,289	0	4,993	3,148		
NPV:	0	16	1,608	0	1,624	587	122	1,225	0	1,934	310		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				1.19						

			PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
			PROGRAM: Energy Star for New Homes								Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	12	0	85	0	97	219	0	0	219	(122)	(122)
2016	48	0	170	0	218	448	0	0	448	(230)	(336)
2017	102	0	213	0	314	573	0	0	573	(259)	(561)
2018	166	0	213	0	378	587	0	0	587	(209)	(730)
2019	202	0	0	0	202	0	0	0	0	202	(578)
2020	208	0	0	0	208	0	0	0	0	208	(432)
2021	211	0	0	0	211	0	0	0	0	211	(294)
2022	216	0	0	0	216	0	0	0	0	216	(163)
2023	221	0	0	0	221	0	0	0	0	221	(38)
2024	227	0	0	0	227	0	0	0	0	227	82
2025	231	0	0	0	231	0	0	0	0	231	196
2026	234	0	0	0	234	0	0	0	0	234	303
2027	237	0	0	0	237	0	0	0	0	237	405
2028	241	0	0	0	241	0	0	0	0	241	501
2029	247	0	0	0	247	0	0	0	0	247	592
2030	251	0	0	0	251	0	0	0	0	251	679
2031	256	0	0	0	256	0	0	0	0	256	761
2032	263	0	0	0	263	0	0	0	0	263	840
2033	270	0	0	0	270	0	0	0	0	270	915
2034	276	0	0	0	276	0	0	0	0	276	987
2035	287	0	0	0	287	0	0	0	0	287	1,057
2036	302	0	0	0	302	0	0	0	0	302	1,125
2037	314	0	0	0	314	0	0	0	0	314	1,191
2038	332	0	0	0	332	0	0	0	0	332	1,256
2039	344	0	0	0	344	0	0	0	0	344	1,319
NOMINAL	5,694	0	680	0	6,374	1,827	0	0	1,827	4,547	
NPV:	2,328	0	600	0	2,927	1,608	0	0	1,608	1,319	
In service year of gen unit:			2019		1.8201273						
Discount rate:			0.0734								

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Energy Star for New Homes								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED T & D				NET BENEFITS TO ALL	CUMULATIVE DISCOUNTED NET
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	2	85	7	0	94	5	0	0	0	5	(89)	(89)
2016	0	5	170	28	0	203	20	6	0	0	26	(177)	(253)
2017	0	6	213	60	0	278	37	7	0	0	44	(234)	(457)
2018	0	6	213	97	0	315	64	7	0	0	71	(244)	(654)
2019	0	0	0	116	0	116	155	12	0	0	167	52	(615)
2020	0	0	0	117	0	117	159	12	0	0	171	55	(577)
2021	0	0	0	118	0	118	165	12	0	0	177	59	(538)
2022	0	0	0	119	0	119	169	12	0	0	181	62	(500)
2023	0	0	0	120	0	120	173	12	0	0	185	65	(463)
2024	0	0	0	121	0	121	180	12	0	0	192	71	(426)
2025	0	0	0	123	0	123	188	12	0	0	200	77	(388)
2026	0	0	0	124	0	124	191	12	0	0	203	79	(352)
2027	0	0	0	125	0	125	196	12	0	0	208	83	(316)
2028	0	0	0	126	0	126	201	12	0	0	213	86	(282)
2029	0	0	0	128	0	128	210	12	0	0	222	94	(247)
2030	0	0	0	129	0	129	215	12	0	0	227	98	(213)
2031	0	0	0	130	0	130	224	12	0	0	236	106	(179)
2032	0	0	0	132	0	132	232	12	0	0	244	113	(145)
2033	0	0	0	133	0	133	241	12	0	0	253	120	(112)
2034	0	0	0	134	0	134	244	12	0	0	256	122	(80)
2035	0	0	0	136	0	136	261	13	0	0	273	138	(46)
2036	0	0	0	137	0	137	271	13	0	0	283	146	(13)
2037	0	0	0	138	0	138	287	13	0	0	300	162	21
2038	0	0	0	140	0	140	305	13	0	0	318	179	56
2039	0	0	0	141	0	141	322	13	0	0	335	194	91
NOMINAL	0	18	680	2,878	0	3,576	4,714	279	0	0	4,993	1,417	
NPV:	0	16	600	1,227	0	1,843	1,812	122	0	0	1,934	91	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.05				

Program: Residential Heating and Cooling

Program Start Date: January 1981

Program Description

The Residential Heating and Cooling Program is designed to encourage customers to make cost-effective improvements to existing residences. The goal is to offer customer rebates for installing high efficiency heating and cooling systems to help reduce their energy consumption while reducing Tampa Electric's weather sensitive peak demand. High efficiency heating and cooling systems require less demand and energy as compared to standard systems. This program will rebate residential customers that install a qualifying air conditioning system.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using historical participation characteristics of residences and utilizing DOE2 building simulations for SEER level changes. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.102 kW
Winter Demand:	0.333 kW
Annual Energy:	371 kWh

Program Costs

Rebate: \$135 per qualifying air conditioning system.

The estimated administrative cost per participant is \$22.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL HEATING AND COOLING					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	630,869	372,213	1,000	0.3%	1,000
2016	640,735	378,034	1,000	0.5%	2,000
2017	650,702	383,914	950	0.8%	2,950
2018	660,594	389,750	900	1.0%	3,850
2019	670,381	395,525	900	1.2%	4,750
2020	680,041	401,224	900	1.4%	5,650
2021	689,544	406,831	900	1.6%	6,550
2022	698,908	412,356	700	1.8%	7,250
2023	708,128	417,796	600	1.9%	7,850
2024	717,339	423,230	500	2.0%	8,350

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL HEATING AND COOLING

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	371	0.333	0.102	0.371	0.333	0.102
2016	371	0.333	0.102	0.742	0.666	0.204
2017	371	0.333	0.102	1.094	0.982	0.301
2018	371	0.333	0.102	1.428	1.282	0.393
2019	371	0.333	0.102	1.762	1.582	0.485
2020	371	0.333	0.102	2.096	1.881	0.576
2021	371	0.333	0.102	2.430	2.181	0.668
2022	371	0.333	0.102	2.690	2.414	0.740
2023	371	0.333	0.102	2.912	2.614	0.801
2024	371	0.333	0.102	3.098	2.781	0.852

PROGRAM NAME: RESIDENTIAL HEATING AND COOLING

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	393	0.355	0.109	0.393	0.355	0.109
2016	393	0.355	0.109	0.787	0.710	0.217
2017	393	0.355	0.109	1.160	1.047	0.321
2018	393	0.355	0.109	1.514	1.367	0.419
2019	393	0.355	0.109	1.868	1.686	0.516
2020	393	0.355	0.109	2.222	2.006	0.614
2021	393	0.355	0.109	2.576	2.325	0.712
2022	393	0.355	0.109	2.851	2.574	0.788
2023	393	0.355	0.109	3.087	2.787	0.854
2024	393	0.355	0.109	3.284	2.964	0.908

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Residential Heating & Cooling				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.333	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.193	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	393	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	371	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	18	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	22.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	275.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	135.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	1.51	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	851.02	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.25	

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Residential Heating & Cooling									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	22	275	0	297	0	0	8	0	8	(289)	(289)
2016	0	23	282	0	304	0	25	22	0	47	(257)	(528)
2017	0	22	274	0	296	0	26	32	0	59	(237)	(734)
2018	0	21	266	0	287	0	27	48	0	75	(212)	(906)
2019	0	0	0	0	0	77	27	57	0	162	162	(784)
2020	0	0	0	0	0	79	28	62	0	169	169	(665)
2021	0	0	0	0	0	83	29	67	0	178	178	(549)
2022	0	0	0	0	0	86	30	71	0	187	187	(435)
2023	0	0	0	0	0	89	30	74	0	194	194	(325)
2024	0	0	0	0	0	93	31	80	0	204	204	(217)
2025	0	0	0	0	0	97	32	86	0	215	215	(111)
2026	0	0	0	0	0	102	33	89	0	224	224	(8)
2027	0	0	0	0	0	107	34	92	0	233	233	91
2028	0	0	0	0	0	112	35	96	0	242	242	188
2029	0	0	0	0	0	117	35	103	0	255	255	282
2030	0	0	0	0	0	122	36	106	0	265	265	374
2031	0	0	0	0	0	128	37	112	0	277	277	463
2032	0	0	0	0	0	133	38	119	0	290	290	550
NOMINAL	0	88	1,096	0	1,184	1,424	535	1,325	0	3,284	2,100	
NPV:	0	79	990	0	1,069	671	288	661	0	1,619	550	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				1.51					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Residential Heating & Cooling							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	18	0	135	0	153	275	0	0	275	(122)	(122)
2016	53	0	135	0	188	282	0	0	282	(93)	(209)
2017	88	0	128	0	217	274	0	0	274	(57)	(259)
2018	124	0	122	0	246	266	0	0	266	(20)	(275)
2019	145	0	0	0	145	0	0	0	0	145	(166)
2020	149	0	0	0	149	0	0	0	0	149	(62)
2021	151	0	0	0	151	0	0	0	0	151	37
2022	155	0	0	0	155	0	0	0	0	155	132
2023	159	0	0	0	159	0	0	0	0	159	222
2024	163	0	0	0	163	0	0	0	0	163	308
2025	165	0	0	0	165	0	0	0	0	165	389
2026	168	0	0	0	168	0	0	0	0	168	466
2027	170	0	0	0	170	0	0	0	0	170	539
2028	173	0	0	0	173	0	0	0	0	173	608
2029	177	0	0	0	177	0	0	0	0	177	673
2030	180	0	0	0	180	0	0	0	0	180	735
2031	184	0	0	0	184	0	0	0	0	184	795
2032	188	0	0	0	188	0	0	0	0	188	851
NOMINAL	2,610	0	520	0	3,129	1,096	0	0	1,096	2,033	
NPV:	1,371	0	470	0	1,841	990	0	0	990	851	
In service year of gen unit:			2019		1.8596375						
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Residential Heating & Cooling									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT					NET	CUMULATIVE	
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	AVOIDED T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	BENEFITS TO ALL CUSTOMERS	DISCOUNTED NET BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	22	135	10	0	167	8	0	0	0	8	(159)	(159)	
2016	0	23	135	31	0	189	22	25	0	0	47	(142)	(291)	
2017	0	22	128	52	0	202	32	26	0	0	59	(144)	(416)	
2018	0	21	122	72	0	215	48	27	0	0	75	(140)	(530)	
2019	0	0	0	83	0	83	134	27	0	0	162	79	(470)	
2020	0	0	0	84	0	84	141	28	0	0	169	85	(410)	
2021	0	0	0	85	0	85	149	29	0	0	178	94	(349)	
2022	0	0	0	85	0	85	157	30	0	0	187	101	(287)	
2023	0	0	0	86	0	86	164	30	0	0	194	108	(226)	
2024	0	0	0	87	0	87	173	31	0	0	204	117	(164)	
2025	0	0	0	88	0	88	183	32	0	0	215	127	(101)	
2026	0	0	0	89	0	89	191	33	0	0	224	135	(40)	
2027	0	0	0	90	0	90	199	34	0	0	233	143	21	
2028	0	0	0	91	0	91	208	35	0	0	242	152	82	
2029	0	0	0	92	0	92	219	35	0	0	255	163	142	
2030	0	0	0	92	0	92	228	36	0	0	265	172	202	
2031	0	0	0	93	0	93	240	37	0	0	277	184	261	
2032	0	0	0	94	0	94	251	38	0	0	290	195	320	
NOMINAL	0	88	520	1,406	0	2,013	2,749	535	0	0	3,284	1,271		
NPV:	0	79	470	750	0	1,300	1,332	288	0	0	1,619	320		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.25					

Program: Neighborhood Weatherization

Program Start Date: March 2008

Program Description

The Neighborhood Weatherization Program is designed to assist low income families in reducing their energy usage. The goal of the program is to provide and install a package of conservation measures at no cost to the customer. Another key component will be educating families and promoting energy conservation techniques to help customers control and reduce their energy usage.

Customer eligibility is confirmed through the utilization of census data to identify eligible customer geographic regions of low income customers or by referrals through direct customer contact, distributed literature and communication through key community contacts or local community assistance agencies which serve low income households. Local residents of these qualifying geographic regions will have the opportunity enroll for participation in the program at no cost.

Tampa Electric will deliver the following applicable measures.

- **Duct Sealing**
For qualified dwellings with a ducted central HVAC system, this will provide sealing of the ADS.
- **Ceiling Insulation**
For qualified dwellings where the existing ceiling insulation is below R-19, this will provide for an R-13 to be installed. Any home where roof pitch limits accessibility, a lower R-value may be installed.
- **CFLs**
This provides the resident with eight CFLs to replace incandescent bulbs with similar lumen output.
- **Water Heater Wrap**
This will furnish and install a water heater wrap for an electric water heater manufactured prior to 1996.
- **Hot Water Pipe Insulation**
This allows for the installation of hot water insulation on un-insulated pipes.
- **Water Heater Temperature Check and Adjustment**
This provides a temperature check of the water heater temperature setting and informs the customer of the possibility for turn-down adjustment.
- **Low Flow Faucet Aerator**
This allows for the installation of up to three low flow faucet aerators to reduce the amount of hot water used.
- **Low Flow Showerhead**
This allows for the installation of up to two low flow showerheads to reduce the amount of hot water used.

- **Wall Plate Thermometer**
This will provide for the installation of one wall plate thermometer per home to check the accuracy of the installed thermostat.
- **Refrigerator Coil Cleaning and Brush**
This will provide for the cleaning of the refrigerator coil. The brush will be provided to the customer for future cleaning.
- **HVAC Weather Stripping Kit**
This will provide for the installation of a weather stripping kit for window/wall HVAC units. The customer will receive or have installed up to two kits.
- **Air Filter Whistle**
This provides each homeowner with a filter whistle to help remind them to clean or change filter monthly.
- **Weatherization Measures**
This portion of the program will provide weather stripping, caulk and foam sealant which will be used to reduce or stop air infiltration around doors, windows, attic entries and where pipes enter the home. Reducing air infiltration is vital to saving energy and improving comfort.
- **Energy Savings Education Handout**
This provides each homeowner with the content and directions for installation for some of the measures within the kit. The handout also includes several no-cost energy conservation tips that provide an immediate payback.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were obtained using a combination of ITRON data for specific kit measures and DOE2 building simulations to determine the composite savings for this program. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.241 kW
Winter Demand:	0.337 kW
Annual Energy:	1,222 kWh

Program Costs

The estimated administrative cost per participant is \$374. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: NEIGHBORHOOD WEATHERIZATION

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	210,290	5,000	2.4%	5,000
2016	640,735	213,578	5,750	5.0%	10,750
2017	650,702	216,901	6,250	7.8%	17,000
2018	660,594	220,198	6,750	10.8%	23,750
2019	670,381	223,460	7,000	13.8%	30,750
2020	680,041	226,680	7,000	16.7%	37,750
2021	689,544	229,848	7,000	19.5%	44,750
2022	698,908	232,969	7,000	22.2%	51,750
2023	708,128	236,043	7,000	24.9%	58,750
2024	717,339	239,113	7,000	27.5%	65,750

* Previous participation levels not included.

PROGRAM NAME: NEIGHBORHOOD WEATHERIZATION

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	1,222	0.337	0.241	6.110	1.685	1.205
2016	1,222	0.337	0.241	13.137	3.623	2.591
2017	1,222	0.337	0.241	20.774	5.729	4.097
2018	1,222	0.337	0.241	29.023	8.004	5.724
2019	1,222	0.337	0.241	37.577	10.363	7.411
2020	1,222	0.337	0.241	46.131	12.722	9.098
2021	1,222	0.337	0.241	54.685	15.081	10.785
2022	1,222	0.337	0.241	63.239	17.440	12.472
2023	1,222	0.337	0.241	71.793	19.799	14.159
2024	1,222	0.337	0.241	80.347	22.158	15.846

PROGRAM NAME: NEIGHBORHOOD WEATHERIZATION

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	1,295	0.359	0.257	6.477	1.796	1.285
2016	1,295	0.359	0.257	13.925	3.862	2.762
2017	1,295	0.359	0.257	22.020	6.107	4.367
2018	1,295	0.359	0.257	30.764	8.532	6.102
2019	1,295	0.359	0.257	39.831	11.047	7.900
2020	1,295	0.359	0.257	48.898	13.561	9.698
2021	1,295	0.359	0.257	57.966	16.076	11.497
2022	1,295	0.359	0.257	67.033	18.591	13.295
2023	1,295	0.359	0.257	76.100	21.105	15.093
2024	1,295	0.359	0.257	85.167	23.620	16.892

INPUT DATA - PART 1				PSC FORM CE 1.1
PROGRAM TITLE: Neighborhood Weatherization				PAGE 1 OF 1
				RUN DATE: February 26, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES		AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.337 KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.301 KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.3 %	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	1.294 KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW	
I. (5) KWH LINE LOSS PERCENTAGE	5.6 %	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW	
I. (6) GROUP LINE LOSS MULTIPLIER	1	IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW	
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV. (7) GEN, TRAN. & DIST COST ESCALATION RATE	3.0 %	
I. (8)* CUSTOMER KWH REDUCTION AT METER	1.222 KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR	
		IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %	
		IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR	
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	15 YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR	
II. (2) GENERATOR ECONOMIC LIFE	25 YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %	
II. (3) T & D ECONOMIC LIFE	25 YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH	
II. (4) K FACTOR FOR GENERATION	1.4625	IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %	
II. (5) K FACTOR FOR T & D	1.4625	IV. (15) GENERATOR CAPACITY FACTOR	13.2 %	
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1	IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH	
		IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %	
		IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR	
		IV. (19)* CAPACITY COST ESCALATION RATE	0 %	
UTILITY & CUSTOMER COSTS		NON-FUEL ENERGY AND DEMAND CHARGES		
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	120.00 \$/CUST			
III. (2) UTILITY RECURRING COST PER CUSTOMER	0 \$/CUST/YR			
III. (3) UTILITY COST ESCALATION RATE	2.4 %			
III. (4) CUSTOMER EQUIPMENT COST	0.00 \$/CUST			
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578 CENTS/KWH	
III. (6) CUSTOMER O & M COST	0 \$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %	
III. (7) CUSTOMER O & M ESCALATION RATE	2.4 %	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO	
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %	
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0 %			
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645			
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	374.00 \$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	6.80	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %	(2)* PARTICIPANT NET BENEFITS (NPV)	31,763.34	
		(3)* RIM TEST - BENEFIT/COST RATIO	0.76	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Neighborhood Weatherization										Page 1 of 1
													February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	600	0	0	600	0	0	130	0	130	(470)	(470)	
2016	0	707	0	0	707	0	169	378	0	547	(159)	(618)	
2017	0	786	0	0	786	0	173	600	0	773	(13)	(629)	
2018	0	870	0	0	870	0	178	952	0	1,130	260	(419)	
2019	0	0	0	0	0	736	183	1,168	0	2,087	2,087	1,153	
2020	0	0	0	0	0	759	187	1,254	0	2,201	2,201	2,698	
2021	0	0	0	0	0	792	192	1,353	0	2,337	2,337	4,226	
2022	0	0	0	0	0	826	197	1,439	0	2,462	2,462	5,725	
2023	0	0	0	0	0	857	202	1,513	0	2,572	2,572	7,185	
2024	0	0	0	0	0	888	207	1,633	0	2,728	2,728	8,627	
2025	0	0	0	0	0	929	213	1,752	0	2,894	2,894	10,052	
2026	0	0	0	0	0	976	218	1,805	0	2,999	2,999	11,428	
2027	0	0	0	0	0	1,025	224	1,869	0	3,118	3,118	12,761	
2028	0	0	0	0	0	1,075	230	1,943	0	3,248	3,248	14,054	
2029	0	0	0	0	0	1,118	236	2,088	0	3,441	3,441	15,331	
NOMINAL	0	2,963	0	0	2,963	9,981	2,810	19,877	0	32,669	29,706		
NPV:	0	2,644	0	0	2,644	5,250	1,671	11,054	0	17,975	15,331		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					6.80					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Neighborhood Weatherization											Page 1 of 1
											February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SAVINGS IN PARTICIPANTS TAX UTILITY OTHER TOTAL CUSTOMER CUSTOMER OTHER TOTAL NET CUMULATIVE											DISCOUNTED NET BENEFITS
YEAR	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	EQUIPMENT COSTS	O & M COSTS	COSTS	COSTS	BENEFITS	
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	290	0	1,870	0	2,160	0	0	0	0	2,160	2,160
2016	921	0	2,151	0	3,072	0	0	0	0	3,072	5,022
2017	1,633	0	2,338	0	3,970	0	0	0	0	3,970	8,468
2018	2,457	0	2,525	0	4,981	0	0	0	0	4,981	12,495
2019	2,941	0	0	0	2,941	0	0	0	0	2,941	14,711
2020	3,025	0	0	0	3,025	0	0	0	0	3,025	16,834
2021	3,077	0	0	0	3,077	0	0	0	0	3,077	18,845
2022	3,143	0	0	0	3,143	0	0	0	0	3,143	20,760
2023	3,222	0	0	0	3,222	0	0	0	0	3,222	22,588
2024	3,303	0	0	0	3,303	0	0	0	0	3,303	24,334
2025	3,361	0	0	0	3,361	0	0	0	0	3,361	25,989
2026	3,411	0	0	0	3,411	0	0	0	0	3,411	27,554
2027	3,455	0	0	0	3,455	0	0	0	0	3,455	29,031
2028	3,514	0	0	0	3,514	0	0	0	0	3,514	30,430
2029	3,593	0	0	0	3,593	0	0	0	0	3,593	31,763
NOMINAL	41,347	0	8,883	0	50,229	0	0	0	0	50,229	
NPV:	23,820	0	7,943	0	31,763	0	0	0	0	31,763	
In service year of gen unit:											
Discount rate:											

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Neighborhood Weatherization								Page 1 of 1
													February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	600	1,870	170	0	2,640	130	0	0	0	130	(2,510)	(2510)
2016	0	707	2,151	542	0	3,399	378	169	0	0	547	(2,852)	(5167)
2017	0	786	2,338	965	0	4,089	600	173	0	0	773	(3,315)	(8044)
2018	0	870	2,525	1,431	0	4,825	952	178	0	0	1,130	(3,695)	(11032)
2019	0	0	0	1,685	0	1,685	1,904	183	0	0	2,087	402	(10729)
2020	0	0	0	1,701	0	1,701	2,014	187	0	0	2,201	500	(10379)
2021	0	0	0	1,718	0	1,718	2,145	192	0	0	2,337	619	(9974)
2022	0	0	0	1,736	0	1,736	2,265	197	0	0	2,462	726	(9532)
2023	0	0	0	1,753	0	1,753	2,370	202	0	0	2,572	819	(9067)
2024	0	0	0	1,771	0	1,771	2,520	207	0	0	2,728	957	(8561)
2025	0	0	0	1,788	0	1,788	2,681	213	0	0	2,894	1,106	(8016)
2026	0	0	0	1,806	0	1,806	2,781	218	0	0	2,999	1,193	(7469)
2027	0	0	0	1,824	0	1,824	2,894	224	0	0	3,118	1,294	(6916)
2028	0	0	0	1,842	0	1,842	3,018	230	0	0	3,248	1,405	(6356)
2029	0	0	0	1,861	0	1,861	3,206	236	0	0	3,441	1,581	(5770)
NOMINAL	0	2,963	8,883	22,594	0	34,439	29,858	2,810	0	0	32,669	-1,770	
NPV:	0	2,644	7,943	13,157	0	23,745	16,304	1,671	0	0	17,975	-5,770	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				0.76				

Program: Residential Price Responsive Load Management (Energy Planner)

Program Start Date: September 2007

Program Description

The company's program relies on a multi-tiered rate structure combined with price signals conveyed to participating customers during the day. This price information is designed to encourage customers to make behavioral or equipment usage changes to their energy consumption thereby achieving the desired high cost period load reduction to assist in meeting system peak.

Price information from the utility is used by the customer to program a "smart" thermostat into preset actions based on the level of pricing. Equipment may be turned on, turned off or changed to a different temperature setting automatically by the smart thermostat or manually by the customer through the smart thermostat in response to either the multi-tiered rates or critical price signals.

Tampa Electric will install a communication device along with a "smart" thermostat at the customer's home used to control the operation of selected appliances such as space heating, air conditioning, water heating and pool pumps. Customers will be able to program the operation of this equipment and alter their energy consumption based the price tiers occurring at specific times of the day and year.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

The billing and kWh usage histories of a control group of customers who participated in the Energy Planner program was examined and compared to those of a sample of similar sized customers who did not participate in the program. Customers included in the analysis did not participate in any other DSM programs. Fifteen minute interval energy consumption data was used between both groups and then verified to have similar energy usage characteristics. Based on this load research data, the analysis yielded the following expected savings per customer participant:

Summer Demand:	2.012 kW
Winter Demand:	3.134 kW
Annual Energy:	242 kWh

Program Costs

The estimated recurring rate benefit per participant: \$51.

The estimated annual recurring administrative cost per participant is \$15.

The estimated one time administrative, installation and setup cost is \$546.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT (ENERGY PLANNER)					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	630,869	437,412	1,000	0.2%	1,000
2016	640,735	443,319	1,000	0.5%	2,000
2017	650,702	449,295	1,000	0.7%	3,000
2018	660,594	455,220	1,000	0.9%	4,000
2019	670,381	460,821	1,250	1.1%	5,250
2020	680,041	466,333	1,250	1.4%	6,500
2021	689,544	471,735	1,250	1.6%	7,750
2022	698,908	477,040	1,250	1.9%	9,000
2023	708,128	482,244	1,250	2.1%	10,250
2024	717,339	487,441	1,250	2.4%	11,500

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT (ENERGY PLANNER)

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	242	3.134	2.012	0.242	3.134	2.012
2016	242	3.134	2.012	0.484	6.268	4.024
2017	242	3.134	2.012	0.726	9.402	6.036
2018	242	3.134	2.012	0.968	12.536	8.048
2019	242	3.134	2.012	1.271	16.454	10.563
2020	242	3.134	2.012	1.573	20.371	13.078
2021	242	3.134	2.012	1.876	24.289	15.593
2022	242	3.134	2.012	2.178	28.206	18.108
2023	242	3.134	2.012	2.481	32.124	20.623
2024	242	3.134	2.012	2.783	36.041	23.138

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT (ENERGY PLANNER)

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	257	3.341	2.145	0.257	3.341	2.145
2016	257	3.341	2.145	0.513	6.682	4.290
2017	257	3.341	2.145	0.770	10.023	6.434
2018	257	3.341	2.145	1.026	13.363	8.579
2019	257	3.341	2.145	1.347	17.539	11.260
2020	257	3.341	2.145	1.667	21.715	13.941
2021	257	3.341	2.145	1.988	25.892	16.622
2022	257	3.341	2.145	2.309	30.068	19.303
2023	257	3.341	2.145	2.629	34.244	21.984
2024	257	3.341	2.145	2.950	37.107	24.665

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Res. Price Responsive Load Management (Energy Planner)				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	3.134	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	2.620	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	256	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	0.00	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	0.00	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	242	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	0.00	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	0.00	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	546.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	15	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	0.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	4.96	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	3,470.59	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	4.08	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM	Res. Price Responsive Load Management (Energy Planner)								Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	554	0	0	554	0	0	5	0	5	(548)	(548)
2016	0	582	0	0	582	0	0	14	0	14	(568)	(1,077)
2017	0	612	0	0	612	0	0	21	0	21	(590)	(1,590)
2018	0	643	0	0	643	0	0	32	0	32	(610)	(2,083)
2019	0	66	0	0	66	1,711	0	39	0	1,750	1,684	(814)
2020	0	68	0	0	68	1,673	0	42	0	1,715	1,647	341
2021	0	69	0	0	69	1,640	0	45	0	1,686	1,616	1,398
2022	0	71	0	0	71	1,612	0	48	0	1,660	1,590	2,366
2023	0	73	0	0	73	1,582	0	50	0	1,633	1,560	3,252
2024	0	74	0	0	74	1,554	0	54	0	1,608	1,534	4,062
2025	0	76	0	0	76	1,541	0	58	0	1,600	1,524	4,813
2026	0	78	0	0	78	1,538	0	60	0	1,598	1,521	5,510
2027	0	80	0	0	80	1,537	0	62	0	1,599	1,519	6,160
2028	0	82	0	0	82	1,536	0	65	0	1,600	1,519	6,765
2029	0	84	0	0	84	1,524	0	70	0	1,594	1,510	7,325
2030	0	86	0	0	86	1,526	0	72	0	1,598	1,513	7,847
2031	0	88	0	0	88	1,525	0	76	0	1,601	1,513	8,335
2032	0	90	0	0	90	1,518	0	80	0	1,599	1,509	8,787
2033	0	92	0	0	92	1,512	0	85	0	1,597	1,505	9,208
2034	0	94	0	0	94	1,521	0	86	0	1,607	1,512	9,602
2035	0	96	0	0	96	1,520	0	94	0	1,614	1,518	9,970
2036	0	99	0	0	99	1,500	0	100	0	1,600	1,501	10,309
2037	0	101	0	0	101	1,502	0	108	0	1,609	1,508	10,626
2038	0	104	0	0	104	1,473	0	117	0	1,590	1,486	10,918
2039	0	106	0	0	106	1,488	0	125	0	1,612	1,506	11,193
NOMINAL	0	4,164	0	0	4,164	32,533	0	1,611	0	34,144	29,979	
NPV:	0	2,825	0	0	2,825	13,412	0	606	0	14,018	11,193	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				4.96					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Res. Price Responsive Load Management (Energy Planner)											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SAVINGS IN PARTICIPANTS						CUSTOMER		CUSTOMER		CUMULATIVE	
	BILL	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
YEAR	\$ (000)	CREDITS \$ (000)	REBATES \$ (000)	BENEFITS \$ (000)	BENEFITS \$ (000)	COSTS \$ (000)	COSTS \$ (000)	COSTS \$ (000)	COSTS \$ (000)	BENEFITS \$ (000)	NET BENEFITS \$ (000)
2015	37	0	0	0	37	0	0	0	0	37	37
2016	112	0	0	0	112	0	0	0	0	112	141
2017	188	0	0	0	188	0	0	0	0	188	305
2018	267	0	0	0	267	0	0	0	0	267	521
2019	310	0	0	0	310	0	0	0	0	310	755
2020	315	0	0	0	315	0	0	0	0	315	976
2021	319	0	0	0	319	0	0	0	0	319	1,185
2022	324	0	0	0	324	0	0	0	0	324	1,382
2023	328	0	0	0	328	0	0	0	0	328	1,568
2024	333	0	0	0	333	0	0	0	0	333	1,744
2025	337	0	0	0	337	0	0	0	0	337	1,911
2026	341	0	0	0	341	0	0	0	0	341	2,067
2027	345	0	0	0	345	0	0	0	0	345	2,215
2028	349	0	0	0	349	0	0	0	0	349	2,354
2029	354	0	0	0	354	0	0	0	0	354	2,485
2030	359	0	0	0	359	0	0	0	0	359	2,609
2031	364	0	0	0	364	0	0	0	0	364	2,726
2032	369	0	0	0	369	0	0	0	0	369	2,837
2033	375	0	0	0	375	0	0	0	0	375	2,942
2034	381	0	0	0	381	0	0	0	0	381	3,041
2035	388	0	0	0	388	0	0	0	0	388	3,135
2036	398	0	0	0	398	0	0	0	0	398	3,225
2037	407	0	0	0	407	0	0	0	0	407	3,311
2038	418	0	0	0	418	0	0	0	0	418	3,393
2039	426	0	0	0	426	0	0	0	0	426	3,471
NOMINAL	8,147	0	0	0	8,147	0	0	0	0	8,147	
NPV:	3,471	0	0	0	3,471	0	0	0	0	3,471	
In service year of gen unit: 2019											
Discount rate: 0.0734											

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Res. Price Responsive Load Management (Energy Planner)									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT	AVOIDED T & D				NET BENEFITS TO ALL	CUMULATIVE DISCOUNTED NET	
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS		REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS		NET BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	554	0	7	0	560	5	0	0	0	5	(555)	(555)	
2016	0	582	0	20	0	603	14	0	0	0	14	(588)	(1103)	
2017	0	612	0	34	0	646	21	0	0	0	21	(625)	(1646)	
2018	0	643	0	49	0	691	32	0	0	0	32	(659)	(2178)	
2019	0	66	0	56	0	122	1,750	0	0	0	1,750	1,628	(952)	
2020	0	68	0	57	0	124	1,715	0	0	0	1,715	1,590	164	
2021	0	69	0	57	0	126	1,686	0	0	0	1,686	1,559	1183	
2022	0	71	0	58	0	129	1,660	0	0	0	1,660	1,532	2116	
2023	0	73	0	58	0	131	1,633	0	0	0	1,633	1,502	2968	
2024	0	74	0	59	0	133	1,608	0	0	0	1,608	1,475	3748	
2025	0	76	0	60	0	136	1,600	0	0	0	1,600	1,464	4469	
2026	0	78	0	60	0	138	1,598	0	0	0	1,598	1,460	5139	
2027	0	80	0	61	0	141	1,599	0	0	0	1,599	1,458	5762	
2028	0	82	0	61	0	143	1,600	0	0	0	1,600	1,457	6343	
2029	0	84	0	62	0	146	1,594	0	0	0	1,594	1,448	6880	
2030	0	86	0	63	0	148	1,598	0	0	0	1,598	1,450	7381	
2031	0	88	0	63	0	151	1,601	0	0	0	1,601	1,450	7848	
2032	0	90	0	64	0	154	1,599	0	0	0	1,599	1,445	8281	
2033	0	92	0	65	0	157	1,597	0	0	0	1,597	1,440	8684	
2034	0	94	0	65	0	159	1,607	0	0	0	1,607	1,447	9061	
2035	0	96	0	66	0	162	1,614	0	0	0	1,614	1,452	9413	
2036	0	99	0	67	0	165	1,600	0	0	0	1,600	1,435	9737	
2037	0	101	0	67	0	168	1,609	0	0	0	1,609	1,441	10040	
2038	0	104	0	68	0	171	1,590	0	0	0	1,590	1,419	10318	
2039	0	106	0	69	0	175	1,612	0	0	0	1,612	1,438	10581	
NOMINAL	0	4,164	0	1,416	0	5,581	34,144	0	0	0	34,144	28,563		
NPV:	0	2,825	0	612	0	3,437	14,018	0	0	0	14,018	10,581		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				4.08					

Program: Residential Wall Insulation

Program Start Date: March 2008

Program Description

The Residential Wall Insulation Program is designed to encourage customers to make cost-effective improvements to existing residences. The goal is to offer customer rebates for installing wall insulation to help reduce their energy consumption while reducing Tampa Electric's weather sensitive peak demand. Wall insulation is designed to reduce demand and energy by decreasing the load on residential air conditioning and heating equipment. Qualifying residential structures are eligible for a rebate based upon the total square footage of insulation installed in exterior walls adjacent to conditioned spaces. Customers will receive a certificate that is used as partial payment for the wall insulation installed.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Savings

Savings were determined using historical participation characteristics of residences and utilizing DOE2 building simulations for insulation changes. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.104 kW
Winter Demand:	0.226 kW
Annual Energy:	399 kWh

Program Costs

Rebate: \$0.11 per square foot of installed qualifying insulation.

The estimated administrative cost per participant is \$51.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL WALL INSULATION

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	630,778	28	0.004%	28
2016	640,735	630,750	28	0.009%	56
2017	650,702	630,722	28	0.013%	84
2018	660,594	630,694	28	0.018%	112
2019	670,381	630,666	28	0.022%	140
2020	680,041	630,638	28	0.027%	168
2021	689,544	630,610	28	0.031%	196
2022	698,908	630,582	28	0.036%	224
2023	708,128	630,554	28	0.040%	252
2024	717,339	630,526	28	0.044%	280

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL WALL INSULATION

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	399	0.226	0.104	0.011	0.006	0.003
2016	399	0.226	0.104	0.022	0.013	0.006
2017	399	0.226	0.104	0.034	0.019	0.009
2018	399	0.226	0.104	0.045	0.025	0.012
2019	399	0.226	0.104	0.056	0.032	0.015
2020	399	0.226	0.104	0.067	0.038	0.017
2021	399	0.226	0.104	0.078	0.044	0.020
2022	399	0.226	0.104	0.089	0.051	0.023
2023	399	0.226	0.104	0.101	0.057	0.026
2024	399	0.226	0.104	0.112	0.063	0.029

PROGRAM NAME: RESIDENTIAL WALL INSULATION

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	423	0.241	0.111	0.012	0.007	0.003
2016	423	0.241	0.111	0.024	0.013	0.006
2017	423	0.241	0.111	0.036	0.020	0.009
2018	423	0.241	0.111	0.047	0.027	0.012
2019	423	0.241	0.111	0.059	0.034	0.016
2020	423	0.241	0.111	0.071	0.040	0.019
2021	423	0.241	0.111	0.083	0.047	0.022
2022	423	0.241	0.111	0.095	0.054	0.025
2023	423	0.241	0.111	0.107	0.061	0.028
2024	423	0.241	0.111	0.118	0.067	0.031

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Residential Wall Insulation				PAGE 1 OF 1	
				RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.226	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.158	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	423	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN. TRAN. & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	399	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	20	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	51.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	352.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	1.11	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	24.89	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	155.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	1.02	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Residential Wall Insulation									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE DISCOUNTED
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				NET
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
						BENEFITS	BENEFITS					
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	10	0	11	0	0	0	0	0	(11)	(11)
2016	0	1	10	0	12	0	1	1	1	0	(10)	(21)
2017	0	1	10	0	12	0	1	1	0	2	(10)	(30)
2018	0	2	11	0	12	0	1	1	0	2	(10)	(38)
2019	0	0	0	0	0	2	1	2	0	4	4	(35)
2020	0	0	0	0	0	2	1	2	0	4	4	(32)
2021	0	0	0	0	0	2	1	2	0	5	5	(29)
2022	0	0	0	0	0	2	1	2	0	5	5	(26)
2023	0	0	0	0	0	2	1	2	0	5	5	(23)
2024	0	0	0	0	0	2	1	3	0	5	5	(20)
2025	0	0	0	0	0	2	1	3	0	6	6	(17)
2026	0	0	0	0	0	2	1	3	0	6	6	(14)
2027	0	0	0	0	0	3	1	3	0	6	6	(12)
2028	0	0	0	0	0	3	1	3	0	6	6	(9)
2029	0	0	0	0	0	3	1	3	0	7	7	(7)
2030	0	0	0	0	0	3	1	3	0	7	7	(4)
2031	0	0	0	0	0	3	1	4	0	7	7	(2)
2032	0	0	0	0	0	3	1	4	0	8	8	0
2033	0	0	0	0	0	3	1	4	0	8	8	3
2034	0	0	0	0	0	3	1	4	0	8	8	5
NOMINAL	0	6	41	0	47	41	12	49	0	103	56	
NPV:	0	5	37	0	42	18	6	23	0	47	5	
Discount Rate	0.0734		Benefit/Cost Ratio - [col (11)/col (6)]:				1.11					

				PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
				PROGRAM: Residential Wall Insulation								Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	SAVINGS											
	IN					CUSTOMER	CUSTOMER					CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET		DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS		NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	1	0	4	0	5	10	0	0	10	(5)		(5)
2016	2	0	4	0	6	10	0	0	10	(4)		(9)
2017	3	0	4	0	7	10	0	0	10	(3)		(12)
2018	4	0	4	0	8	11	0	0	11	(2)		(14)
2019	5	0	0	0	5	0	0	0	0	5		(10)
2020	5	0	0	0	5	0	0	0	0	5		(7)
2021	5	0	0	0	5	0	0	0	0	5		(4)
2022	5	0	0	0	5	0	0	0	0	5		(1)
2023	5	0	0	0	5	0	0	0	0	5		2
2024	5	0	0	0	5	0	0	0	0	5		5
2025	5	0	0	0	5	0	0	0	0	5		7
2026	5	0	0	0	5	0	0	0	0	5		10
2027	5	0	0	0	5	0	0	0	0	5		12
2028	5	0	0	0	5	0	0	0	0	5		14
2029	6	0	0	0	6	0	0	0	0	6		16
2030	6	0	0	0	6	0	0	0	0	6		18
2031	6	0	0	0	6	0	0	0	0	6		20
2032	6	0	0	0	6	0	0	0	0	6		22
2033	6	0	0	0	6	0	0	0	0	6		23
2034	6	0	0	0	6	0	0	0	0	6		25
NOMINAL	94	0	17	0	111	41	0	0	41	70		
NPV:	46	0	16	0	62	37	0	0	37	25		
In service year of gen unit:			2019		1.676678							
Discount rate:			0.0734									

						RATE IMPACT TEST							PSC FORM CE 2.5
						PROGRAM: Residential Wall Insulation							Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED				NET	CUMULATIVE
	INCREASED	UTILITY					UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS						CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	4	0	0	6	0	0	0	0	0	(6)	(6)
2016	0	1	4	1	0	7	1	1	0	0	1	(6)	(11)
2017	0	1	4	2	0	7	1	1	0	0	2	(6)	(16)
2018	0	2	4	2	0	8	1	1	0	0	2	(6)	(21)
2019	0	0	0	3	0	3	4	1	0	0	4	2	(20)
2020	0	0	0	3	0	3	4	1	0	0	4	2	(19)
2021	0	0	0	3	0	3	4	1	0	0	5	2	(17)
2022	0	0	0	3	0	3	4	1	0	0	5	2	(16)
2023	0	0	0	3	0	3	4	1	0	0	5	2	(15)
2024	0	0	0	3	0	3	5	1	0	0	5	3	(13)
2025	0	0	0	3	0	3	5	1	0	0	6	3	(12)
2026	0	0	0	3	0	3	5	1	0	0	6	3	(10)
2027	0	0	0	3	0	3	5	1	0	0	6	3	(9)
2028	0	0	0	3	0	3	6	1	0	0	6	4	(8)
2029	0	0	0	3	0	3	6	1	0	0	7	4	(6)
2030	0	0	0	3	0	3	6	1	0	0	7	4	(5)
2031	0	0	0	3	0	3	7	1	0	0	7	4	(3)
2032	0	0	0	3	0	3	7	1	0	0	8	5	(2)
2033	0	0	0	3	0	3	7	1	0	0	8	5	(0)
2034	0	0	0	3	0	3	7	1	0	0	8	5	1
NOMINAL	0	6	17	50	0	73	90	12	0	0	103	29	
NPV:	0	5	16	25	0	46	41	6	0	0	47	1	
Discount rate:			0.0734			Benefit/Cost Ratio - [col (12)/col (7)]:			1.02				

Program: Residential Window Replacement

Program Start Date: March 2008

Program Description

The Residential Window Replacement Program is designed to encourage customers to make cost-effective improvements to existing residences. The goal is to offer customer rebates for replacing existing external windows with high performance windows that help reduce their energy consumption while reducing Tampa Electric's weather sensitive peak demand. High performance windows are designed to reduce demand and energy by decreasing the solar heat gain into a residence and in turn, decrease the load on residential air conditioning equipment. Qualifying residential structures are eligible for a rebate based upon the total square footage of exterior windows replaced.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using historical participation characteristics of residences and utilizing DOE2 building simulations for solar heat gain coefficient and U-factor changes. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.311 kW
Winter Demand:	0.212 kW
Annual Energy:	1,121 kWh

Program Costs

Rebate: \$2.20 per square foot of qualifying window replacement installed.

The estimated administrative cost per participant is \$45.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL WINDOW REPLACEMENT

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	621,873	500	0.1%	500
2016	640,735	621,373	500	0.2%	1,000
2017	650,702	620,873	500	0.2%	1,500
2018	660,594	620,373	500	0.3%	2,000
2019	670,381	619,873	500	0.4%	2,500
2020	680,041	619,373	500	0.5%	3,000
2021	689,544	618,873	500	0.6%	3,500
2022	698,908	618,373	500	0.6%	4,000
2023	708,128	617,873	500	0.7%	4,500
2024	717,339	617,373	500	0.8%	5,000

* Previous participation levels not included.

PROGRAM NAME: RESIDENTIAL WINDOW REPLACEMENT

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	1,121	0.212	0.311	0.561	0.106	0.156
2016	1,121	0.212	0.311	1.121	0.212	0.311
2017	1,121	0.212	0.311	1.682	0.318	0.467
2018	1,121	0.212	0.311	2.242	0.424	0.622
2019	1,121	0.212	0.311	2.803	0.530	0.778
2020	1,121	0.212	0.311	3.363	0.636	0.933
2021	1,121	0.212	0.311	3.924	0.742	1.089
2022	1,121	0.212	0.311	4.484	0.848	1.244
2023	1,121	0.212	0.311	5.045	0.954	1.400
2024	1,121	0.212	0.311	5.605	1.060	1.555

PROGRAM NAME: RESIDENTIAL WINDOW REPLACEMENT

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	1,188	0.226	0.332	0.594	0.113	0.166
2016	1,188	0.226	0.332	1.188	0.226	0.332
2017	1,188	0.226	0.332	1.782	0.339	0.497
2018	1,188	0.226	0.332	2.377	0.452	0.663
2019	1,188	0.226	0.332	2.971	0.565	0.829
2020	1,188	0.226	0.332	3.565	0.678	0.995
2021	1,188	0.226	0.332	4.159	0.791	1.160
2022	1,188	0.226	0.332	4.753	0.904	1.326
2023	1,188	0.226	0.332	5.347	1.017	1.492
2024	1,188	0.226	0.332	5.941	1.130	1.658

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Residential Window Replacement			PAGE 1 OF 1	
			RUN DATE:	February 26, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.311	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.310	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.3	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	1,188	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.6	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	1,121	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	40	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	45.00	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	660.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	5.578 CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	326.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	2.07
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	2,140.25
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	1.28

TOTAL RESOURCE COST TESTS												PSC FORM CE 2.3
PROGRAM: Residential Window Replacement												Page 1 of 1
												February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	PARTICIPANT PROGRAM COSTS	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT BENEFITS	AVOIDED T & D BENEFITS	PROGRAM FUEL SAVINGS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	23	330	0	353	0	0	12	0	12	(341)	(341)
2016	0	23	338	0	361	0	9	33	0	42	(319)	(637)
2017	0	24	346	0	370	0	10	50	0	59	(311)	(907)
2018	0	24	354	0	378	0	10	75	0	85	(294)	(1,144)
2019	0	0	0	0	0	101	18	90	0	209	209	(987)
2020	0	0	0	0	0	99	18	97	0	213	213	(837)
2021	0	0	0	0	0	97	17	105	0	219	219	(694)
2022	0	0	0	0	0	95	17	111	0	224	224	(558)
2023	0	0	0	0	0	94	17	117	0	228	228	(428)
2024	0	0	0	0	0	92	17	126	0	235	235	(304)
2025	0	0	0	0	0	91	17	135	0	244	244	(184)
2026	0	0	0	0	0	91	17	139	0	248	248	(70)
2027	0	0	0	0	0	91	17	144	0	253	253	38
2028	0	0	0	0	0	91	17	150	0	258	258	141
2029	0	0	0	0	0	90	18	161	0	269	269	241
2030	0	0	0	0	0	90	18	166	0	274	274	336
2031	0	0	0	0	0	90	18	176	0	284	284	427
2032	0	0	0	0	0	90	18	186	0	294	294	515
2033	0	0	0	0	0	89	18	196	0	304	304	600
2034	0	0	0	0	0	90	18	200	0	307	307	680
2035	0	0	0	0	0	90	18	219	0	327	327	759
2036	0	0	0	0	0	89	18	231	0	338	338	836
2037	0	0	0	0	0	89	19	249	0	357	357	911
2038	0	0	0	0	0	87	19	271	0	377	377	985
2039	0	0	0	0	0	88	19	289	0	396	396	1,057
2040	0	0	0	0	0	89	19	303	0	411	411	1,127
2041	0	0	0	0	0	88	6	161	0	256	256	1,168
2042	0	0	0	0	0	90	6	0	0	96	96	1,182
2043	0	0	0	0	0	183	6	0	0	189	189	1,208
2044	0	0	0	0	0	164	4	0	0	168	168	1,229
2045	0	0	0	0	0	173	4	0	0	176	176	1,250
2046	0	0	0	0	0	181	4	0	0	185	185	1,271
2047	0	0	0	0	0	190	4	0	0	194	194	1,291
2048	0	0	0	0	0	199	4	0	0	203	203	1,311
2049	0	0	0	0	0	209	4	0	0	213	213	1,330
2050	0	0	0	0	0	219	4	0	0	224	224	1,349
2051	0	0	0	0	0	230	4	0	0	235	235	1,367
2052	0	0	0	0	0	242	4	0	0	246	246	1,385
2053	0	0	0	0	0	254	4	0	0	258	258	1,402
2054	0	0	0	0	0	0	0	0 *		0	0	1,402
NOMINAL	0	93	1,368	0	1,462	4,437	479	4,194	0	9,111	7,649	
NPV:	0	84	1,232	0	1,316	1,052	185	1,481	0	2,718	1,402	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				2.07					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Residential Window Replacement											Page 1 of 1
											February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	27	0	163	0	190	330	0	0	330	(140)	(140)
2016	80	0	163	0	243	338	0	0	338	(94)	(228)
2017	135	0	163	0	298	346	0	0	346	(48)	(270)
2018	194	0	163	0	357	354	0	0	354	2	(268)
2019	227	0	0	0	227	0	0	0	0	227	(97)
2020	234	0	0	0	234	0	0	0	0	234	67
2021	238	0	0	0	238	0	0	0	0	238	222
2022	243	0	0	0	243	0	0	0	0	243	370
2023	249	0	0	0	249	0	0	0	0	249	511
2024	255	0	0	0	255	0	0	0	0	255	646
2025	260	0	0	0	260	0	0	0	0	260	774
2026	264	0	0	0	264	0	0	0	0	264	895
2027	267	0	0	0	267	0	0	0	0	267	1,009
2028	271	0	0	0	271	0	0	0	0	271	1,117
2029	278	0	0	0	278	0	0	0	0	278	1,220
2030	282	0	0	0	282	0	0	0	0	282	1,318
2031	288	0	0	0	288	0	0	0	0	288	1,411
2032	296	0	0	0	296	0	0	0	0	296	1,499
2033	304	0	0	0	304	0	0	0	0	304	1,584
2034	311	0	0	0	311	0	0	0	0	311	1,665
2035	323	0	0	0	323	0	0	0	0	323	1,744
2036	340	0	0	0	340	0	0	0	0	340	1,820
2037	354	0	0	0	354	0	0	0	0	354	1,895
2038	374	0	0	0	374	0	0	0	0	374	1,968
2039	387	0	0	0	387	0	0	0	0	387	2,039
2040	401	0	0	0	401	0	0	0	0	401	2,107
2041	210	0	0	0	210	0	0	0	0	210	2,140
2042	0	0	0	0	0	0	0	0	0	0	2,140
2043	0	0	0	0	0	0	0	0	0	0	2,140
2044	0	0	0	0	0	0	0	0	0	0	2,140
2045	0	0	0	0	0	0	0	0	0	0	2,140
2046	0	0	0	0	0	0	0	0	0	0	2,140
2047	0	0	0	0	0	0	0	0	0	0	2,140
2048	0	0	0	0	0	0	0	0	0	0	2,140
2049	0	0	0	0	0	0	0	0	0	0	2,140
2050	0	0	0	0	0	0	0	0	0	0	2,140
2051	0	0	0	0	0	0	0	0	0	0	2,140
2052	0	0	0	0	0	0	0	0	0	0	2,140
2053	0	0	0	0	0	0	0	0	0	0	2,140
2054	0	0	0	0	0	0	0	0	0	0	2,140
NOMINAL	7,090	0	652	0	7,742	1,368	0	0	1,368	6,373	
NPV:	2,784	0	588	0	3,372	1,232	0	0	1,232	2,140	
In service year of gen unit:			2019		2.737727						
Discount rate:			0.0734								

RATE IMPACT TEST													PSC FORM CE 2.5
PROGRAM: Residential Window Replacement													Page 1 of 1
													February 26, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	INCREASED	UTILITY					AVOIDED	AVOIDED				NET	CUMULATIVE
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	GEN UNIT	T & D	REVENUE	OTHER	TOTAL	BENEFITS	DISCOUNTED
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	UNIT & FUEL	BENEFITS	GAINS	BENEFITS	BENEFITS	TO ALL	NET
							BENEFITS					CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	23	163	16	0	201	12	0	0	0	12	(189)	(189)
2016	0	23	163	47	0	233	33	9	0	0	42	(191)	(367)
2017	0	24	163	80	0	266	50	10	0	0	59	(207)	(547)
2018	0	24	163	113	0	300	75	10	0	0	85	(215)	(721)
2019	0	0	0	130	0	130	191	18	0	0	209	79	(662)
2020	0	0	0	131	0	131	196	18	0	0	213	82	(604)
2021	0	0	0	133	0	133	202	17	0	0	219	86	(548)
2022	0	0	0	134	0	134	207	17	0	0	224	90	(493)
2023	0	0	0	135	0	135	210	17	0	0	228	92	(440)
2024	0	0	0	137	0	137	218	17	0	0	235	99	(388)
2025	0	0	0	138	0	138	227	17	0	0	244	106	(336)
2026	0	0	0	140	0	140	230	17	0	0	248	108	(286)
2027	0	0	0	141	0	141	235	17	0	0	253	112	(239)
2028	0	0	0	142	0	142	241	17	0	0	258	116	(192)
2029	0	0	0	144	0	144	251	18	0	0	269	125	(146)
2030	0	0	0	145	0	145	257	18	0	0	274	129	(101)
2031	0	0	0	147	0	147	267	18	0	0	284	138	(57)
2032	0	0	0	148	0	148	276	18	0	0	294	146	(13)
2033	0	0	0	150	0	150	286	18	0	0	304	154	30
2034	0	0	0	151	0	151	289	18	0	0	307	156	71
2035	0	0	0	153	0	153	308	18	0	0	327	174	113
2036	0	0	0	154	0	154	319	18	0	0	338	184	154
2037	0	0	0	156	0	156	338	19	0	0	357	201	197
2038	0	0	0	157	0	157	358	19	0	0	377	220	240
2039	0	0	0	159	0	159	377	19	0	0	396	238	283
2040	0	0	0	160	0	160	392	19	0	0	411	251	326
2041	0	0	0	81	0	81	250	6	0	0	256	175	353
2042	0	0	0	0	0	0	90	6	0	0	96	96	368
2043	0	0	0	0	0	0	183	6	0	0	189	189	394
2044	0	0	0	0	0	0	164	4	0	0	168	168	415
2045	0	0	0	0	0	0	173	4	0	0	176	176	436
2046	0	0	0	0	0	0	181	4	0	0	185	185	457
2047	0	0	0	0	0	0	190	4	0	0	194	194	477
2048	0	0	0	0	0	0	199	4	0	0	203	203	496
2049	0	0	0	0	0	0	209	4	0	0	213	213	516
2050	0	0	0	0	0	0	219	4	0	0	224	224	534
2051	0	0	0	0	0	0	230	4	0	0	235	235	553
2052	0	0	0	0	0	0	242	4	0	0	246	246	571
2053	0	0	0	0	0	0	254	4	0	0	258	258	588
2054	0	0	0	0	0	0	0	0	0	0	0	0	588
NOMINAL	0	93	652	3,521	0	4,266	8,632	479	0	0	9,111	4,844	
NPV:	0	84	588	1,458	0	2,130	2,533	185	0	0	2,718	588	
Discount rate:			0.0734			Benefit/Cost Ratio - [col (12)/col (7)]:				1.28			

Program: Commercial/Industrial Audit (Free)

Program Start Date: July 1983

Program Description

A conservation program designed to reduce demand and energy consumption of commercial/industrial facilities by increasing customer awareness of the energy use in their facilities. The savings are dependent upon the customer's implementation of conservation measures and practices recommended.

The audit is conducted by a trained commercial energy analyst who will perform at a minimum the following:

1. Identify, note and recommend only those conservation measures and practices that apply to the specific commercial or industrial facility.
2. Encourage customer and organization participation in available conservation programs in which the specific commercial or industrial facility will benefit.
3. Energy usage profiling and benchmarking showing the historical energy usage and forecasted usage with no changes.
4. Identify and communicate to the customer identified no-cost, low-cost and capital cost conservation measures and practices including those that have less than a two-year payback.

Recommendations are tailored to the specific commercial or industrial facility based upon the replacement of less efficient equipment and systems or modifications to operations to enhance the customer's overall efficiency. Recommendations are primarily standardized and encourage the customer to implement measures that, if cost-effective, move the customer beyond the efficiency level typically installed in the marketplace.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

The kWh billing histories of customers who received these audits were examined in comparison to those of matched customers without audits. Customers included in the analysis did not participate in any other DSM programs. Consumption before and after the audit was compared for both sets of customers to estimate the impact associated with the audit. Based on this load research data, the analysis yielded the following expected savings per customer participant:

Summer Demand:	0.093 kW
Winter Demand:	0.094 kW
Annual Energy:	817 kWh

Program Costs

Based on historical costs, the administrative cost per audit is estimated to be \$293.00. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL/INDUSTRIAL AUDIT (FREE)					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,300	700	0.9%	700
2016	76,350	76,350	700	1.8%	1,400
2017	77,348	77,348	750	2.8%	2,150
2018	78,317	78,317	800	3.8%	2,950
2019	79,282	79,282	800	4.7%	3,750
2020	80,255	80,255	800	5.7%	4,550
2021	81,224	81,224	800	6.6%	5,350
2022	82,178	82,178	800	7.5%	6,150
2023	83,120	83,120	800	8.4%	6,950
2024	84,014	84,014	800	9.2%	7,750

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL/INDUSTRIAL AUDIT (FREE)

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	817	0.094	0.093	0.572	0.066	0.065
2016	817	0.094	0.093	1.144	0.132	0.130
2017	817	0.094	0.093	1.757	0.202	0.200
2018	817	0.094	0.093	2.410	0.277	0.274
2019	817	0.094	0.093	3.064	0.353	0.349
2020	817	0.094	0.093	3.717	0.428	0.423
2021	817	0.094	0.093	4.371	0.503	0.498
2022	817	0.094	0.093	5.025	0.578	0.572
2023	817	0.094	0.093	5.678	0.653	0.646
2024	817	0.094	0.093	6.332	0.729	0.721

PROGRAM NAME: COMMERCIAL/INDUSTRIAL AUDIT (FREE)						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	864	0.100	0.099	0.605	0.070	0.069
2016	864	0.100	0.099	1.210	0.140	0.139
2017	864	0.100	0.099	1.858	0.215	0.213
2018	864	0.100	0.099	2.550	0.295	0.292
2019	864	0.100	0.099	3.241	0.375	0.371
2020	864	0.100	0.099	3.933	0.456	0.451
2021	864	0.100	0.099	4.624	0.536	0.530
2022	864	0.100	0.099	5.316	0.616	0.609
2023	864	0.100	0.099	6.007	0.696	0.688
2024	864	0.100	0.099	6.699	0.776	0.768

Program: Comprehensive Commercial/Industrial Audit (Paid)

Program Start Date: May 1981

Program Description

A conservation program designed to reduce demand and energy consumption of commercial/industrial facilities by increasing customer awareness of the energy use in their facilities. The paid audit will involve monitoring specific equipment within a customer's facility to determine its electric usage with respect to the volume of use and time of operation. Based on the results, Tampa Electric will recommend conservation measure or practice changes to save energy and/or demand within the facility. The savings are dependent upon the customer's implementation of conservation measures and practices recommended.

The audit is conducted by a trained commercial energy analyst who will perform the following at a minimum:

1. Identify, note and recommend only those conservation measures and practices that apply to the specific commercial or industrial facility.
2. Encourage customer and organization participation in available conservation programs in which the specific commercial or industrial facility will benefit.
3. Energy usage profiling and benchmarking showing the historical energy usage and forecasted usage with no changes.
4. Set up energy and demand monitoring equipment on requested equipment.
5. Identify and communicate to the customer identified no-cost, low-cost and capital cost conservation measures and practices including those that have less than a two-year payback.
6. Provide a measurement and verification report showing the current usage and identifying the potential for energy and demand savings for the recommended conservation measures or practices recommended.

Recommendations are tailored to the specific commercial or industrial facility based upon the replacement of less efficient equipment and systems or modifications to operations to enhance the customer's overall efficiency. Recommendations are primarily standardized and encourage the customer to implement measures that, if cost-effective, move the customer beyond the efficiency level typically installed in the marketplace.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings for the Comprehensive Commercial/Industrial Audit are assumed to be the same as the Free Commercial/Industrial Audit due to the limited number of paid audits completed since the last evaluation.

Summer Demand:	0.093 kW
Winter Demand:	0.094 kW
Annual Energy:	817 kWh

Program Costs

Based on experience, the administrative cost per audit is estimated to be \$806.00. There are no rebates or incentives for this program.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMPREHENSIVE COMMERCIAL/INDUSTRIAL AUDIT (PAID)					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	75,300	75,300	4	0.01%	4
2016	76,350	76,350	4	0.01%	8
2017	77,348	77,348	4	0.02%	12
2018	78,317	78,317	4	0.02%	16
2019	79,282	79,282	4	0.03%	20
2020	80,255	80,255	4	0.03%	24
2021	81,224	81,224	4	0.03%	28
2022	82,178	82,178	4	0.04%	32
2023	83,120	83,120	4	0.04%	36
2024	84,014	84,014	4	0.05%	40

* Previous participation levels not included.

PROGRAM NAME: COMPREHENSIVE COMMERCIAL/INDUSTRIAL AUDIT (PAID)						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	817	0.094	0.093	0.003	0.000	0.000
2016	817	0.094	0.093	0.007	0.001	0.001
2017	817	0.094	0.093	0.010	0.001	0.001
2018	817	0.094	0.093	0.013	0.002	0.001
2019	817	0.094	0.093	0.016	0.002	0.002
2020	817	0.094	0.093	0.020	0.002	0.002
2021	817	0.094	0.093	0.023	0.003	0.003
2022	817	0.094	0.093	0.026	0.003	0.003
2023	817	0.094	0.093	0.029	0.003	0.003
2024	817	0.094	0.093	0.033	0.004	0.004

PROGRAM NAME: COMPREHENSIVE COMMERCIAL/INDUSTRIAL AUDIT (PAID)						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	864	0.100	0.099	0.003	0.000	0.000
2016	864	0.100	0.099	0.007	0.001	0.001
2017	864	0.100	0.099	0.010	0.001	0.001
2018	864	0.100	0.099	0.014	0.002	0.002
2019	864	0.100	0.099	0.017	0.002	0.002
2020	864	0.100	0.099	0.021	0.002	0.002
2021	864	0.100	0.099	0.024	0.003	0.003
2022	864	0.100	0.099	0.028	0.003	0.003
2023	864	0.100	0.099	0.031	0.004	0.004
2024	864	0.100	0.099	0.035	0.004	0.004

Program: Commercial Ceiling Insulation

Program Start Date: March 2008

Program Description

The Commercial Ceiling Insulation Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing ceiling insulation to help reduce their energy consumption and demand while reducing Tampa Electric's weather sensitive peak demand. Ceiling insulation is designed to reduce demand and energy by decreasing the load on commercial/industrial air conditioning and heating equipment. Qualifying structures are eligible for a rebate based upon the total square footage of insulation installed over conditioned space. Certificates for participation will be issued through energy audits or by direct evaluation of the existing building envelope.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	1.480 kW
Winter Demand:	0.020 kW
Annual Energy:	7,124 kWh

Program Costs

Rebate: \$0.15 per square foot of installed qualifying insulation.

The estimated administrative cost per participant is \$204.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL CEILING INSULATION					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	74,999	50	0.0%	50
2016	76,350	75,999	50	0.0%	100
2017	77,348	76,947	50	0.2%	150
2018	78,317	77,866	50	0.3%	200
2019	79,282	78,781	50	0.3%	250
2020	80,255	79,704	50	0.4%	300
2021	81,224	80,623	50	0.4%	350
2022	82,178	81,527	50	0.5%	400
2023	83,120	82,419	50	0.5%	450
2024	84,014	83,263	50	0.6%	500
* Previous participation levels not included.					

PROGRAM NAME: COMMERCIAL CEILING INSULATION						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	7,124	0.020	1.480	0.356	0.001	0.074
2016	7,124	0.020	1.480	0.712	0.002	0.148
2017	7,124	0.020	1.480	1.069	0.003	0.222
2018	7,124	0.020	1.480	1.425	0.004	0.296
2019	7,124	0.020	1.480	1.781	0.005	0.370
2020	7,124	0.020	1.480	2.137	0.006	0.444
2021	7,124	0.020	1.480	2.493	0.007	0.518
2022	7,124	0.020	1.480	2.850	0.008	0.592
2023	7,124	0.020	1.480	3.206	0.009	0.666
2024	7,124	0.020	1.480	3.562	0.010	0.740

PROGRAM NAME: COMMERCIAL CEILING INSULATION						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	7,537	0.021	1.576	0.377	0.001	0.079
2016	7,537	0.021	1.576	0.754	0.002	0.158
2017	7,537	0.021	1.576	1.131	0.003	0.236
2018	7,537	0.021	1.576	1.507	0.004	0.315
2019	7,537	0.021	1.576	1.884	0.005	0.394
2020	7,537	0.021	1.576	2.261	0.006	0.473
2021	7,537	0.021	1.576	2.638	0.007	0.552
2022	7,537	0.021	1.576	3.015	0.009	0.630
2023	7,537	0.021	1.576	3.392	0.010	0.709
2024	7,537	0.021	1.576	3.769	0.011	0.788

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Ceiling Insulation				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	1.480	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	1.131	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	7,515	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	7,124	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	20	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	204.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	1395.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	675.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	3.43	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	1,245.99	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.17	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Commercial Ceiling Insulation										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	10	70	0	80	0	0	8	0	8	(72)	(72)	
2016	0	10	71	0	82	0	6	21	0	27	(55)	(123)	
2017	0	11	73	0	84	0	6	31	0	38	(46)	(164)	
2018	0	11	75	0	86	0	6	47	0	54	(32)	(189)	
2019	0	0	0	0	0	23	7	57	0	87	87	(124)	
2020	0	0	0	0	0	24	7	61	0	92	92	(59)	
2021	0	0	0	0	0	25	7	66	0	98	98	5	
2022	0	0	0	0	0	26	7	70	0	104	104	68	
2023	0	0	0	0	0	27	7	74	0	108	108	130	
2024	0	0	0	0	0	28	7	80	0	115	115	191	
2025	0	0	0	0	0	29	8	86	0	123	123	251	
2026	0	0	0	0	0	31	8	88	0	127	127	309	
2027	0	0	0	0	0	32	8	91	0	132	132	366	
2028	0	0	0	0	0	34	8	95	0	137	137	420	
2029	0	0	0	0	0	35	9	102	0	146	146	475	
2030	0	0	0	0	0	37	9	105	0	151	151	527	
2031	0	0	0	0	0	39	9	112	0	159	159	578	
2032	0	0	0	0	0	40	9	118	0	167	167	628	
2033	0	0	0	0	0	42	9	124	0	176	176	677	
2034	0	0	0	0	0	44	10	126	0	180	180	724	
NOMINAL	0	42	289	0	331	518	147	1,564	0	2,229	1,897		
NPV:	0	38	260	0	298	227	74	722	0	1,023	724		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					3.43					

PARTICIPANT COSTS AND BENEFITS												PSC FORM CE 2.4
PROGRAM: Commercial Ceiling Insulation												Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
SAVINGS												
IN												
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	CUSTOMER	CUSTOMER					CUMULATIVE
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	EQUIPMENT	O & M	OTHER	TOTAL	NET		DISCOUNTED
YEAR	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	NET BENEFITS
2015	16	0	34	0	50	70	0	0	70	(20)		(20)
2016	48	0	34	0	82	71	0	0	71	10		(10)
2017	80	0	34	0	114	73	0	0	73	41		25
2018	116	0	34	0	149	75	0	0	75	74		85
2019	136	0	0	0	136	0	0	0	0	136		188
2020	140	0	0	0	140	0	0	0	0	140		286
2021	142	0	0	0	142	0	0	0	0	142		379
2022	145	0	0	0	145	0	0	0	0	145		467
2023	149	0	0	0	149	0	0	0	0	149		552
2024	153	0	0	0	153	0	0	0	0	153		633
2025	156	0	0	0	156	0	0	0	0	156		710
2026	158	0	0	0	158	0	0	0	0	158		782
2027	160	0	0	0	160	0	0	0	0	160		851
2028	163	0	0	0	163	0	0	0	0	163		916
2029	167	0	0	0	167	0	0	0	0	167		978
2030	170	0	0	0	170	0	0	0	0	170		1,037
2031	173	0	0	0	173	0	0	0	0	173		1,092
2032	178	0	0	0	178	0	0	0	0	178		1,146
2033	183	0	0	0	183	0	0	0	0	183		1,197
2034	188	0	0	0	188	0	0	0	0	188		1,246
NOMINAL	2,823	0	135	0	2,958	289	0	0	289	2,669		
NPV:	1,385	0	122	0	1,506	260	0	0	260	1,246		
In service year of gen unit:												
Discount rate:												

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Commercial Ceiling Insulation								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED				NET BENEFITS	CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	TO ALL CUSTOMERS	NET BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	10	34	9	0	53	8	0	0	0	8	(45)	(45)
2016	0	10	34	27	0	71	21	6	0	0	27	(44)	(86)
2017	0	11	34	45	0	90	31	6	0	0	38	(52)	(132)
2018	0	11	34	64	0	109	47	6	0	0	54	(55)	(176)
2019	0	0	0	74	0	74	80	7	0	0	87	13	(167)
2020	0	0	0	75	0	75	85	7	0	0	92	17	(154)
2021	0	0	0	76	0	76	91	7	0	0	98	23	(140)
2022	0	0	0	76	0	76	97	7	0	0	104	27	(123)
2023	0	0	0	77	0	77	101	7	0	0	108	31	(105)
2024	0	0	0	78	0	78	108	7	0	0	115	38	(86)
2025	0	0	0	79	0	79	115	8	0	0	123	44	(64)
2026	0	0	0	79	0	79	119	8	0	0	127	48	(42)
2027	0	0	0	80	0	80	124	8	0	0	132	52	(20)
2028	0	0	0	81	0	81	129	8	0	0	137	56	3
2029	0	0	0	82	0	82	137	9	0	0	146	64	26
2030	0	0	0	83	0	83	142	9	0	0	151	69	50
2031	0	0	0	84	0	84	150	9	0	0	159	76	74
2032	0	0	0	84	0	84	158	9	0	0	167	83	99
2033	0	0	0	85	0	85	166	9	0	0	176	90	125
2034	0	0	0	86	0	86	170	10	0	0	180	93	149
NOMINAL	0	42	135	1,425	0	1,602	2,082	147	0	0	2,229	627	
NPV:	0	38	122	714	0	874	948	74	0	0	1,023	149	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.17				

Program: Commercial Chiller

Program Start Date: March 2008

Program Description

The Commercial Chiller Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities and processes. The goal is to offer customer rebates for installing high efficiency electric water-cooled chillers and electric air-cooled chillers that exceed Florida's Building Code and minimum product manufacturing standards in commercial/industrial buildings or processes to help reduce their energy consumption and demand while reducing Tampa Electric's weather sensitive peak demand. High efficiency chillers reduce demand and energy by decreasing the load on air conditioning and heating equipment or process cooling equipment during weather sensitive peak demand times.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	21.370 kW
Winter Demand:	16.620 kW
Annual Energy:	50,046 kWh

Program Costs

Rebate: \$146 per kW reduced over the baseline.

The estimated administrative cost per participant is \$200.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL CHILLER					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	3,765	5	0.0%	5
2016	76,350	3,813	5	0.0%	10
2017	77,348	3,857	5	0.4%	15
2018	78,317	3,901	5	0.5%	20
2019	79,282	3,944	5	0.6%	25
2020	80,255	3,988	5	0.8%	30
2021	81,224	4,031	5	0.9%	35
2022	82,178	4,074	5	1.0%	40
2023	83,120	4,116	5	1.1%	45
2024	84,014	4,156	5	1.2%	50

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL CHILLER						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	50,046	16.620	21.370	0.250	0.083	0.107
2016	50,046	16.620	21.370	0.500	0.166	0.214
2017	50,046	16.620	21.370	0.751	0.249	0.321
2018	50,046	16.620	21.370	1.001	0.332	0.427
2019	50,046	16.620	21.370	1.251	0.416	0.534
2020	50,046	16.620	21.370	1.501	0.499	0.641
2021	50,046	16.620	21.370	1.752	0.582	0.748
2022	50,046	16.620	21.370	2.002	0.665	0.855
2023	50,046	16.620	21.370	2.252	0.748	0.962
2024	50,046	16.620	21.370	2.502	0.831	1.069

PROGRAM NAME: COMMERCIAL CHILLER

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	52,949	17.700	22.759	0.265	0.089	0.114
2016	52,949	17.700	22.759	0.529	0.177	0.228
2017	52,949	17.700	22.759	0.794	0.266	0.341
2018	52,949	17.700	22.759	1.059	0.354	0.455
2019	52,949	17.700	22.759	1.324	0.443	0.569
2020	52,949	17.700	22.759	1.588	0.531	0.683
2021	52,949	17.700	22.759	1.853	0.620	0.797
2022	52,949	17.700	22.759	2.118	0.708	0.910
2023	52,949	17.700	22.759	2.383	0.797	1.024
2024	52,949	17.700	22.759	2.647	0.885	1.138

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Chiller				PAGE 1 OF 1	
				RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	21.370	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	22.009	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	52.791	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN. TRAN. & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	50.046	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	20	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	200.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	33000.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	1.71	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	864.08	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	14016.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	1.05	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Commercial Chiller									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	PARTICIPANT PROGRAM COSTS	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT BENEFITS	AVOIDED T & D BENEFITS	FUEL SAVINGS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	165	0	166	0	0	5	0	5	(161)	(161)
2016	0	1	169	0	170	0	9	15	0	24	(146)	(297)
2017	0	1	173	0	174	0	10	22	0	32	(143)	(420)
2018	0	1	177	0	178	0	10	33	0	43	(135)	(530)
2019	0	0	0	0	0	45	10	40	0	95	95	(458)
2020	0	0	0	0	0	47	10	43	0	100	100	(387)
2021	0	0	0	0	0	49	11	46	0	106	106	(318)
2022	0	0	0	0	0	51	11	49	0	111	111	(251)
2023	0	0	0	0	0	53	11	52	0	116	116	(185)
2024	0	0	0	0	0	55	11	56	0	122	122	(120)
2025	0	0	0	0	0	57	12	60	0	129	129	(57)
2026	0	0	0	0	0	60	12	62	0	134	134	5
2027	0	0	0	0	0	63	12	64	0	140	140	65
2028	0	0	0	0	0	66	13	67	0	146	146	123
2029	0	0	0	0	0	69	13	72	0	154	154	180
2030	0	0	0	0	0	72	13	74	0	160	160	235
2031	0	0	0	0	0	75	14	78	0	167	167	289
2032	0	0	0	0	0	78	14	83	0	175	175	341
2033	0	0	0	0	0	81	14	87	0	183	183	392
2034	0	0	0	0	0	85	15	89	0	188	188	441
NOMINAL	0	4	684	0	688	1,008	224	1,099	0	2,330	1,642	
NPV:	0	4	616	0	620	441	113	507	0	1,061	441	
Discount Rate	0.0734		Benefit/Cost Ratio - [col (11)/col (6)]:				1.71					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Commercial Chiller											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SAVINGS											
IN											
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	CUSTOMER	CUSTOMER				CUMULATIVE
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	NET BENEFITS
2015	14	0	70	0	84	165	0	0	165	(81)	(81)
2016	43	0	70	0	113	169	0	0	169	(56)	(132)
2017	73	0	70	0	143	173	0	0	173	(30)	(159)
2018	104	0	70	0	174	177	0	0	177	(3)	(161)
2019	122	0	0	0	122	0	0	0	0	122	(69)
2020	125	0	0	0	125	0	0	0	0	125	18
2021	127	0	0	0	127	0	0	0	0	127	101
2022	129	0	0	0	129	0	0	0	0	129	180
2023	132	0	0	0	132	0	0	0	0	132	255
2024	135	0	0	0	135	0	0	0	0	135	327
2025	138	0	0	0	138	0	0	0	0	138	395
2026	139	0	0	0	139	0	0	0	0	139	459
2027	141	0	0	0	141	0	0	0	0	141	519
2028	143	0	0	0	143	0	0	0	0	143	576
2029	146	0	0	0	146	0	0	0	0	146	630
2030	149	0	0	0	149	0	0	0	0	149	682
2031	152	0	0	0	152	0	0	0	0	152	731
2032	155	0	0	0	155	0	0	0	0	155	777
2033	159	0	0	0	159	0	0	0	0	159	822
2034	163	0	0	0	163	0	0	0	0	163	864
NOMINAL	2,491	0	280	0	2,771	684	0	0	684	2,087	
NPV:	1,227	0	253	0	1,480	616	0	0	616	864	
In service year of gen unit:											
Discount rate:											

RATE IMPACT TEST													PSC FORM CE 2.5
PROGRAM: Commercial Chiller													Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED				NET BENEFITS	CUMULATIVE
	INCREASED	UTILITY	INCENTIVES	REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	DISCOUNTED
	SUPPLY	PROGRAM		LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	NET
	COSTS	COSTS											
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	70	9	0	81	5	0	0	0	5	(75)	(75)
2016	0	1	70	29	0	100	15	9	0	0	24	(76)	(146)
2017	0	1	70	48	0	119	22	10	0	0	32	(88)	(222)
2018	0	1	70	68	0	139	33	10	0	0	43	(96)	(299)
2019	0	0	0	78	0	78	85	10	0	0	95	17	(287)
2020	0	0	0	79	0	79	90	10	0	0	100	21	(272)
2021	0	0	0	80	0	80	95	11	0	0	106	26	(255)
2022	0	0	0	81	0	81	100	11	0	0	111	30	(237)
2023	0	0	0	82	0	82	105	11	0	0	116	34	(217)
2024	0	0	0	82	0	82	111	11	0	0	122	40	(196)
2025	0	0	0	83	0	83	117	12	0	0	129	46	(174)
2026	0	0	0	84	0	84	122	12	0	0	134	50	(151)
2027	0	0	0	85	0	85	127	12	0	0	140	55	(127)
2028	0	0	0	86	0	86	133	13	0	0	146	60	(104)
2029	0	0	0	87	0	87	141	13	0	0	154	67	(79)
2030	0	0	0	88	0	88	146	13	0	0	160	72	(54)
2031	0	0	0	88	0	88	154	14	0	0	167	79	(28)
2032	0	0	0	89	0	89	161	14	0	0	175	86	(3)
2033	0	0	0	90	0	90	169	14	0	0	183	93	23
2034	0	0	0	91	0	91	174	15	0	0	188	97	49
NOMINAL	0	4	280	1,509	0	1,793	2,107	224	0	0	2,330	537	
NPV:	0	4	253	756	0	1,012	948	113	0	0	1,061	49	
Discount rate:			0.0734	Benefit/Cost Ratio - [col (12)/col (7)]:					1.05				

Program: Cogeneration

Program Start Date: January 1981

Program Description

Tampa Electric's Cogeneration program is administered by a professional team experienced in working with cogenerators. The group manages functions related to coordination with Qualifying Facilities ("QFs") including negotiations, agreements and informational requests; functions related to governmental, regulatory and legislative bodies; research, development, data acquisition and analysis; economic evaluations of existing and proposed QFs as well as the preparation of Tampa Electric's Annual Twenty-Year Cogeneration Forecast.

The Cogeneration team leads Tampa Electric's involvement with prospective cogeneration projects that may be developed within the company's retail service area. This involvement includes developing and providing interconnection cost estimates, determining appropriate relaying schemes, establishing operation and maintenance procedures and negotiating purchase power and transmission service agreement when appropriate.

Program Activities

A detailed description of the activities conducted under the Cogeneration program is listed below.

- Plan, develop and assist in administering and implementing corporate and FPSC policies and regulations in areas related to cogeneration activities.
- Provide consultation, data and other specific information on a daily basis to cogeneration customers, consultants, industry executives, FPSC and other governmental agencies, developers, other utilities and various media publications regarding cogeneration policies, FPSC rules, avoided cost rates and other related criteria.
- Prepare testimony and represent Tampa Electric at hearings, rulemaking and workshop sessions, and specific tariff activities before the FPSC and other governmental agencies.
- Conduct research and development, data acquisition and economic analyses that provide reliable criteria upon which to evaluate the feasibility of cogeneration and small power production facilities.
- Prepare and issue monthly correspondence to cogeneration customers which includes a payment statement, hour-by-hour energy payment rates for preliminary and final energy payments, identification of hourly differences between preliminary and final energy payments and early capacity payment accrual accounts.
- Obtain appropriate initial and subsequent renewal Certificates of Insurance for each cogeneration customer interconnected with Tampa Electric and for each cogeneration customer under contract with the company, sufficient to cover the customer's liability with the company.
- Prepare monthly and quarterly reports of cogeneration activities, avoided costs, etc., for submittal to the FPSC.

- Review monthly O&M bills for a customer's substation and transmission interconnections with the company.
- Determine if each customer's monthly contract standby demand level remains appropriate, and when ratcheted, the new level does not exceed the customer's generator capacity.
- Direct communications and develop the negotiations and final contractual language for interconnection, operating and transmission service agreements with cogeneration and small power production facilities.
- Assist the company's engineering and maintenance personnel with cogeneration maintenance procedures and cost estimates.
- Coordinate all cogeneration-related activities with other company departments.
- Develop the company's forecast of annual sales to cogeneration customers.
- Serve as a resource for budgeting non-fuel revenues from cogeneration customers for transmission service transactions, O&M on interconnected facilities and standby service from the company.
- Prepare and distribute the company's Twenty-Year Cogeneration Forecast.

Program Costs

Program costs are estimated on an annual basis and are integral to the company's annual ECCR Projection Filings. Actual expenses are reported in the annual ECCR True-Up Filings and subject to FPSC audits.

Program: Conservation Value

Program Start Date: April 1991

Program Description

The Conservation Value Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. This rebate program is designed to recognize those investments in demand shifting or demand reduction measures that reduce Tampa Electric's peak demand. Measures funded in this program will not be covered under any other Tampa Electric commercial/industrial conservation programs. Candidates are identified through energy audits or their engineering consultants can submit proposals for funding which offer demand and energy reduction during weather sensitive peak periods helping reduce Tampa Electric's peak demand.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	185.140 kW
Winter Demand:	0.000 kW
Annual Energy:	19,244 kWh

Program Costs

Rebate: up to a maximum of \$200.00 per kW reduced over the baseline. The actual rebate will be based upon following the FPSC cost-effectiveness methodology for the specific project maintaining RIM and PCT values equal to or greater than 1.00.

The estimated administrative cost per participant is \$2,000.

Program Monitoring and Evaluation

The measures evaluated in this program are specific to each participant. Because of this, every Conservation Value participant is evaluated on a case by case basis, including verification of savings.

Customers and/or their consultants are responsible for justifying their demand and energy savings estimates. Tampa Electric will advise the customer of any special metering requirements when conservation measure(s) are submitted for review. If the company does require special metering, the customer will include such provision in the design of the measure. The company may choose to furnish and install metering equipment. The customer may also be requested to assist in data collection for complex measures.

PROGRAM NAME: CONSERVATION VALUE					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	3,765	2	0.1%	2
2016	76,350	3,818	2	0.1%	4
2017	77,348	3,867	2	0.2%	6
2018	78,317	3,916	2	0.2%	8
2019	79,282	3,964	2	0.3%	10
2020	80,255	4,013	2	0.3%	12
2021	81,224	4,061	2	0.3%	14
2022	82,178	4,109	2	0.4%	16
2023	83,120	4,156	2	0.4%	18
2024	84,014	4,201	2	0.5%	20

* Previous participation levels not included.

PROGRAM NAME: CONSERVATION VALUE						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	19,244	0.000	185.140	0.038	0.000	0.370
2016	19,244	0.000	185.140	0.077	0.000	0.741
2017	19,244	0.000	185.140	0.115	0.000	1.111
2018	19,244	0.000	185.140	0.154	0.000	1.481
2019	19,244	0.000	185.140	0.192	0.000	1.851
2020	19,244	0.000	185.140	0.231	0.000	2.222
2021	19,244	0.000	185.140	0.269	0.000	2.592
2022	19,244	0.000	185.140	0.308	0.000	2.962
2023	19,244	0.000	185.140	0.346	0.000	3.333
2024	19,244	0.000	185.140	0.385	0.000	3.703

PROGRAM NAME: CONSERVATION VALUE						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	20,360	0.000	197.174	0.041	0.000	0.394
2016	20,360	0.000	197.174	0.081	0.000	0.789
2017	20,360	0.000	197.174	0.122	0.000	1.183
2018	20,360	0.000	197.174	0.163	0.000	1.577
2019	20,360	0.000	197.174	0.204	0.000	1.972
2020	20,360	0.000	197.174	0.244	0.000	2.366
2021	20,360	0.000	197.174	0.285	0.000	2.760
2022	20,360	0.000	197.174	0.326	0.000	3.155
2023	20,360	0.000	197.174	0.366	0.000	3.549
2024	20,360	0.000	197.174	0.407	0.000	3.943

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Conservation Value				PAGE 1 OF 1	
				RUN DATE:	March 9, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	185.140	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	140.616	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	20.300	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	19.244	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	2000.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	110346.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.69	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	37028.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	2.31	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	915.81	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.16	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM	Commercial	Conservation	Value							Page 1 of 1
													March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET		NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS		BENEFITS
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	4	221	0	225	0	0	1	0	1	(224)	(224)	(224)
2016	0	4	226	0	230	0	21	2	0	23	(207)	(416)	(416)
2017	0	4	231	0	236	0	22	3	0	25	(211)	(599)	(599)
2018	0	4	237	0	241	0	22	5	0	27	(214)	(772)	(772)
2019	0	0	0	0	0	184	40	6	0	230	230	(599)	(599)
2020	0	0	0	0	0	180	40	7	0	226	226	(441)	(441)
2021	0	0	0	0	0	176	40	7	0	223	223	(295)	(295)
2022	0	0	0	0	0	173	40	8	0	220	220	(161)	(161)
2023	0	0	0	0	0	170	40	8	0	217	217	(37)	(37)
2024	0	0	0	0	0	167	40	9	0	215	215	76	76
2025	0	0	0	0	0	165	40	9	0	214	214	182	182
2026	0	0	0	0	0	165	40	10	0	214	214	280	280
2027	0	0	0	0	0	165	40	10	0	214	214	372	372
2028	0	0	0	0	0	165	40	10	0	215	215	457	457
2029	0	0	0	0	0	164	40	11	0	214	214	537	537
2030	0	0	0	0	0	164	40	11	0	215	215	611	611
2031	0	0	0	0	0	164	40	12	0	216	216	681	681
2032	0	0	0	0	0	163	40	13	0	216	216	746	746
2033	0	0	0	0	0	162	40	13	0	216	216	806	806
2034	0	0	0	0	0	163	41	14	0	217	217	863	863
2035	0	0	0	0	0	163	41	15	0	219	219	916	916
2036	0	0	0	0	0	161	42	16	0	218	218	965	965
2037	0	0	0	0	0	161	42	17	0	220	220	1,012	1,012
2038	0	0	0	0	0	158	43	19	0	219	219	1,054	1,054
2039	0	0	0	0	0	160	43	20	0	223	223	1,095	1,095
NOMINAL	0	17	915	0	932	3,492	913	255	0	4,660	3,729		
NPV:	0	15	824	0	839	1,440	398	96	0	1,934	1,095		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					2.31					

				PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
				PROGRAM:	Commercial	Conservation	Value				Page 1 of 1	
											March 9, 2015	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	SAVINGS IN					CUSTOMER	CUSTOMER					
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	CUMULATIVE DISCOUNTED	
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	16	0	74	0	90	221	0	0	221	(131)	(131)	
2016	49	0	74	0	123	226	0	0	226	(103)	(227)	
2017	82	0	74	0	156	231	0	0	231	(76)	(293)	
2018	116	0	74	0	190	237	0	0	237	(47)	(331)	
2019	134	0	0	0	134	0	0	0	0	134	(230)	
2020	135	0	0	0	135	0	0	0	0	135	(135)	
2021	137	0	0	0	137	0	0	0	0	137	(45)	
2022	139	0	0	0	139	0	0	0	0	139	39	
2023	140	0	0	0	140	0	0	0	0	140	119	
2024	142	0	0	0	142	0	0	0	0	142	194	
2025	143	0	0	0	143	0	0	0	0	143	264	
2026	145	0	0	0	145	0	0	0	0	145	331	
2027	146	0	0	0	146	0	0	0	0	146	393	
2028	148	0	0	0	148	0	0	0	0	148	452	
2029	150	0	0	0	150	0	0	0	0	150	508	
2030	151	0	0	0	151	0	0	0	0	151	560	
2031	153	0	0	0	153	0	0	0	0	153	609	
2032	155	0	0	0	155	0	0	0	0	155	656	
2033	157	0	0	0	157	0	0	0	0	157	699	
2034	159	0	0	0	159	0	0	0	0	159	741	
2035	161	0	0	0	161	0	0	0	0	161	780	
2036	163	0	0	0	163	0	0	0	0	163	817	
2037	166	0	0	0	166	0	0	0	0	166	852	
2038	169	0	0	0	169	0	0	0	0	169	885	
2039	171	0	0	0	171	0	0	0	0	171	916	
NOMINAL	3,425	0	296	0	3,721	915	0	0	915	2,806		
NPV:	1,472	0	267	0	1,739	824	0	0	824	916		
In service year of gen unit:			2019		2.1118627							
Discount rate:			0.0734									

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Commercial Conservation Value									Page 1 of 1
														March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT	AVOIDED T & D				NET BENEFITS TO ALL	CUMULATIVE DISCOUNTED NET	
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS		REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS		NET BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	4	74	15	0	93	1	0	0	0	1	(93)	(93)	
2016	0	4	74	46	0	124	2	21	0	0	23	(101)	(187)	
2017	0	4	74	78	0	156	3	22	0	0	25	(131)	(301)	
2018	0	4	74	110	0	189	5	22	0	0	27	(161)	(431)	
2019	0	0	0	127	0	127	190	40	0	0	230	103	(354)	
2020	0	0	0	128	0	128	186	40	0	0	226	98	(285)	
2021	0	0	0	130	0	130	183	40	0	0	223	93	(224)	
2022	0	0	0	131	0	131	181	40	0	0	220	89	(170)	
2023	0	0	0	132	0	132	178	40	0	0	217	85	(122)	
2024	0	0	0	134	0	134	175	40	0	0	215	81	(79)	
2025	0	0	0	135	0	135	175	40	0	0	214	79	(40)	
2026	0	0	0	136	0	136	175	40	0	0	214	78	(4)	
2027	0	0	0	138	0	138	175	40	0	0	214	77	29	
2028	0	0	0	139	0	139	175	40	0	0	215	76	59	
2029	0	0	0	140	0	140	175	40	0	0	214	74	87	
2030	0	0	0	142	0	142	175	40	0	0	215	73	112	
2031	0	0	0	143	0	143	176	40	0	0	216	73	135	
2032	0	0	0	145	0	145	176	40	0	0	216	71	157	
2033	0	0	0	146	0	146	176	40	0	0	216	70	176	
2034	0	0	0	148	0	148	177	41	0	0	217	70	194	
2035	0	0	0	149	0	149	178	41	0	0	219	70	211	
2036	0	0	0	151	0	151	177	42	0	0	218	68	227	
2037	0	0	0	152	0	152	178	42	0	0	220	68	241	
2038	0	0	0	154	0	154	177	43	0	0	219	66	254	
2039	0	0	0	155	0	155	179	43	0	0	223	67	266	
NOMINAL	0	17	296	3,205	0	3,518	3,747	913	0	0	4,660	1,142		
NPV:	0	15	267	1,385	0	1,668	1,536	398	0	0	1,934	266		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.16					

Program: Cool Roof

Program Start Date: March 2010

Program Description:

The Cool Roof Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing a cool roof system above conditioned spaces to help reduce their energy consumption and demand while reducing Tampa Electric's weather sensitive peak demand. Cool roofs reduce the heat load transferred into a building or facility by reflecting some of the sun's energy which reduces the load on commercial/industrial air conditioning and cooling equipment. Qualifying structures are eligible for a rebate based upon the total square footage of cool roof PVC membrane installed over conditioned space.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	15.080 kW
Winter Demand:	0.000 kW
Annual Energy:	66,433 kWh

Program Costs

Rebate: \$0.30 per square foot of installed qualifying cool roof PVC membrane.

The estimated administrative cost per participant is \$570.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COOL ROOF					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	75,300	75,136	20	0.0%	20
2016	76,350	76,166	20	0.1%	40
2017	77,348	77,144	20	0.1%	60
2018	78,317	78,093	20	0.1%	80
2019	79,282	79,038	20	0.1%	100
2020	80,255	79,991	20	0.2%	120
2021	81,224	80,940	20	0.2%	140
2022	82,178	81,874	20	0.2%	160
2023	83,120	82,796	20	0.2%	180
2024	84,014	83,670	20	0.2%	200

* Previous participation levels not included.

PROGRAM NAME: COOL ROOF

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	66,433	0.000	15.080	1.329	0.000	0.302
2016	66,433	0.000	15.080	2.657	0.000	0.603
2017	66,433	0.000	15.080	3.986	0.000	0.905
2018	66,433	0.000	15.080	5.315	0.000	1.206
2019	66,433	0.000	15.080	6.643	0.000	1.508
2020	66,433	0.000	15.080	7.972	0.000	1.810
2021	66,433	0.000	15.080	9.301	0.000	2.111
2022	66,433	0.000	15.080	10.629	0.000	2.413
2023	66,433	0.000	15.080	11.958	0.000	2.714
2024	66,433	0.000	15.080	13.287	0.000	3.016

PROGRAM NAME: COOL ROOF

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	70,286	0.000	16.060	1.406	0.000	0.321
2016	70,286	0.000	16.060	2.811	0.000	0.642
2017	70,286	0.000	16.060	4.217	0.000	0.964
2018	70,286	0.000	16.060	5.623	0.000	1.285
2019	70,286	0.000	16.060	7.029	0.000	1.606
2020	70,286	0.000	16.060	8.434	0.000	1.927
2021	70,286	0.000	16.060	9.840	0.000	2.248
2022	70,286	0.000	16.060	11.246	0.000	2.570
2023	70,286	0.000	16.060	12.652	0.000	2.891
2024	70,286	0.000	16.060	14.057	0.000	3.212

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Cool Roof				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	15.080	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	11.453	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	70.077	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	66.433	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	15	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	570.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	50821.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	7750.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	0.77	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	1,027.62	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.02	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Cool Roof										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	11	1,016	0	1,028	0	0	28	0	28	(1,000)	(1,000)	
2016	0	12	1,041	0	1,052	0	25	78	0	103	(950)	(1,884)	
2017	0	12	1,066	0	1,078	0	25	117	0	143	(935)	(2,696)	
2018	0	12	1,091	0	1,104	0	26	177	0	203	(900)	(3,424)	
2019	0	0	0	0	0	94	27	213	0	334	334	(3,172)	
2020	0	0	0	0	0	97	28	229	0	354	354	(2,924)	
2021	0	0	0	0	0	102	28	247	0	377	377	(2,678)	
2022	0	0	0	0	0	106	29	262	0	397	397	(2,436)	
2023	0	0	0	0	0	110	30	276	0	416	416	(2,200)	
2024	0	0	0	0	0	114	30	298	0	442	442	(1,966)	
2025	0	0	0	0	0	119	31	320	0	470	470	(1,735)	
2026	0	0	0	0	0	125	32	329	0	486	486	(1,512)	
2027	0	0	0	0	0	132	33	341	0	505	505	(1,296)	
2028	0	0	0	0	0	138	34	354	0	526	526	(1,086)	
2029	0	0	0	0	0	144	35	381	0	559	559	(879)	
NOMINAL	0	47	4,214	0	4,262	1,281	413	3,649	0	5,343	1,081		
NPV:	0	43	3,794	0	3,836	674	245	2,038	0	2,957	-879		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					0.77					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Cool Roof											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	61	0	155	0	216	1,016	0	0	1,016	(801)	(801)
2016	184	0	155	0	339	1,041	0	0	1,041	(702)	(1,455)
2017	308	0	155	0	463	1,066	0	0	1,066	(603)	(1,978)
2018	442	0	155	0	597	1,091	0	0	1,091	(495)	(2,378)
2019	519	0	0	0	519	0	0	0	0	519	(1,987)
2020	534	0	0	0	534	0	0	0	0	534	(1,612)
2021	543	0	0	0	543	0	0	0	0	543	(1,257)
2022	555	0	0	0	555	0	0	0	0	555	(919)
2023	569	0	0	0	569	0	0	0	0	569	(596)
2024	584	0	0	0	584	0	0	0	0	584	(287)
2025	595	0	0	0	595	0	0	0	0	595	6
2026	604	0	0	0	604	0	0	0	0	604	283
2027	611	0	0	0	611	0	0	0	0	611	544
2028	622	0	0	0	622	0	0	0	0	622	792
2029	636	0	0	0	636	0	0	0	0	636	1,028
NOMINAL	7,367	0	620	0	7,987	4,214	0	0	4,214	3,772	
NPV:	4,262	0	559	0	4,821	3,794	0	0	3,794	1,028	
In service year of gen unit:			2019		1.2708875						
Discount rate:			0.0734								

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Cool Roof								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	11	155	35	0	201	28	0	0	0	28	(173)	(173)
2016	0	12	155	105	0	272	78	25	0	0	103	(169)	(330)
2017	0	12	155	177	0	344	117	25	0	0	143	(201)	(505)
2018	0	12	155	250	0	417	177	26	0	0	203	(214)	(678)
2019	0	0	0	289	0	289	307	27	0	0	334	46	(644)
2020	0	0	0	292	0	292	326	28	0	0	354	62	(600)
2021	0	0	0	295	0	295	348	28	0	0	377	82	(547)
2022	0	0	0	298	0	298	368	29	0	0	397	100	(486)
2023	0	0	0	301	0	301	386	30	0	0	416	115	(421)
2024	0	0	0	304	0	304	412	30	0	0	442	139	(347)
2025	0	0	0	307	0	307	439	31	0	0	470	163	(267)
2026	0	0	0	310	0	310	454	32	0	0	486	177	(186)
2027	0	0	0	313	0	313	472	33	0	0	505	193	(103)
2028	0	0	0	316	0	316	492	34	0	0	526	210	(20)
2029	0	0	0	319	0	319	524	35	0	0	559	240	69
NOMINAL	0	47	620	3,907	0	4,575	4,930	413	0	0	5,343	769	
NPV:	0	43	559	2,286	0	2,888	2,712	245	0	0	2,957	69	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.02				

Program: Commercial Cooling

Program Start Date: July 2000

Program Description

The Commercial Cooling Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing high efficiency heating and cooling systems to help reduce their energy consumption and demand while reducing Tampa Electric's weather sensitive peak demand. High efficiency heating and cooling systems require less demand and energy as compared to standard systems. This program will rebate commercial/industrial customers that install a qualifying air conditioning system.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	1.400 kW
Winter Demand:	0.000 kW
Annual Energy:	2,703 kWh

Program Costs

Rebate: \$11.00 per ton of installed qualifying air conditioning.

The estimated administrative cost per participant is \$45.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL COOLING					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,300	100	0.1%	100
2016	76,350	76,250	100	0.3%	200
2017	77,348	77,148	100	0.4%	300
2018	78,317	78,017	100	0.5%	400
2019	79,282	78,882	100	0.6%	500
2020	80,255	79,755	100	0.8%	600
2021	81,224	80,624	100	0.9%	700
2022	82,178	81,478	100	1.0%	800
2023	83,120	82,320	100	1.1%	900
2024	84,014	83,114	100	1.2%	1,000

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL COOLING						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,703	0.000	1.400	0.270	0.000	0.140
2016	2,703	0.000	1.400	0.541	0.000	0.280
2017	2,703	0.000	1.400	0.811	0.000	0.420
2018	2,703	0.000	1.400	1.081	0.000	0.560
2019	2,703	0.000	1.400	1.352	0.000	0.700
2020	2,703	0.000	1.400	1.622	0.000	0.840
2021	2,703	0.000	1.400	1.892	0.000	0.980
2022	2,703	0.000	1.400	2.162	0.000	1.120
2023	2,703	0.000	1.400	2.433	0.000	1.260
2024	2,703	0.000	1.400	2.703	0.000	1.400

PROGRAM NAME: COMMERCIAL COOLING

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,860	0.000	1.491	0.286	0.000	0.149
2016	2,860	0.000	1.491	0.572	0.000	0.298
2017	2,860	0.000	1.491	0.858	0.000	0.447
2018	2,860	0.000	1.491	1.144	0.000	0.596
2019	2,860	0.000	1.491	1.430	0.000	0.746
2020	2,860	0.000	1.491	1.716	0.000	0.895
2021	2,860	0.000	1.491	2.002	0.000	1.044
2022	2,860	0.000	1.491	2.288	0.000	1.193
2023	2,860	0.000	1.491	2.574	0.000	1.342
2024	2,860	0.000	1.491	2.860	0.000	1.491

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Cooling			PAGE 1 OF 1	
			RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I.	(1) CUSTOMER KW REDUCTION AT THE METER	1.400 KW /CUST	IV.	(1) BASE YEAR 2015
I.	(2) GENERATOR KW REDUCTION PER CUSTOMER	1.063 KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT 2019
I.	(3) KW LINE LOSS PERCENTAGE	7.0 %	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D 2016
I.	(4) GENERATION KWH REDUCTION PER CUSTOMER	2.851 KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST 650.64 \$/KW
I.	(5) KWH LINE LOSS PERCENTAGE	5.2 %	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST 11.92 \$/KW
I.	(6) GROUP LINE LOSS MULTIPLIER	1	IV.	(6) BASE YEAR DISTRIBUTION COST 57.96 \$/KW
I.	(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV.	(7) GEN, TRAN, & DIST COST ESCALATION RATE 3.0 %
I.	(8)* CUSTOMER KWH REDUCTION AT METER	2,703 KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST 11.95 \$/KW/YR
			IV.	(9) GENERATOR FIXED O&M ESCALATION RATE 2.4 %
ECONOMIC LIFE & K FACTORS			IV.	(10) TRANSMISSION FIXED O & M COST 2.92 \$/KW/YR
II.	(1) STUDY PERIOD FOR CONSERVATION PROGRAM	15 YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST 11.69 \$/KW/YR
II.	(2) GENERATOR ECONOMIC LIFE	25 YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE 2.4 %
II.	(3) T & D ECONOMIC LIFE	25 YEARS	IV.	(13) AVOIDED GEN UNIT VARIABLE O & M COSTS 0.180 CENTS/KWH
II.	(4) K FACTOR FOR GENERATION	1.4625	IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE 2.4 %
II.	(5) K FACTOR FOR T & D	1.4625	IV.	(15) GENERATOR CAPACITY FACTOR 13.2 %
	(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1	IV.	(16) AVOIDED GENERATING UNIT FUEL COST 4.70 CENTS/KWH
			IV.	(17) AVOIDED GEN UNIT FUEL ESCALATION RATE 5.21 %
			IV.	(18)* AVOIDED PURCHASE CAPACITY COST PER KW 0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV.	(19)* CAPACITY COST ESCALATION RATE 0 %
III.	(1) UTILITY NONRECURRING COST PER CUSTOMER	45.00 \$/CUST		
III.	(2) UTILITY RECURRING COST PER CUSTOMER	0 \$/CUST/YR		
III.	(3) UTILITY COST ESCALATION RATE	2.4 %		
III.	(4) CUSTOMER EQUIPMENT COST	1491.00 \$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III.	(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V.	(1) NON-FUEL COST IN CUSTOMER BILL 2.596 CENTS/KWH
III.	(6) CUSTOMER O & M COST	0 \$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE 1 %
III.	(7) CUSTOMER O & M ESCALATION RATE	2.4 %	V.	(3) CUSTOMER DEMAND CHARGE PER KW 9.640 \$/KW/MO
III.	(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE 1 %
III.	(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL 1.00
III.	(10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR		
III.	(11)* SUPPLY COSTS ESCALATION RATE	0 %		
III.	(12)* UTILITY DISCOUNT RATE	0.0734		
III.	(13)* UTILITY AFUDC RATE	0.0645	CALCULATED BENEFITS AND COSTS	
III.	(14)* UTILITY NON RECURRING REBATE/INCENTIVE	128.00 \$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO 1.47	
III.	(15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV) 656.52	
III.	(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %	(3)* RIM TEST - BENEFIT/COST RATIO 1.02	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Commercial Cooling										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	5	149	0	154	0	0	6	0	6	(148)	(148)	
2016	0	5	153	0	157	0	12	16	0	27	(130)	(269)	
2017	0	5	156	0	161	0	12	24	0	36	(125)	(378)	
2018	0	5	160	0	165	0	12	36	0	48	(117)	(472)	
2019	0	0	0	0	0	44	12	43	0	100	100	(397)	
2020	0	0	0	0	0	45	13	47	0	105	105	(324)	
2021	0	0	0	0	0	47	13	50	0	110	110	(252)	
2022	0	0	0	0	0	49	13	53	0	116	116	(181)	
2023	0	0	0	0	0	51	14	56	0	121	121	(112)	
2024	0	0	0	0	0	53	14	61	0	128	128	(45)	
2025	0	0	0	0	0	55	15	65	0	135	135	22	
2026	0	0	0	0	0	58	15	67	0	140	140	86	
2027	0	0	0	0	0	61	15	69	0	146	146	148	
2028	0	0	0	0	0	64	16	72	0	152	152	209	
2029	0	0	0	0	0	67	16	77	0	160	160	268	
NOMINAL	0	19	618	0	637	595	192	742	0	1,529	892		
NPV:	0	17	556	0	573	313	114	415	0	841	268		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				1.47						

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Commercial Cooling							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	17	0	13	0	30	149	0	0	149	(119)	(119)
2016	51	0	13	0	64	153	0	0	153	(89)	(202)
2017	86	0	13	0	99	156	0	0	156	(58)	(252)
2018	123	0	13	0	135	160	0	0	160	(25)	(272)
2019	143	0	0	0	143	0	0	0	0	143	(164)
2020	147	0	0	0	147	0	0	0	0	147	(61)
2021	149	0	0	0	149	0	0	0	0	149	37
2022	152	0	0	0	152	0	0	0	0	152	129
2023	155	0	0	0	155	0	0	0	0	155	217
2024	159	0	0	0	159	0	0	0	0	159	301
2025	161	0	0	0	161	0	0	0	0	161	380
2026	163	0	0	0	163	0	0	0	0	163	455
2027	165	0	0	0	165	0	0	0	0	165	526
2028	168	0	0	0	168	0	0	0	0	168	593
2029	171	0	0	0	171	0	0	0	0	171	657
NOMINAL	2,011	0	51	0	2,062	618	0	0	618	1,444	
NPV:	1,167	0	46	0	1,213	556	0	0	556	657	
In service year of gen unit:			2019		2.1797868						
Discount rate:			0.0734								

Program: Demand Response

Program Start Date: March 2008

Program Description

Tampa Electric's Commercial Demand Response is a conservation and load management program intended to help alter the company's system load curve by reducing summer and winter demand peaks. The company will contract for a turn-key program that will induce commercial/industrial customers to reduce their demand for electricity in response to market signals. Reductions will be achieved through a mix of emergency backup generation, energy management systems, raising cooling set-points and turning off or dimming lights, signage, etc.

Tampa Electric will contract with a demand response vendor on an as needed basis for additional MW of load reduction. Vendor will market program to potential customers and secure participants. In addition, vendor will audit the customer's facility to identify equipment to be utilized in demand reduction, install automated controls and provide participant with load tracking software for the customer's use. Vendor will pay customers on a dollar per kW – month basis.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data. The analysis yielded the following expected savings per customer participant:

Summer Demand:	470.59 kW
Winter Demand:	470.59 kW
Annual Energy:	35,294 kWh

Program Costs

The estimated administrative cost per participant is \$42,746.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: DEMAND RESPONSE					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	13,554	1	0.0%	1
2016	76,350	13,743	1	0.0%	2
2017	77,348	13,923	1	0.0%	3
2018	78,317	14,097	1	0.0%	4
2019	79,282	14,271	1	0.0%	5
2020	80,255	14,446	1	0.0%	6
2021	81,224	14,620	1	0.0%	7
2022	82,178	14,792	1	0.1%	8
2023	83,120	14,962	1	0.1%	9
2024	84,014	15,123	1	0.1%	10

* Previous participation levels not included.

PROGRAM NAME: DEMAND RESPONSE

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	35,294	470.590	470.590	0.035	0.471	0.471
2016	35,294	470.590	470.590	0.071	0.941	0.941
2017	35,294	470.590	470.590	0.106	1.412	1.412
2018	35,294	470.590	470.590	0.141	1.882	1.882
2019	35,294	470.590	470.590	0.176	2.353	2.353
2020	35,294	470.590	470.590	0.212	2.824	2.824
2021	35,294	470.590	470.590	0.247	3.294	3.294
2022	35,294	470.590	470.590	0.282	3.765	3.765
2023	35,294	470.590	470.590	0.318	4.235	4.235
2024	35,294	470.590	470.590	0.353	4.706	4.706

PROGRAM NAME: DEMAND RESPONSE						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	37,341	501.178	501.178	0.037	0.501	0.501
2016	37,341	501.178	501.178	0.075	1.002	1.002
2017	37,341	501.178	501.178	0.112	1.504	1.504
2018	37,341	501.178	501.178	0.149	2.005	2.005
2019	37,341	501.178	501.178	0.187	2.506	2.506
2020	37,341	501.178	501.178	0.224	3.007	3.007
2021	37,341	501.178	501.178	0.261	3.508	3.508
2022	37,341	501.178	501.178	0.299	4.009	4.009
2023	37,341	501.178	501.178	0.336	4.511	4.511
2024	37,341	501.178	501.178	0.373	5.012	5.012

INPUT DATA - PART 1				PSC FORM CE 1.1
PROGRAM TITLE: Demand Response				PAGE 1 OF 1
				RUN DATE: March 5, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES		AVOIDED GENERATOR, TRANS. & DIST COSTS		
(1) CUSTOMER KW REDUCTION AT THE METER	470,590 KW /CUST	IV.	(1) BASE YEAR	2015
(2) GENERATOR KW REDUCTION PER CUSTOMER	521.019 KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
(3) KW LINE LOSS PERCENTAGE	7.0 %	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
(4) GENERATION KWH REDUCTION PER CUSTOMER	37,230 KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
(5) KWH LINE LOSS PERCENTAGE	5.2 %	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST	0.00 \$/KW
(6) GROUP LINE LOSS MULTIPLIER	1	IV.	(6) BASE YEAR DISTRIBUTION COST	0.00 \$/KW
(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV.	(7) GEN, TRAN. & DIST COST ESCALATION RATE	3.0 %
(8)* CUSTOMER KWH REDUCTION AT METER	35,294 KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
ECONOMIC LIFE & K FACTORS		IV.	(9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
(1) STUDY PERIOD FOR CONSERVATION PROGRAM	25 YEARS	IV.	(10) TRANSMISSION FIXED O & M COST	0.00 \$/KW/YR
(2) GENERATOR ECONOMIC LIFE	25 YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST	0.00 \$/KW/YR
(3) T & D ECONOMIC LIFE	25 YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE	2.4 %
(4) K FACTOR FOR GENERATION	1.4625	IV.	(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
(5) K FACTOR FOR T & D	1.4625	IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0	IV.	(15) GENERATOR CAPACITY FACTOR	13.2 %
UTILITY & CUSTOMER COSTS		IV.	(16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
(1) UTILITY NONRECURRING COST PER CUSTOMER	860.00 \$/CUST	IV.	(17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
(2) UTILITY RECURRING COST PER CUSTOMER	393 \$/CUST/YR		(18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
(3) UTILITY COST ESCALATION RATE	2.4 %		(19)* CAPACITY COST ESCALATION RATE	0 %
(4) CUSTOMER EQUIPMENT COST	0.00 \$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V.	(1) NON-FUEL COST IN CUSTOMER BILL	2.596 CENTS/KWH
(6) CUSTOMER O & M COST	0 \$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE	1 %
(7) CUSTOMER O & M ESCALATION RATE	2.4 %	V.	(3) CUSTOMER DEMAND CHARGE PER KW	9.640 \$/KW/MO
(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE	1 %
(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
(10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR		FACTOR FOR CUSTOMER BILL	0.00
(11)* SUPPLY COSTS ESCALATION RATE	0 %		CALCULATED BENEFITS AND COSTS	
(12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	115.61
(13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	1,857.84
(14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00 \$/CUST		(3)* RIM TEST - BENEFIT/COST RATIO	1.53
(15)* UTILITY RECURRING REBATE/INCENTIVE	42,353.00 \$/CUST/YR			
(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %			

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Demand Response										Page 1 of 1
													March 5, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	1	0	0	1	0	0	1	0	1	(0)	(0)	
2016	0	1	0	0	1	0	0	2	0	2	1	0	
2017	0	2	0	0	2	0	0	3	0	3	1	1	
2018	0	2	0	0	2	0	0	5	0	5	2	3	
2019	0	2	0	0	2	340	0	6	0	346	344	262	
2020	0	2	0	0	2	333	0	6	0	339	337	499	
2021	0	2	0	0	2	326	0	7	0	333	331	715	
2022	0	2	0	0	2	321	0	7	0	328	326	914	
2023	0	2	0	0	2	315	0	7	0	322	320	1,095	
2024	0	2	0	0	2	309	0	8	0	317	315	1,262	
2025	0	2	0	0	2	306	0	8	0	315	313	1,416	
2026	0	2	0	0	2	306	0	9	0	315	313	1,559	
2027	0	2	0	0	2	306	0	9	0	315	313	1,693	
2028	0	2	0	0	2	305	0	9	0	315	313	1,817	
2029	0	2	0	0	2	303	0	10	0	313	311	1,933	
2030	0	2	0	0	2	304	0	10	0	314	312	2,040	
2031	0	2	0	0	2	303	0	11	0	314	312	2,141	
2032	0	2	0	0	2	302	0	12	0	314	311	2,234	
2033	0	2	0	0	2	301	0	12	0	313	311	2,321	
2034	0	2	0	0	2	302	0	13	0	315	312	2,402	
2035	0	3	0	0	3	302	0	14	0	316	313	2,478	
2036	0	3	0	0	3	298	0	14	0	313	310	2,548	
2037	0	3	0	0	3	299	0	16	0	314	312	2,614	
2038	0	3	0	0	3	293	0	17	0	310	307	2,674	
2039	0	3	0	0	3	296	0	18	0	314	311	2,731	
NOMINAL	0	53	0	0	53	6,469	0	234	0	6,703	6,650		
NPV:	0	24	0	0	24	2,667	0	88	0	2,755	2,731		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				115.61						

PARTICIPANT COSTS AND BENEFITS												PSC FORM CE 2.4
PROGRAM: Demand Response												Page 1 of 1
												March 5, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
SAVINGS												
IN												
PARTICIPANTS												
BILL												
TAX												
CREDITS												
UTILITY												
REBATES												
OTHER												
BENEFITS												
TOTAL												
BENEFITS												
CUSTOMER												
EQUIPMENT												
COSTS												
CUSTOMER												
O & M												
COSTS												
OTHER												
COSTS												
TOTAL												
COSTS												
NET												
BENEFITS												
CUMULATIVE												
DISCOUNTED												
NET BENEFITS												
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	1	0	21	0	22	0	0	0	0	0	22	22
2016	3	0	64	0	67	0	0	0	0	0	67	85
2017	6	0	106	0	112	0	0	0	0	0	112	182
2018	8	0	148	0	157	0	0	0	0	0	157	308
2019	10	0	169	0	179	0	0	0	0	0	179	443
2020	10	0	169	0	180	0	0	0	0	0	180	570
2021	10	0	169	0	180	0	0	0	0	0	180	687
2022	11	0	169	0	180	0	0	0	0	0	180	797
2023	11	0	169	0	181	0	0	0	0	0	181	899
2024	11	0	169	0	181	0	0	0	0	0	181	995
2025	12	0	169	0	181	0	0	0	0	0	181	1,084
2026	12	0	169	0	181	0	0	0	0	0	181	1,167
2027	12	0	169	0	181	0	0	0	0	0	181	1,245
2028	12	0	169	0	182	0	0	0	0	0	182	1,317
2029	13	0	169	0	182	0	0	0	0	0	182	1,385
2030	13	0	169	0	182	0	0	0	0	0	182	1,448
2031	13	0	169	0	183	0	0	0	0	0	183	1,507
2032	14	0	169	0	183	0	0	0	0	0	183	1,561
2033	14	0	169	0	184	0	0	0	0	0	184	1,613
2034	15	0	169	0	184	0	0	0	0	0	184	1,661
2035	15	0	169	0	185	0	0	0	0	0	185	1,705
2036	16	0	169	0	186	0	0	0	0	0	186	1,747
2037	17	0	169	0	186	0	0	0	0	0	186	1,787
2038	18	0	169	0	188	0	0	0	0	0	188	1,823
2039	19	0	169	0	188	0	0	0	0	0	188	1,858
NOMINAL	298	0	3,896	0	4,194	0	0	0	0	0	4,194	
NPV:	121	0	1,737	0	1,858	0	0	0	0	0	1,858	
In service year of gen unit:												
Discount rate:												
0.0734												

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM:	Demand Response							Page 1 of 1
													March 5, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT					NET BENEFITS	CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	AVOIDED T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	TO ALL CUSTOMERS	NET BENEFIT
			INCENTIVES										
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	21	0	0	23	1	0	0	0	1	(22)	(22)
2016	0	1	64	1	0	66	2	0	0	0	2	(64)	(82)
2017	0	2	106	2	0	110	3	0	0	0	3	(107)	(175)
2018	0	2	148	3	0	154	5	0	0	0	5	(149)	(295)
2019	0	2	169	4	0	175	346	0	0	0	346	171	(167)
2020	0	2	169	4	0	175	339	0	0	0	339	164	(52)
2021	0	2	169	4	0	175	333	0	0	0	333	158	51
2022	0	2	169	4	0	175	328	0	0	0	328	152	144
2023	0	2	169	4	0	175	322	0	0	0	322	147	227
2024	0	2	169	4	0	175	317	0	0	0	317	141	302
2025	0	2	169	4	0	175	315	0	0	0	315	140	371
2026	0	2	169	4	0	176	315	0	0	0	315	139	435
2027	0	2	169	4	0	176	315	0	0	0	315	139	494
2028	0	2	169	4	0	176	315	0	0	0	315	139	549
2029	0	2	169	4	0	176	313	0	0	0	313	137	600
2030	0	2	169	4	0	176	314	0	0	0	314	138	648
2031	0	2	169	4	0	176	314	0	0	0	314	138	693
2032	0	2	169	4	0	176	314	0	0	0	314	138	734
2033	0	2	169	4	0	176	313	0	0	0	313	137	772
2034	0	2	169	4	0	176	315	0	0	0	315	139	808
2035	0	3	169	4	0	176	316	0	0	0	316	140	842
2036	0	3	169	5	0	177	313	0	0	0	313	136	873
2037	0	3	169	5	0	177	314	0	0	0	314	138	902
2038	0	3	169	5	0	177	310	0	0	0	310	133	928
2039	0	3	169	5	0	177	314	0	0	0	314	137	953
NOMINAL	0	53	3,896	96	0	4,046	6,703	0	0	0	6,703	2,657	
NPV:	0	24	1,737	42	0	1,802	2,755	0	0	0	2,755	953	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.53				

Program: Commercial Duct Repair

Program Start Date: 2007

Program Description

The Commercial Duct Repair Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal of this conservation program is to offer rebates for sealing existing facility's duct system to reduce demand and energy by decreasing the load on commercial HVAC equipment. This program eliminates or reduces areas of HVAC air distribution losses by sealing and repairing the ADS.

Customers call Tampa Electric to request appointments for duct repair and a HVAC contractor appointed by Tampa Electric will seal and repair all accessible components of the ADS in the facility. Tampa Electric's rebate is included in the payment to the participating contractor performing ADS repairs.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using ITRON data for systems across all eligible commercial market segments and participants. The analysis yielded the following expected savings per customer participant:

Summer Demand:	1.551 kW
Winter Demand:	0.016 kW
Annual Energy:	6,862 kWh

Program Costs

Rebate: \$150 per qualifying ADS.

The estimated administrative cost per participant is \$100.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL DUCT REPAIR

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	64,373	250	0.0%	250
2016	76,350	65,173	250	0.0%	500
2017	77,348	65,921	250	1.1%	750
2018	78,317	66,640	250	1.5%	1,000
2019	79,282	67,355	250	1.9%	1,250
2020	80,255	68,128	200	2.1%	1,450
2021	81,224	68,897	200	2.4%	1,650
2022	82,178	69,651	200	2.7%	1,850
2023	83,120	70,393	200	2.9%	2,050
2024	84,014	71,087	200	3.2%	2,250

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL DUCT REPAIR						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	6,862	0.016	1.551	1.716	0.004	0.388
2016	6,862	0.016	1.551	3.431	0.008	0.776
2017	6,862	0.016	1.551	5.147	0.012	1.163
2018	6,862	0.016	1.551	6.862	0.016	1.551
2019	6,862	0.016	1.551	8.578	0.020	1.939
2020	6,862	0.016	1.551	9.950	0.023	2.249
2021	6,862	0.016	1.551	11.322	0.026	2.559
2022	6,862	0.016	1.551	12.695	0.030	2.869
2023	6,862	0.016	1.551	14.067	0.033	3.180
2024	6,862	0.016	1.551	15.440	0.036	3.490

PROGRAM NAME: COMMERCIAL DUCT REPAIR						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	7,260	0.017	1.652	1.815	0.004	0.413
2016	7,260	0.017	1.652	3.630	0.009	0.826
2017	7,260	0.017	1.652	5.445	0.013	1.239
2018	7,260	0.017	1.652	7.260	0.017	1.652
2019	7,260	0.017	1.652	9.075	0.021	2.065
2020	7,260	0.017	1.652	10.527	0.025	2.395
2021	7,260	0.017	1.652	11.979	0.028	2.725
2022	7,260	0.017	1.652	13.431	0.032	3.056
2023	7,260	0.017	1.652	14.883	0.035	3.386
2024	7,260	0.017	1.652	16.335	0.038	3.717

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Duct Repair				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	1.551	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	1.184	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	7.238	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	6.862	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	18	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	100.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	471.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	150.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	8.59	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	6,017.69	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.28	

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Commercial Duct Repair									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	25	118	0	143	0	0	36	0	36	(106)	(106)
2016	0	26	121	0	146	0	32	101	0	133	(14)	(119)
2017	0	26	123	0	150	0	33	151	0	184	34	(89)
2018	0	27	126	0	153	0	34	229	0	262	109	(1)
2019	0	0	0	0	0	122	34	275	0	432	432	324
2020	0	0	0	0	0	126	35	295	0	457	457	645
2021	0	0	0	0	0	131	36	318	0	486	486	962
2022	0	0	0	0	0	137	37	339	0	513	513	1,275
2023	0	0	0	0	0	142	38	356	0	537	537	1,579
2024	0	0	0	0	0	147	39	384	0	571	571	1,881
2025	0	0	0	0	0	154	40	413	0	607	607	2,180
2026	0	0	0	0	0	162	41	425	0	628	628	2,468
2027	0	0	0	0	0	170	42	440	0	652	652	2,747
2028	0	0	0	0	0	178	43	457	0	679	679	3,017
2029	0	0	0	0	0	185	45	491	0	722	722	3,285
2030	0	0	0	0	0	194	46	507	0	747	747	3,543
2031	0	0	0	0	0	203	47	538	0	788	788	3,797
2032	0	0	0	0	0	211	48	568	0	827	827	4,045
NOMINAL	0	104	488	0	592	2,264	672	6,325	0	9,261	8,669	
NPV:	0	93	439	0	533	1,067	361	3,150	0	4,578	4,045	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					8.59				

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Commercial Duct Repair									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT					NET	CUMULATIVE	
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	AVOIDED T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	BENEFITS TO ALL CUSTOMERS	DISCOUNTED NET BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	25	38	45	0	107	36	0	0	0	36	(71)	(71)	
2016	0	26	38	135	0	199	101	32	0	0	133	(66)	(132)	
2017	0	26	38	228	0	292	151	33	0	0	184	(108)	(226)	
2018	0	27	38	322	0	387	229	34	0	0	262	(124)	(326)	
2019	0	0	0	372	0	372	397	34	0	0	432	60	(281)	
2020	0	0	0	376	0	376	421	35	0	0	457	81	(225)	
2021	0	0	0	380	0	380	450	36	0	0	486	107	(155)	
2022	0	0	0	383	0	383	476	37	0	0	513	130	(76)	
2023	0	0	0	387	0	387	498	38	0	0	537	149	9	
2024	0	0	0	391	0	391	532	39	0	0	571	180	104	
2025	0	0	0	395	0	395	567	40	0	0	607	212	208	
2026	0	0	0	399	0	399	587	41	0	0	628	229	313	
2027	0	0	0	403	0	403	610	42	0	0	652	250	420	
2028	0	0	0	407	0	407	636	43	0	0	679	272	529	
2029	0	0	0	411	0	411	677	45	0	0	722	311	644	
2030	0	0	0	415	0	415	702	46	0	0	747	332	759	
2031	0	0	0	419	0	419	741	47	0	0	788	368	877	
2032	0	0	0	423	0	423	779	48	0	0	827	404	998	
NOMINAL	0	104	150	6,292	0	6,546	8,589	672	0	0	9,261	2,715		
NPV:	0	93	135	3,351	0	3,580	4,217	361	0	0	4,578	998		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.28					

Program: Commercial Electronically Commutated Motors (ECM)

Program Start Date: March 2010

Program Description

The Commercial ECM Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal of this conservation program is to offer rebates for installing electronically commutated motors in existing air conditioning and refrigeration equipment. The program is aimed at reducing energy and the growth of weather sensitive peak demand by encouraging customers to replace current induction motors with high efficiency ECM that exceed minimum product manufacturing standards.

Program Participation Standard

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected and validated with ITRON data. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.410 kW
Winter Demand:	0.000 kW
Annual Energy:	3,875 kWh

Program Costs

Rebate: \$200 per qualifying HP of ECM.

The estimated administrative cost per participant is \$138.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	75,300	75,300	5	0.0%	5
2016	76,350	76,345	5	0.0%	10
2017	77,348	77,338	5	0.0%	15
2018	78,317	78,302	5	0.0%	20
2019	79,282	79,262	5	0.0%	25
2020	80,255	80,230	5	0.0%	30
2021	81,224	81,194	5	0.0%	35
2022	82,178	82,143	5	0.0%	40
2023	83,120	83,080	5	0.1%	45
2024	84,014	83,969	5	0.1%	50

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	3,875	0.000	0.410	0.019	0.000	0.002
2016	3,875	0.000	0.410	0.039	0.000	0.004
2017	3,875	0.000	0.410	0.058	0.000	0.006
2018	3,875	0.000	0.410	0.078	0.000	0.008
2019	3,875	0.000	0.410	0.097	0.000	0.010
2020	3,875	0.000	0.410	0.116	0.000	0.012
2021	3,875	0.000	0.410	0.136	0.000	0.014
2022	3,875	0.000	0.410	0.155	0.000	0.016
2023	3,875	0.000	0.410	0.174	0.000	0.018
2024	3,875	0.000	0.410	0.194	0.000	0.021

PROGRAM NAME: COMMERCIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	4,100	0.000	0.437	0.020	0.000	0.002
2016	4,100	0.000	0.437	0.041	0.000	0.004
2017	4,100	0.000	0.437	0.061	0.000	0.007
2018	4,100	0.000	0.437	0.082	0.000	0.009
2019	4,100	0.000	0.437	0.102	0.000	0.011
2020	4,100	0.000	0.437	0.123	0.000	0.013
2021	4,100	0.000	0.437	0.143	0.000	0.015
2022	4,100	0.000	0.437	0.164	0.000	0.017
2023	4,100	0.000	0.437	0.184	0.000	0.020
2024	4,100	0.000	0.437	0.205	0.000	0.022

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Electronically Commutated Motors (ECM)			PAGE 1 OF 1	
			RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.410	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.311	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	4.088	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	3.875	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	15	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	138.00	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	400.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596 CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	200.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	3.57
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	49.34
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	1.17

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Commercial Electronically Commutated Motors (ECM)										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	2	0	3	0	0	0	0	0	0	(2)	(2)
2016	0	1	2	0	3	0	0	1	0	1	(1)	(4)	(4)
2017	0	1	2	0	3	0	0	2	0	2	(1)	(4)	(4)
2018	0	1	2	0	3	0	0	3	0	3	(0)	(5)	(5)
2019	0	0	0	0	0	1	0	3	0	4	4	(2)	(2)
2020	0	0	0	0	0	1	0	3	0	4	4	1	1
2021	0	0	0	0	0	1	0	4	0	4	4	4	4
2022	0	0	0	0	0	1	0	4	0	5	5	7	7
2023	0	0	0	0	0	1	0	4	0	5	5	10	10
2024	0	0	0	0	0	1	0	4	0	5	5	13	13
2025	0	0	0	0	0	1	0	5	0	6	6	16	16
2026	0	0	0	0	0	1	0	5	0	6	6	18	18
2027	0	0	0	0	0	1	0	5	0	6	6	21	21
2028	0	0	0	0	0	1	0	5	0	6	6	23	23
2029	0	0	0	0	0	1	0	6	0	7	7	26	26
NOMINAL	0	3	8	0	11	9	3	53	0	65	53		
NPV:	0	3	7	0	10	4	2	30	0	36	26		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					3.57					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Commercial Electronically Commutated Motors (ECM)											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	1	0	1	0	2	2	0	0	2	(0)	(0)
2016	2	0	1	0	3	2	0	0	2	1	1
2017	4	0	1	0	5	2	0	0	2	3	3
2018	5	0	1	0	6	2	0	0	2	4	7
2019	6	0	0	0	6	0	0	0	0	6	12
2020	7	0	0	0	7	0	0	0	0	7	16
2021	7	0	0	0	7	0	0	0	0	7	21
2022	7	0	0	0	7	0	0	0	0	7	25
2023	7	0	0	0	7	0	0	0	0	7	29
2024	7	0	0	0	7	0	0	0	0	7	33
2025	7	0	0	0	7	0	0	0	0	7	36
2026	8	0	0	0	8	0	0	0	0	8	40
2027	8	0	0	0	8	0	0	0	0	8	43
2028	8	0	0	0	8	0	0	0	0	8	46
2029	8	0	0	0	8	0	0	0	0	8	49
NOMINAL	92	0	4	0	96	8	0	0	8	88	
NPV:	53	0	4	0	57	7	0	0	7	49	
In service year of gen unit:			2019		7.6101391						
Discount rate:			0.0734								

Program: Industrial Load Management (GSLM 2&3)

Program Start Date: September 1999

Program Description

This is a load management program for large industrial customers with interruptible loads of 500 kW or greater. The program was approved by the FPSC in Docket No. 990037-EI, Order No. PSC-99-1778-FOF-EI, issued September 10, 1999. Assessments for customer participation are conducted every six months.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data. The analysis yielded the following expected savings per customer participant:

Summer Demand:	3,119 kW
Winter Demand:	3,095 kW
Annual Energy:	746,190 kWh

Program Costs

Program costs include estimates for marketing, administration and field verification for participation and incentives. These estimates are used to maintain a RIM value of 1.20 utilizing the Commission prescribed cost-effectiveness methodology.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

Program: Lighting Conditioned Space

Program Start Date: January 1991

Program Description

The Lighting Conditioned Space Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing energy efficient lighting technology and systems within conditioned space to help reduce their energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will provide a rebate to customers who install qualifying conditioned spaces lighting systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals including the associated effect from the lighting system on the HVAC equipment. The analysis yielded the following expected savings per customer participant:

Summer Demand:	21.600 kW
Winter Demand:	16.820 kW
Annual Energy:	99,081 kWh

Program Costs

Rebate: \$0.148 per Watt reduction.

The estimated administrative cost per participant is \$150.

Program Monitoring and Evaluation

Data necessary to substantiate the kW and kWh savings as well as the demand coincidence will be contained on the customer's rebate analysis worksheet that accompanies the rebate application.

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: LIGHTING CONDITIONED SPACE					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	73,561	25	0.0%	25
2016	76,350	74,586	25	0.1%	50
2017	77,348	75,559	25	0.1%	75
2018	78,317	76,503	25	0.1%	100
2019	79,282	77,428	40	0.2%	140
2020	80,255	78,361	40	0.2%	180
2021	81,224	79,290	40	0.3%	220
2022	82,178	80,204	40	0.3%	260
2023	83,120	81,106	40	0.4%	300
2024	84,014	81,960	40	0.4%	340

* Previous participation levels not included.

PROGRAM NAME: LIGHTING CONDITIONED SPACE						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	99,081	16.820	21.600	2.477	0.421	0.540
2016	99,081	16.820	21.600	4.954	0.841	1.080
2017	99,081	16.820	21.600	7.431	1.262	1.620
2018	99,081	16.820	21.600	9.908	1.682	2.160
2019	99,081	16.820	21.600	13.871	2.355	3.024
2020	99,081	16.820	21.600	17.835	3.028	3.888
2021	99,081	16.820	21.600	21.798	3.700	4.752
2022	99,081	16.820	21.600	25.761	4.373	5.616
2023	99,081	16.820	21.600	29.724	5.046	6.480
2024	99,081	16.820	21.600	33.688	5.719	7.344

PROGRAM NAME: LIGHTING CONDITIONED SPACE

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	104,828	17.913	23.004	2.621	0.448	0.575
2016	104,828	17.913	23.004	5.241	0.896	1.150
2017	104,828	17.913	23.004	7.862	1.343	1.725
2018	104,828	17.913	23.004	10.483	1.791	2.300
2019	104,828	17.913	23.004	14.676	2.508	3.221
2020	104,828	17.913	23.004	18.869	3.224	4.141
2021	104,828	17.913	23.004	23.062	3.941	5.061
2022	104,828	17.913	23.004	27.255	4.657	5.981
2023	104,828	17.913	23.004	31.448	5.374	6.901
2024	104,828	17.913	23.004	35.641	6.091	7.821

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Lighting Conditioned Space				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	21.600	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	22.253	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	104.516	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	99.081	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	15	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	150.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	11540.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	5.41	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	7,009.39	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	2501.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	1.34	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Lighting Conditioned Space										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	4	289	0	292	0	0	53	0	53	(240)	(240)	(240)
2016	0	4	295	0	299	0	47	145	0	192	(107)	(339)	(339)
2017	0	4	303	0	306	0	48	218	0	266	(40)	(374)	(374)
2018	0	4	310	0	314	0	49	330	0	379	66	(321)	(321)
2019	0	0	0	0	0	229	51	397	0	677	677	189	189
2020	0	0	0	0	0	237	52	426	0	715	715	691	691
2021	0	0	0	0	0	247	53	460	0	760	760	1,188	1,188
2022	0	0	0	0	0	258	55	489	0	801	801	1,676	1,676
2023	0	0	0	0	0	267	56	514	0	838	838	2,151	2,151
2024	0	0	0	0	0	277	57	555	0	889	889	2,621	2,621
2025	0	0	0	0	0	290	59	596	0	944	944	3,086	3,086
2026	0	0	0	0	0	304	61	614	0	978	978	3,535	3,535
2027	0	0	0	0	0	320	62	635	0	1,017	1,017	3,970	3,970
2028	0	0	0	0	0	335	64	661	0	1,059	1,059	4,392	4,392
2029	0	0	0	0	0	349	65	710	0	1,124	1,124	4,809	4,809
NOMINAL	0	16	1,196	0	1,212	3,112	779	6,803	0	10,694	9,482		
NPV:	0	14	1,077	0	1,091	1,637	463	3,799	0	5,899	4,809		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					5.41					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Lighting Conditioned Space							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	112	0	63	0	174	289	0	0	289	(114)	(114)
2016	338	0	63	0	401	295	0	0	295	106	(16)
2017	567	0	63	0	630	303	0	0	303	327	268
2018	814	0	63	0	877	310	0	0	310	567	727
2019	957	0	0	0	957	0	0	0	0	957	1,448
2020	985	0	0	0	985	0	0	0	0	985	2,139
2021	1,002	0	0	0	1,002	0	0	0	0	1,002	2,794
2022	1,024	0	0	0	1,024	0	0	0	0	1,024	3,417
2023	1,050	0	0	0	1,050	0	0	0	0	1,050	4,013
2024	1,078	0	0	0	1,078	0	0	0	0	1,078	4,583
2025	1,097	0	0	0	1,097	0	0	0	0	1,097	5,124
2026	1,114	0	0	0	1,114	0	0	0	0	1,114	5,634
2027	1,128	0	0	0	1,128	0	0	0	0	1,128	6,117
2028	1,148	0	0	0	1,148	0	0	0	0	1,148	6,574
2029	1,174	0	0	0	1,174	0	0	0	0	1,174	7,009
NOMINAL	13,589	0	250	0	13,839	1,196	0	0	1,196	12,643	
NPV:	7,861	0	226	0	8,086	1,077	0	0	1,077	7,009	
In service year of gen unit:			2019		7.509754						
Discount rate:			0.0734								

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Lighting Conditioned Space								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	4	63	63	0	130	53	0	0	0	53	(77)	(77)
2016	0	4	63	192	0	258	145	47	0	0	192	(66)	(139)
2017	0	4	63	323	0	390	218	48	0	0	266	(123)	(246)
2018	0	4	63	457	0	524	330	49	0	0	379	(144)	(362)
2019	0	0	0	528	0	528	627	51	0	0	677	149	(250)
2020	0	0	0	533	0	533	663	52	0	0	715	182	(122)
2021	0	0	0	538	0	538	707	53	0	0	760	222	23
2022	0	0	0	544	0	544	747	55	0	0	801	258	180
2023	0	0	0	549	0	549	781	56	0	0	838	288	344
2024	0	0	0	555	0	555	832	57	0	0	889	335	521
2025	0	0	0	560	0	560	885	59	0	0	944	384	710
2026	0	0	0	566	0	566	918	61	0	0	978	413	899
2027	0	0	0	571	0	571	955	62	0	0	1,017	446	1090
2028	0	0	0	577	0	577	996	64	0	0	1,059	482	1282
2029	0	0	0	583	0	583	1,058	65	0	0	1,124	541	1482
NOMINAL	0	16	250	7,139	0	7,405	9,915	779	0	0	10,694	3,289	
NPV:	0	14	226	4,177	0	4,417	5,436	463	0	0	5,899	1,482	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.34				

Program: Lighting Non-Conditioned Space

Program Start Date: January 1991

Program Description

The Lighting Non-Conditioned Space Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing energy efficient outdoor lighting technology and systems or in non-conditioned spaces to help reduce their energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will provide a rebate to customers who install qualifying non-conditioned spaces lighting systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	52.930 kW
Winter Demand:	52.930 kW
Annual Energy:	407,425 kWh

Program Costs

Rebate: \$0.075 per Watt reduction.

The estimated administrative cost per participant is \$150.

Program Monitoring and Evaluation

Data necessary to substantiate the kW and kWh savings as well as the demand coincidence will be contained on the customer's rebate analysis worksheet that accompanies the rebate application.

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: LIGHTING NON-CONDITIONED SPACE					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	75,300	75,158	5	0.0%	5
2016	76,350	76,203	5	0.0%	10
2017	77,348	77,196	5	0.0%	15
2018	78,317	78,160	5	0.0%	20
2019	79,282	79,120	5	0.0%	25
2020	80,255	80,083	10	0.0%	35
2021	81,224	81,042	10	0.1%	45
2022	82,178	81,986	10	0.1%	55
2023	83,120	82,918	10	0.1%	65
2024	84,014	83,802	10	0.1%	75

* Previous participation levels not included.

PROGRAM NAME: LIGHTING NON-CONDITIONED SPACE

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	407,425	52.930	52.930	2.037	0.265	0.265
2016	407,425	52.930	52.930	4.074	0.529	0.529
2017	407,425	52.930	52.930	6.111	0.794	0.794
2018	407,425	52.930	52.930	8.149	1.059	1.059
2019	407,425	52.930	52.930	10.186	1.323	1.323
2020	407,425	52.930	52.930	14.260	1.853	1.853
2021	407,425	52.930	52.930	18.334	2.382	2.382
2022	407,425	52.930	52.930	22.408	2.911	2.911
2023	407,425	52.930	52.930	26.483	3.440	3.440
2024	407,425	52.930	52.930	30.557	3.970	3.970

PROGRAM NAME: LIGHTING NON-CONDITIONED SPACE

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	431,056	56.370	56.370	2.155	0.282	0.282
2016	431,056	56.370	56.370	4.311	0.564	0.564
2017	431,056	56.370	56.370	6.466	0.846	0.846
2018	431,056	56.370	56.370	8.621	1.127	1.127
2019	431,056	56.370	56.370	10.776	1.409	1.409
2020	431,056	56.370	56.370	15.087	1.973	1.973
2021	431,056	56.370	56.370	19.398	2.537	2.537
2022	431,056	56.370	56.370	23.708	3.100	3.100
2023	431,056	56.370	56.370	28.019	3.664	3.664
2024	431,056	56.370	56.370	32.329	4.228	4.228

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Lighting Non-Conditioned Space				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	52.930	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	58.602	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	429.773	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	407.425	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	5	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	150.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	83268.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	0.61	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	196.95	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	3971.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	1.03	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Lighting Non-Conditioned Space									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
						BENEFITS	BENEFITS					
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	416	0	417	0	0	43	0	43	(374)	(374)
2016	0	1	426	0	427	0	23	120	0	143	(284)	(639)
2017	0	1	437	0	437	0	24	179	0	203	(234)	(842)
2018	0	1	447	0	448	0	25	272	0	296	(152)	(964)
2019	0	0	0	0	0	121	25	327	0	473	473	(608)
NOMINAL	0	3	1,726	0	1,729	121	97	940	0	1,158	-571	
NPV:	0	3	1,554	0	1,557	91	81	776	0	948	-608	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				0.61					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Lighting Non-Conditioned Space							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN										
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	CUSTOMER	CUSTOMER				CUMULATIVE
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	NET BENEFITS
2015	82	0	20	0	102	416	0	0	416	(315)	(315)
2016	247	0	20	0	267	426	0	0	426	(160)	(463)
2017	414	0	20	0	433	437	0	0	437	(3)	(466)
2018	595	0	20	0	615	447	0	0	447	168	(331)
2019	700	0	0	0	700	0	0	0	0	700	197
NOMINAL	2,037	0	79	0	2,117	1,726	0	0	1,726	391	
NPV:	1,679	0	72	0	1,751	1,554	0	0	1,554	197	
In service year of gen unit:			2019		1.1267495						
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Lighting Non-Conditioned Space									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED					NET	CUMULATIVE	
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED	
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET	
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	1	20	42	0	62	43	0	0	0	43	(19)	(19)	
2016	0	1	20	126	0	147	120	23	0	0	143	(4)	(23)	
2017	0	1	20	213	0	234	179	24	0	0	203	(30)	(49)	
2018	0	1	20	301	0	322	272	25	0	0	296	(26)	(70)	
2019	0	0	0	348	0	348	447	25	0	0	473	125	24	
NOMINAL	0	3	79	1,030	0	1,112	1,061	97	0	0	1,158	46		
NPV:	0	3	72	850	0	924	867	81	0	0	948	24		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.03					

Program: Lighting Occupancy Sensors

Program Start Date: March 2008

Program Description

The Lighting Occupancy Sensors Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing lighting occupancy sensors to efficiently control lighting systems to help reduce their energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will provide a rebate to customers who install qualifying occupancy sensors for lighting systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	24.840 kW
Winter Demand:	19.490 kW
Annual Energy:	27,772 kWh

Program Costs

Rebate: \$20.00 per qualifying occupancy sensor.

The estimated administrative cost per participant is \$179.

Program Monitoring and Evaluation

Data necessary to substantiate the kW and kWh savings as well as the demand coincidence will be contained on the customer's rebate analysis worksheet that accompanies the rebate application. Time of use sampling with data loggers to confirm operating hours and kWh estimates may be used.

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: LIGHTING OCCUPANCY SENSORS

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,087	15	0.0%	15
2016	76,350	76,122	15	0.0%	30
2017	77,348	77,105	15	0.1%	45
2018	78,317	78,059	15	0.1%	60
2019	79,282	79,009	15	0.1%	75
2020	80,255	79,967	15	0.1%	90
2021	81,224	80,921	15	0.1%	105
2022	82,178	81,860	15	0.1%	120
2023	83,120	82,787	15	0.2%	135
2024	84,014	83,666	15	0.2%	150

* Previous participation levels not included.

PROGRAM NAME: LIGHTING OCCUPANCY SENSORS						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	27,772	19.490	24.840	0.417	0.292	0.373
2016	27,772	19.490	24.840	0.833	0.585	0.745
2017	27,772	19.490	24.840	1.250	0.877	1.118
2018	27,772	19.490	24.840	1.666	1.169	1.490
2019	27,772	19.490	24.840	2.083	1.462	1.863
2020	27,772	19.490	24.840	2.499	1.754	2.236
2021	27,772	19.490	24.840	2.916	2.046	2.608
2022	27,772	19.490	24.840	3.333	2.339	2.981
2023	27,772	19.490	24.840	3.749	2.631	3.353
2024	27,772	19.490	24.840	4.166	2.924	3.726

PROGRAM NAME: LIGHTING OCCUPANCY SENSORS

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	29,383	20.757	26.455	0.441	0.311	0.397
2016	29,383	20.757	26.455	0.881	0.623	0.794
2017	29,383	20.757	26.455	1.322	0.934	1.190
2018	29,383	20.757	26.455	1.763	1.245	1.587
2019	29,383	20.757	26.455	2.204	1.557	1.984
2020	29,383	20.757	26.455	2.644	1.868	2.381
2021	29,383	20.757	26.455	3.085	2.179	2.778
2022	29,383	20.757	26.455	3.526	2.491	3.175
2023	29,383	20.757	26.455	3.967	2.802	3.571
2024	29,383	20.757	26.455	4.407	3.114	3.968

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Lighting Occupancy Sensors				PAGE 1 OF 1	
				RUN DATE:	March 9, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
(1) CUSTOMER KW REDUCTION AT THE METER	24.840	KW /CUST	IV.	(1) BASE YEAR	2015
(2) GENERATOR KW REDUCTION PER CUSTOMER	25.642	KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
(3) KW LINE LOSS PERCENTAGE	7.0	%	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
(4) GENERATION KWH REDUCTION PER CUSTOMER	29.295	KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
(5) KWH LINE LOSS PERCENTAGE	5.2	%	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
(6) GROUP LINE LOSS MULTIPLIER	1		IV.	(6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV.	(7) GEN., TRAN., & DIST COST ESCALATION RATE	3.0 %
(8)* CUSTOMER KWH REDUCTION AT METER	27.772	KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
ECONOMIC LIFE & K FACTORS			IV.	(9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
(1) STUDY PERIOD FOR CONSERVATION PROGRAM	12	YEARS	IV.	(10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
(2) GENERATOR ECONOMIC LIFE	25	YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
(3) T & D ECONOMIC LIFE	25	YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE	2.4 %
(4) K FACTOR FOR GENERATION	1.4625		IV.	(13) AVOIDED GEN. UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
(5) K FACTOR FOR T & D	1.4625		IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV.	(15) GENERATOR CAPACITY FACTOR	13.2 %
UTILITY & CUSTOMER COSTS			IV.	(16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
(1) UTILITY NONRECURRING COST PER CUSTOMER	179.00	\$/CUST	IV.	(17) AVOIDED GEN. UNIT FUEL ESCALATION RATE	5.21 %
(2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV.	(18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
(3) UTILITY COST ESCALATION RATE	2.4	%	IV.	(19)* CAPACITY COST ESCALATION RATE	0 %
(4) CUSTOMER EQUIPMENT COST	4000.00	\$/CUST		NON-FUEL ENERGY AND DEMAND CHARGES	
(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V.	(1) NON-FUEL COST IN CUSTOMER BILL	2.596 CENTS/KWH
(6) CUSTOMER O & M COST	0	\$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE	1 %
(7) CUSTOMER O & M ESCALATION RATE	2.4	%	V.	(3) CUSTOMER DEMAND CHARGE PER KW	9.640 \$/KW/MO
(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE	1 %
(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
(10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR		FACTOR FOR CUSTOMER BILL	1.00
(11)* SUPPLY COSTS ESCALATION RATE	0	%			
(12)* UTILITY DISCOUNT RATE	0.0734				
(13)* UTILITY AFUDC RATE	0.0645			CALCULATED BENEFITS AND COSTS	
(14)* UTILITY NON RECURRING REBATE/INCENTIVE	1260.00	\$/CUST		(1)* TRC TEST - BENEFIT/COST RATIO	6.96
(15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR		(2)* PARTICIPANT NET BENEFITS (NPV)	1,831.67
(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%		(3)* RIM TEST - BENEFIT/COST RATIO	1.04

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Lighting Occupancy Sensors									Page 1 of 1
												March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
						BENEFITS	BENEFITS					
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	3	60	0	63	0	0	9	0	9	(54)	(54)
2016	0	3	61	0	64	0	32	24	0	57	(7)	(61)
2017	0	3	63	0	66	0	33	37	0	70	4	(57)
2018	0	3	64	0	67	0	34	56	0	90	22	(39)
2019	0	0	0	0	0	159	35	67	0	260	260	157
2020	0	0	0	0	0	164	36	72	0	271	271	347
2021	0	0	0	0	0	171	37	77	0	285	285	534
2022	0	0	0	0	0	178	38	82	0	298	298	715
2023	0	0	0	0	0	185	39	86	0	310	310	891
2024	0	0	0	0	0	191	40	93	0	324	324	1,063
2025	0	0	0	0	0	200	41	100	0	341	341	1,231
2026	0	0	0	0	0	210	42	103	0	355	355	1,394
NOMINAL	0	11	249	0	260	1,458	406	807	0	2,671	2,411	
NPV:	0	10	224	0	234	856	267	505	0	1,628	1,394	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				6.96					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Lighting Occupancy Sensors							Page 1 of 1
											March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)
2015	35	0	19	0	54	60	0	0	60	(6)	(6)
2016	106	0	19	0	125	61	0	0	61	64	53
2017	179	0	19	0	197	63	0	0	63	135	170
2018	254	0	19	0	273	64	0	0	64	209	339
2019	297	0	0	0	297	0	0	0	0	297	563
2020	303	0	0	0	303	0	0	0	0	303	775
2021	307	0	0	0	307	0	0	0	0	307	976
2022	312	0	0	0	312	0	0	0	0	312	1,166
2023	318	0	0	0	318	0	0	0	0	318	1,346
2024	324	0	0	0	324	0	0	0	0	324	1,517
2025	329	0	0	0	329	0	0	0	0	329	1,679
2026	333	0	0	0	333	0	0	0	0	333	1,832
NOMINAL	3,096	0	76	0	3,171	249	0	0	249	2,922	
NPV:	1,987	0	68	0	2,056	224	0	0	224	1,832	
In service year of gen unit:			2019		9.1794695						
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM:	Lighting Occupancy Sensors								Page 1 of 1
														March 9, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT	AVOIDED				NET BENEFITS	CUMULATIVE DISCOUNTED	
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS		REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	NET TO ALL CUSTOMERS	NET BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	3	19	27	0	49	9	0	0	0	9	(40)	(40)	
2016	0	3	19	82	0	103	24	32	0	0	57	(47)	(83)	
2017	0	3	19	138	0	159	37	33	0	0	70	(89)	(161)	
2018	0	3	19	194	0	216	56	34	0	0	90	(127)	(263)	
2019	0	0	0	224	0	224	225	35	0	0	260	36	(236)	
2020	0	0	0	227	0	227	235	36	0	0	271	45	(205)	
2021	0	0	0	229	0	229	248	37	0	0	285	56	(168)	
2022	0	0	0	231	0	231	260	38	0	0	298	67	(127)	
2023	0	0	0	234	0	234	271	39	0	0	310	76	(84)	
2024	0	0	0	236	0	236	285	40	0	0	324	89	(37)	
2025	0	0	0	238	0	238	300	41	0	0	341	103	14	
2026	0	0	0	241	0	241	314	42	0	0	355	115	66	
NOMINAL	0	11	76	2,300	0	2,387	2,265	406	0	0	2,671	284		
NPV:	0	10	68	1,483	0	1,561	1,361	267	0	0	1,628	66		
Discount rate:			0.0734			Benefit/Cost Ratio - [col (12)/col (7)]:				1.04				

Program: Commercial Load Management

Program Start Date: January 1988

Program Description

The Commercial Load Management Program is intended to help alter Tampa Electric's system load curve by reducing summer and winter demand peaks. The goal is to offer customer incentives for allowing the installation and control of load management control equipment on specific technologies to reduce Tampa Electric's weather sensitive peak demand. Customers that participate in this program choose whether to have the technology controlled either interrupted for the entire control period or cycled during the control period. Tampa Electric will provide a monthly incentive credit to customers participating in this program.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected. Demand reduction for the extended control commercial customers is continuously metered. Demand reduction for cyclic control customers is determined at time of installation either through equipment performance evaluation or calculations performed by the company using the nameplate electrical capacity of the equipment. The analysis yielded the following expected savings per customer participant:

The average demand reduction per customer is as follows:

Summer @ 5:00 P.M. and 91°F in June
Winter @ 8:00 A.M. and 31°F in January

	<u>Cyclic Control</u>	<u>Extended Control</u>
Summer Demand:	13.200 kW	92.000 kW
Winter Demand:	0.000 kW	60.000 kW
Annual Energy:	0.000 kWh	0.000 kWh

Program Costs

Incentive: Cyclic control receives \$3.00 per kW demand reduction per month during the summer; extended control receives \$3.50 per kW demand reduction per month annually. Both incentives are applied to the customer's monthly bill.

Incentive: \$265 recurring annual average per cyclic participant.

Incentive: \$3,776 recurring annual average per extended participant.

The estimated annual recurring administrative cost per participant is \$103.

The estimated one time administrative, installation and setup cost is \$820.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - CYCLIC					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,294	1	0.0%	1
2016	76,350	76,349	1	0.0%	2
2017	77,348	77,346	1	0.0%	3
2018	78,317	78,314	1	0.0%	4
2019	79,282	79,278	1	0.0%	5
2020	80,255	80,250	1	0.0%	6
2021	81,224	81,218	1	0.0%	7
2022	82,178	82,171	1	0.0%	8
2023	83,120	83,112	1	0.0%	9
2024	84,014	84,005	1	0.0%	10

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - CYCLIC						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	0	0.000	13.200	0.000	0.000	0.013
2016	0	0.000	13.200	0.000	0.000	0.026
2017	0	0.000	13.200	0.000	0.000	0.040
2018	0	0.000	13.200	0.000	0.000	0.053
2019	0	0.000	13.200	0.000	0.000	0.066
2020	0	0.000	13.200	0.000	0.000	0.079
2021	0	0.000	13.200	0.000	0.000	0.092
2022	0	0.000	13.200	0.000	0.000	0.106
2023	0	0.000	13.200	0.000	0.000	0.119
2024	0	0.000	13.200	0.000	0.000	0.132

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - CYCLIC						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	0	0.000	14.058	0.000	0.000	0.014
2016	0	0.000	14.058	0.000	0.000	0.028
2017	0	0.000	14.058	0.000	0.000	0.042
2018	0	0.000	14.058	0.000	0.000	0.056
2019	0	0.000	14.058	0.000	0.000	0.070
2020	0	0.000	14.058	0.000	0.000	0.084
2021	0	0.000	14.058	0.000	0.000	0.098
2022	0	0.000	14.058	0.000	0.000	0.112
2023	0	0.000	14.058	0.000	0.000	0.127
2024	0	0.000	14.058	0.000	0.000	0.141

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - EXTENDED					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,300	1	0.0%	1
2016	76,350	76,349	1	0.0%	2
2017	77,348	77,346	1	0.0%	3
2018	78,317	78,314	1	0.0%	4
2019	79,282	79,278	1	0.0%	5
2020	80,255	80,250	1	0.0%	6
2021	81,224	81,218	1	0.0%	7
2022	82,178	82,171	1	0.0%	8
2023	83,120	83,112	1	0.0%	9
2024	84,014	84,005	1	0.0%	10

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - EXTENDED						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	0	60.000	92.000	0.000	0.060	0.092
2016	0	60.000	92.000	0.000	0.120	0.184
2017	0	60.000	92.000	0.000	0.180	0.276
2018	0	60.000	92.000	0.000	0.240	0.368
2019	0	60.000	92.000	0.000	0.300	0.460
2020	0	60.000	92.000	0.000	0.360	0.552
2021	0	60.000	92.000	0.000	0.420	0.644
2022	0	60.000	92.000	0.000	0.480	0.736
2023	0	60.000	92.000	0.000	0.540	0.828
2024	0	60.000	92.000	0.000	0.600	0.920

PROGRAM NAME: COMMERCIAL LOAD MANAGEMENT - EXTENDED

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	0	63.900	97.980	0.000	0.064	0.098
2016	0	63.900	97.980	0.000	0.128	0.196
2017	0	63.900	97.980	0.000	0.192	0.294
2018	0	63.900	97.980	0.000	0.256	0.392
2019	0	63.900	97.980	0.000	0.320	0.490
2020	0	63.900	97.980	0.000	0.383	0.588
2021	0	63.900	97.980	0.000	0.447	0.686
2022	0	63.900	97.980	0.000	0.511	0.784
2023	0	63.900	97.980	0.000	0.575	0.882
2024	0	63.900	97.980	0.000	0.639	0.980

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Load Management - Cyclic				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	13.200	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	10.026	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	0	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	0.00	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	0.00	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	0	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	0.00	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	0.00	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	820.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	103	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	0.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	6.05	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	10.87	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	2.65	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	265.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

TOTAL RESOURCE COST TESTS												PSC FORM CE 2.3
PROGRAM: Commercial Load Management - Cyclic												Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2016	0	1	0	0	1	0	0	0	0	0	(1)	(2)
2017	0	1	0	0	1	0	0	0	0	0	(1)	(3)
2018	0	1	0	0	1	0	0	0	0	0	(1)	(4)
2019	0	0	0	0	0	7	0	0	0	7	6	1
2020	0	0	0	0	0	6	0	0	0	6	6	5
2021	0	0	0	0	0	6	0	0	0	6	6	9
2022	0	0	0	0	0	6	0	0	0	6	6	12
2023	0	0	0	0	0	6	0	0	0	6	6	15
2024	0	1	0	0	1	6	0	0	0	6	5	18
2025	0	1	0	0	1	6	0	0	0	6	5	21
2026	0	1	0	0	1	6	0	0	0	6	5	23
2027	0	1	0	0	1	6	0	0	0	6	5	26
2028	0	1	0	0	1	6	0	0	0	6	5	28
2029	0	1	0	0	1	6	0	0	0	6	5	30
2030	0	1	0	0	1	6	0	0	0	6	5	31
2031	0	1	0	0	1	6	0	0	0	6	5	33
2032	0	1	0	0	1	6	0	0	0	6	5	35
2033	0	1	0	0	1	6	0	0	0	6	5	36
2034	0	1	0	0	1	6	0	0	0	6	5	37
2035	0	1	0	0	1	6	0	0	0	6	5	39
2036	0	1	0	0	1	6	0	0	0	6	5	40
2037	0	1	0	0	1	6	0	0	0	6	5	41
2038	0	1	0	0	1	6	0	0	0	6	5	42
2039	0	1	0	0	1	6	0	0	0	6	5	43
NOMINAL	0	16	0	0	16	124	0	0	0	124	108	
NPV:	0	8	0	0	8	51	0	0	0	51	43	
Discount Rate	0.0734		Benefit/Cost Ratio - [col (11)/col (6)]:				6.05					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Commercial Load Management - Cyclic							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	1
2017	0	0	1	0	1	0	0	0	0	1	1
2018	0	0	1	0	1	0	0	0	0	1	2
2019	0	0	1	0	1	0	0	0	0	1	3
2020	0	0	1	0	1	0	0	0	0	1	3
2021	0	0	1	0	1	0	0	0	0	1	4
2022	0	0	1	0	1	0	0	0	0	1	5
2023	0	0	1	0	1	0	0	0	0	1	5
2024	0	0	1	0	1	0	0	0	0	1	6
2025	0	0	1	0	1	0	0	0	0	1	6
2026	0	0	1	0	1	0	0	0	0	1	7
2027	0	0	1	0	1	0	0	0	0	1	7
2028	0	0	1	0	1	0	0	0	0	1	8
2029	0	0	1	0	1	0	0	0	0	1	8
2030	0	0	1	0	1	0	0	0	0	1	9
2031	0	0	1	0	1	0	0	0	0	1	9
2032	0	0	1	0	1	0	0	0	0	1	9
2033	0	0	1	0	1	0	0	0	0	1	9
2034	0	0	1	0	1	0	0	0	0	1	10
2035	0	0	1	0	1	0	0	0	0	1	10
2036	0	0	1	0	1	0	0	0	0	1	10
2037	0	0	1	0	1	0	0	0	0	1	10
2038	0	0	1	0	1	0	0	0	0	1	11
2039	0	0	1	0	1	0	0	0	0	1	11
NOMINAL	0	0	24	0	24	0	0	0	0	24	
NPV:	0	0	11	0	11	0	0	0	0	11	
In service year of gen unit:			2019								
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5	
					PROGRAM: Commercial Load Management - Cyclic									Page 1 of 1	
														March 4, 2015	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)		
							AVOIDED					NET	CUMULATIVE		
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED		
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET		
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT		
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)		
2015	0	1	0	0	0	0	1	0	0	0	0	0	(1)	(1)	
2016	0	1	0	0	0	0	1	0	0	0	0	0	(1)	(2)	
2017	0	1	1	0	0	0	2	0	0	0	0	0	(2)	(4)	
2018	0	1	1	0	0	0	2	0	0	0	0	0	(2)	(6)	
2019	0	0	1	0	0	0	2	7	0	0	0	7	5	(2)	
2020	0	0	1	0	0	0	2	6	0	0	0	6	5	2	
2021	0	0	1	0	0	0	2	6	0	0	0	6	5	5	
2022	0	0	1	0	0	0	2	6	0	0	0	6	5	7	
2023	0	0	1	0	0	0	2	6	0	0	0	6	4	10	
2024	0	1	1	0	0	0	2	6	0	0	0	6	4	12	
2025	0	1	1	0	0	0	2	6	0	0	0	6	4	14	
2026	0	1	1	0	0	0	2	6	0	0	0	6	4	16	
2027	0	1	1	0	0	0	2	6	0	0	0	6	4	18	
2028	0	1	1	0	0	0	2	6	0	0	0	6	4	20	
2029	0	1	1	0	0	0	2	6	0	0	0	6	4	21	
2030	0	1	1	0	0	0	2	6	0	0	0	6	4	23	
2031	0	1	1	0	0	0	2	6	0	0	0	6	4	24	
2032	0	1	1	0	0	0	2	6	0	0	0	6	4	25	
2033	0	1	1	0	0	0	2	6	0	0	0	6	4	27	
2034	0	1	1	0	0	0	2	6	0	0	0	6	4	28	
2035	0	1	1	0	0	0	2	6	0	0	0	6	4	29	
2036	0	1	1	0	0	0	2	6	0	0	0	6	4	30	
2037	0	1	1	0	0	0	2	6	0	0	0	6	4	30	
2038	0	1	1	0	0	0	2	6	0	0	0	6	4	31	
2039	0	1	1	0	0	0	2	6	0	0	0	6	4	32	
NOMINAL	0	16	24	0	0	41	124	0	0	0	124	83			
NPV:	0	8	11	0	0	19	51	0	0	0	51	32			
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:					2.65					

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Load Management - Extended				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS		
I. (1) CUSTOMER KW REDUCTION AT THE METER	92.000	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	90.734	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	0	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	0.00	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	0.00	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	0	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4	%
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	0.00	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	0.00	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS			IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70	CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	820.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	103	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	0.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	CALCULATED BENEFITS AND COSTS		
III. (12)* UTILITY DISCOUNT RATE	0.0734		(1)* TRC TEST - BENEFIT/COST RATIO	54.87	
III. (13)* UTILITY AFUDC RATE	0.0645		(2)* PARTICIPANT NET BENEFITS (NPV)	154.83	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00	\$/CUST	(3)* RIM TEST - BENEFIT/COST RATIO	2.84	
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	3,776.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

TOTAL RESOURCE COST TESTS												PSC FORM CE 2.3
PROGRAM Commercial Load Management - Extended												Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2016	0	1	0	0	1	0	0	0	0	0	(1)	(2)
2017	0	1	0	0	1	0	0	0	0	0	(1)	(3)
2018	0	1	0	0	1	0	0	0	0	0	(1)	(4)
2019	0	0	0	0	0	59	0	0	0	59	59	40
2020	0	0	0	0	0	58	0	0	0	58	57	81
2021	0	0	0	0	0	57	0	0	0	57	56	118
2022	0	0	0	0	0	56	0	0	0	56	55	151
2023	0	0	0	0	0	55	0	0	0	55	54	182
2024	0	1	0	0	1	54	0	0	0	54	53	210
2025	0	1	0	0	1	53	0	0	0	53	53	236
2026	0	1	0	0	1	53	0	0	0	53	53	261
2027	0	1	0	0	1	53	0	0	0	53	53	283
2028	0	1	0	0	1	53	0	0	0	53	53	304
2029	0	1	0	0	1	53	0	0	0	53	52	323
2030	0	1	0	0	1	53	0	0	0	53	52	341
2031	0	1	0	0	1	53	0	0	0	53	52	358
2032	0	1	0	0	1	53	0	0	0	53	52	374
2033	0	1	0	0	1	52	0	0	0	52	52	388
2034	0	1	0	0	1	53	0	0	0	53	52	402
2035	0	1	0	0	1	53	0	0	0	53	52	414
2036	0	1	0	0	1	52	0	0	0	52	51	426
2037	0	1	0	0	1	52	0	0	0	52	51	437
2038	0	1	0	0	1	51	0	0	0	51	50	447
2039	0	1	0	0	1	52	0	0	0	52	51	456
NOMINAL	0	16	0	0	16	1,127	0	0	0	1,127	1,110	
NPV:	0	8	0	0	8	464	0	0	0	464	456	
Discount Rate	0.0734		Benefit/Cost Ratio - [col (11)/col (6)]:				54.87					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Commercial Load Management - Extended											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILL \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O & M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2015	0	0	2	0	2	0	0	0	0	2	2
2016	0	0	6	0	6	0	0	0	0	6	7
2017	0	0	9	0	9	0	0	0	0	9	15
2018	0	0	13	0	13	0	0	0	0	13	26
2019	0	0	15	0	15	0	0	0	0	15	37
2020	0	0	15	0	15	0	0	0	0	15	48
2021	0	0	15	0	15	0	0	0	0	15	58
2022	0	0	15	0	15	0	0	0	0	15	67
2023	0	0	15	0	15	0	0	0	0	15	76
2024	0	0	15	0	15	0	0	0	0	15	84
2025	0	0	15	0	15	0	0	0	0	15	91
2026	0	0	15	0	15	0	0	0	0	15	98
2027	0	0	15	0	15	0	0	0	0	15	104
2028	0	0	15	0	15	0	0	0	0	15	110
2029	0	0	15	0	15	0	0	0	0	15	116
2030	0	0	15	0	15	0	0	0	0	15	121
2031	0	0	15	0	15	0	0	0	0	15	126
2032	0	0	15	0	15	0	0	0	0	15	131
2033	0	0	15	0	15	0	0	0	0	15	135
2034	0	0	15	0	15	0	0	0	0	15	139
2035	0	0	15	0	15	0	0	0	0	15	143
2036	0	0	15	0	15	0	0	0	0	15	146
2037	0	0	15	0	15	0	0	0	0	15	149
2038	0	0	15	0	15	0	0	0	0	15	152
2039	0	0	15	0	15	0	0	0	0	15	155
NOMINAL	0	0	347	0	347	0	0	0	0	347	
NPV:	0	0	155	0	155	0	0	0	0	155	
In service year of gen unit: 2019											
Discount rate: 0.0734											

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Commercial Load Management - Extended								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	1	2	0	0	3	0	0	0	0	0	(3)	(3)
2016	0	1	6	0	0	7	0	0	0	0	0	(7)	(9)
2017	0	1	9	0	0	11	0	0	0	0	0	(11)	(18)
2018	0	1	13	0	0	14	0	0	0	0	0	(14)	(30)
2019	0	0	15	0	0	16	59	0	0	0	59	44	3
2020	0	0	15	0	0	16	58	0	0	0	58	42	33
2021	0	0	15	0	0	16	57	0	0	0	57	41	60
2022	0	0	15	0	0	16	56	0	0	0	56	40	84
2023	0	0	15	0	0	16	55	0	0	0	55	39	107
2024	0	1	15	0	0	16	54	0	0	0	54	38	127
2025	0	1	15	0	0	16	53	0	0	0	53	38	145
2026	0	1	15	0	0	16	53	0	0	0	53	38	163
2027	0	1	15	0	0	16	53	0	0	0	53	38	179
2028	0	1	15	0	0	16	53	0	0	0	53	38	194
2029	0	1	15	0	0	16	53	0	0	0	53	37	207
2030	0	1	15	0	0	16	53	0	0	0	53	37	220
2031	0	1	15	0	0	16	53	0	0	0	53	37	232
2032	0	1	15	0	0	16	53	0	0	0	53	37	243
2033	0	1	15	0	0	16	52	0	0	0	52	37	253
2034	0	1	15	0	0	16	53	0	0	0	53	37	263
2035	0	1	15	0	0	16	53	0	0	0	53	37	272
2036	0	1	15	0	0	16	52	0	0	0	52	36	280
2037	0	1	15	0	0	16	52	0	0	0	52	36	288
2038	0	1	15	0	0	16	51	0	0	0	51	35	295
2039	0	1	15	0	0	16	52	0	0	0	52	36	301
NOMINAL	0	16	347	0	0	364	1,127	0	0	0	1,127	763	
NPV:	0	8	155	0	0	163	464	0	0	0	464	301	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				2.84				

Program: Refrigeration Anti-Condensate Control

Program Start Date: March 2008

Program Description

The Refrigeration Anti-Condensate Control Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing energy efficient anti-condensate control technology for their refrigerated door heaters to help reduce their energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will provide a rebate to customers who install qualifying anti-condensate control systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using ITRON data for systems across all eligible commercial market segments and participants. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.802 kW
Winter Demand:	1.316 kW
Annual Energy:	12,933 kWh

Program Costs

Rebate: \$0.35 per linear foot of heat element that is controlled by qualifying anti-condensate control.

The estimated administrative cost per participant is \$75.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: REFRIGERATION ANTI-CONDENSATE CONTROL					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	1,883	1	0.0%	1
2016	76,350	1,909	1	0.0%	2
2017	77,348	1,934	2	0.2%	4
2018	78,317	1,958	2	0.3%	6
2019	79,282	1,982	3	0.5%	9
2020	80,255	2,006	3	0.6%	12
2021	81,224	2,031	3	0.7%	15
2022	82,178	2,054	4	0.9%	19
2023	83,120	2,078	4	1.1%	23
2024	84,014	2,100	4	1.3%	27

* Previous participation levels not included.

PROGRAM NAME: REFRIGERATION ANTI-CONDENSATE CONTROL						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	12,933	1.316	0.802	0.013	0.001	0.001
2016	12,933	1.316	0.802	0.026	0.003	0.002
2017	12,933	1.316	0.802	0.052	0.005	0.003
2018	12,933	1.316	0.802	0.078	0.008	0.005
2019	12,933	1.316	0.802	0.116	0.012	0.007
2020	12,933	1.316	0.802	0.155	0.016	0.010
2021	12,933	1.316	0.802	0.194	0.020	0.012
2022	12,933	1.316	0.802	0.246	0.025	0.015
2023	12,933	1.316	0.802	0.297	0.030	0.018
2024	12,933	1.316	0.802	0.349	0.036	0.022

PROGRAM NAME: REFRIGERATION ANTI-CONDENSATE CONTROL

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	13,683	1.402	0.854	0.014	0.001	0.001
2016	13,683	1.402	0.854	0.027	0.003	0.002
2017	13,683	1.402	0.854	0.055	0.006	0.003
2018	13,683	1.402	0.854	0.082	0.008	0.005
2019	13,683	1.402	0.854	0.123	0.013	0.008
2020	13,683	1.402	0.854	0.164	0.017	0.010
2021	13,683	1.402	0.854	0.205	0.021	0.013
2022	13,683	1.402	0.854	0.260	0.027	0.016
2023	13,683	1.402	0.854	0.315	0.032	0.020
2024	13,683	1.402	0.854	0.369	0.038	0.023

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Refrigeration Anti-condensate Control				PAGE 1 OF 1	
				RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	1.316	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	1.067	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	13,642	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	12,933	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	12	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	75.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	1613.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT		
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	1.00	
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%			
III. (12)* UTILITY DISCOUNT RATE	0.0734				
III. (13)* UTILITY AFUDC RATE	0.0645				
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	800.00	\$/CUST	CALCULATED BENEFITS AND COSTS		
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(1)* TRC TEST - BENEFIT/COST RATIO	2.94	
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(2)* PARTICIPANT NET BENEFITS (NPV)	37.14	
			(3)* RIM TEST - BENEFIT/COST RATIO	1.15	

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Refrigeration Anti-condensate Control									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET
						BENEFITS	BENEFITS					BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	2	0	2	0	0	0	0	0	(1)	(1)
2016	0	0	2	0	2	0	0	1	0	1	(1)	(2)
2017	0	0	3	0	4	0	0	1	0	2	(2)	(4)
2018	0	0	3	0	4	0	0	2	0	3	(1)	(5)
2019	0	0	0	0	0	1	0	3	0	4	4	(2)
2020	0	0	0	0	0	1	0	3	0	4	4	1
2021	0	0	0	0	0	1	0	4	0	4	4	4
2022	0	0	0	0	0	1	0	4	0	5	5	7
2023	0	0	0	0	0	1	0	4	0	5	5	10
2024	0	0	0	0	0	1	0	4	0	5	5	13
2025	0	0	0	0	0	1	0	5	0	6	6	15
2026	0	0	0	0	0	1	0	5	0	6	6	18
NOMINAL	0	0	10	0	11	6	2	37	0	44	34	
NPV:	0	0	9	0	9	3	1	23	0	27	18	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				2.94					

PARTICIPANT COSTS AND BENEFITS											PSC FORM CE 2.4
PROGRAM: Refrigeration Anti-condensate Control											Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SAVINGS IN PARTICIPANTS											CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	BILL \$ (000)	TAX CREDITS \$ (000)	UTILITY REBATES \$ (000)	OTHER BENEFITS \$ (000)	TOTAL BENEFITS \$ (000)	CUSTOMER EQUIPMENT COSTS \$ (000)	CUSTOMER O & M COSTS \$ (000)	OTHER COSTS \$ (000)	TOTAL COSTS \$ (000)	NET BENEFITS \$ (000)	NET BENEFITS \$ (000)
2015	0	0	1	0	1	2	0	0	2	(0)	(0)
2016	2	0	1	0	2	2	0	0	2	1	0
2017	3	0	2	0	5	3	0	0	3	1	1
2018	5	0	2	0	7	3	0	0	3	3	4
2019	6	0	0	0	6	0	0	0	0	6	9
2020	7	0	0	0	7	0	0	0	0	7	14
2021	7	0	0	0	7	0	0	0	0	7	18
2022	7	0	0	0	7	0	0	0	0	7	22
2023	7	0	0	0	7	0	0	0	0	7	26
2024	7	0	0	0	7	0	0	0	0	7	30
2025	7	0	0	0	7	0	0	0	0	7	34
2026	8	0	0	0	8	0	0	0	0	8	37
NOMINAL	66	0	5	0	71	10	0	0	10	61	
NPV:	42	0	4	0	46	9	0	0	9	37	
In service year of gen unit: 2019											5.1787521
Discount rate: 0.0734											

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Refrigeration Anti-condensate Control								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED GEN UNIT	AVOIDED				NET BENEFITS	CUMULATIVE DISCOUNTED
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	INCENTIVES	REVENUE LOSSES	OTHER COSTS	TOTAL COSTS	UNIT & FUEL BENEFITS	T & D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	TO ALL CUSTOMERS	NET BENEFIT
YEAR	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)	\$ (000)
2015	0	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2016	0	0	1	1	0	2	1	0	0	0	1	(1)	(1)
2017	0	0	2	1	0	3	1	0	0	0	2	(2)	(3)
2018	0	0	2	3	0	4	2	0	0	0	3	(2)	(4)
2019	0	0	0	3	0	3	4	0	0	0	4	1	(4)
2020	0	0	0	3	0	3	4	0	0	0	4	1	(3)
2021	0	0	0	3	0	3	4	0	0	0	4	1	(2)
2022	0	0	0	3	0	3	5	0	0	0	5	2	(1)
2023	0	0	0	3	0	3	5	0	0	0	5	2	(0)
2024	0	0	0	3	0	3	5	0	0	0	5	2	1
2025	0	0	0	3	0	3	5	0	0	0	6	2	2
2026	0	0	0	3	0	3	6	0	0	0	6	3	3
NOMINAL	0	0	5	30	0	36	42	2	0	0	44	9	
NPV:	0	0	4	19	0	24	26	1	0	0	27	3	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.15				

Program: Standby Generator

Program Start Date: January 1991

Program Description

The Standby Generator Program is designed to utilize the emergency generation capacity of commercial/industrial facilities in order to reduce weather sensitive peak demand. Tampa Electric provides the participating customers a 30-minute notice that their generation will be required. This allows customers time to start generators and arrange for orderly transfer of load. Tampa Electric meters and issues monthly credits for that portion of the generator's output that could serve normal building load after the notification time. Normal building load is defined as load (type, amount and time duration) that would have been served by Tampa Electric if the emergency generator did not operate. Under no circumstances will the generator deliver power to Tampa Electric's grid. Under the Environmental Protection Agency's rules, Tampa Electric classifies the Standby Generator Program as a non-emergency program.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected. The analysis yielded the following expected savings per customer participant:

Summer Demand:	485.50 kW
Winter Demand:	485.50 kW
Annual Energy:	48,550 kWh

Program Costs

Incentive: \$29,995 recurring annual average cost per current participant (based upon \$4.75 per qualifying kW transferred).

The estimated annual recurring administrative cost per participant is \$386.

The estimated one time administrative, installation and setup cost per participant is \$6,304.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: STANDBY GENERATOR

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	258	1	0.4%	1
2016	76,350	262	1	0.8%	2
2017	77,348	265	1	1.1%	3
2018	78,317	269	1	1.5%	4
2019	79,282	273	1	1.8%	5
2020	80,255	276	1	2.2%	6
2021	81,224	280	1	2.5%	7
2022	82,178	283	1	2.8%	8
2023	83,120	287	1	3.1%	9
2024	84,014	290	1	3.4%	10

* Previous participation levels not included.

PROGRAM NAME: STANDBY GENERATOR

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	48,550	485.500	485.500	0.049	0.486	0.486
2016	48,550	485.500	485.500	0.097	0.971	0.971
2017	48,550	485.500	485.500	0.146	1.457	1.457
2018	48,550	485.500	485.500	0.194	1.942	1.942
2019	48,550	485.500	485.500	0.243	2.428	2.428
2020	48,550	485.500	485.500	0.291	2.913	2.913
2021	48,550	485.500	485.500	0.340	3.399	3.399
2022	48,550	485.500	485.500	0.388	3.884	3.884
2023	48,550	485.500	485.500	0.437	4.370	4.370
2024	48,550	485.500	485.500	0.486	4.855	4.855

PROGRAM NAME: STANDBY GENERATOR

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	51,366	517.058	517.058	0.051	0.517	0.517
2016	51,366	517.058	517.058	0.103	1.034	1.034
2017	51,366	517.058	517.058	0.154	1.551	1.551
2018	51,366	517.058	517.058	0.205	2.068	2.068
2019	51,366	517.058	517.058	0.257	2.585	2.585
2020	51,366	517.058	517.058	0.308	3.102	3.102
2021	51,366	517.058	517.058	0.360	3.619	3.619
2022	51,366	517.058	517.058	0.411	4.136	4.136
2023	51,366	517.058	517.058	0.462	4.654	4.654
2024	51,366	517.058	517.058	0.514	5.171	5.171

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Standby Generator			PAGE 1 OF 1	
			RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	485.500	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	537.527	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	51.213	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	0.00 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	0.00 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN. & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	48.550	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	0.00 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	0.00 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	6304.00	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	386	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	0.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596 CENTS/KWH
III. (6) CUSTOMER O & M COST	4985	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.00
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	29995.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	9.41
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	13.36
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	13.73

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Standby Generator										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
													CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					DISCOUNTED
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET		NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS		BENEFITS
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	6	2	0	9	0	0	1	0	1	(8)		(8)
2016	0	7	8	0	15	0	0	3	0	3	(12)		(19)
2017	0	8	13	0	21	0	0	4	0	4	(16)		(33)
2018	0	8	19	0	27	0	0	6	0	6	(20)		(50)
2019	0	2	22	0	24	351	0	8	0	359	335		203
2020	0	2	22	0	24	343	0	8	0	352	327		432
2021	0	2	23	0	25	337	0	9	0	346	321		642
2022	0	2	24	0	25	331	0	10	0	340	315		834
2023	0	2	24	0	26	325	0	10	0	335	309		1,009
2024	0	2	25	0	27	319	0	11	0	330	303		1,169
2025	0	2	25	0	27	316	0	12	0	328	301		1,317
2026	0	2	26	0	28	316	0	12	0	328	300		1,455
2027	0	2	27	0	29	315	0	12	0	328	299		1,583
2028	0	2	27	0	29	315	0	13	0	328	299		1,702
2029	0	2	28	0	30	313	0	14	0	327	297		1,812
2030	0	2	28	0	31	313	0	14	0	328	297		1,914
2031	0	2	29	0	31	313	0	15	0	328	297		2,010
2032	0	2	30	0	32	311	0	16	0	328	295		2,098
2033	0	2	31	0	33	310	0	17	0	327	294		2,181
2034	0	2	31	0	34	312	0	17	0	329	295		2,257
2035	0	2	32	0	35	312	0	19	0	331	296		2,329
2036	0	3	33	0	35	308	0	20	0	328	292		2,395
2037	0	3	34	0	36	308	0	22	0	330	293		2,457
2038	0	3	34	0	37	302	0	23	0	326	288		2,514
2039	0	3	35	0	38	305	0	25	0	330	292		2,567
NOMINAL	0	75	632	0	707	6,674	0	322	0	6,996	6,289		
NPV:	0	44	262	0	305	2,751	0	121	0	2,872	2,567		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					9.41					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Standby Generator							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS										
	IN					CUSTOMER	CUSTOMER				CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	2	0	30	0	32	0	2	0	2	29	29
2016	5	0	30	0	35	0	8	0	8	27	54
2017	8	0	30	0	38	0	13	0	13	25	76
2018	12	0	30	0	42	0	19	0	19	23	94
2019	14	0	0	0	14	0	22	0	22	(8)	88
2020	14	0	0	0	14	0	22	0	22	(8)	82
2021	14	0	0	0	14	0	23	0	23	(9)	77
2022	15	0	0	0	15	0	24	0	24	(9)	71
2023	15	0	0	0	15	0	24	0	24	(9)	66
2024	16	0	0	0	16	0	25	0	25	(9)	62
2025	16	0	0	0	16	0	25	0	25	(9)	57
2026	16	0	0	0	16	0	26	0	26	(10)	53
2027	17	0	0	0	17	0	27	0	27	(10)	49
2028	17	0	0	0	17	0	27	0	27	(10)	45
2029	17	0	0	0	17	0	28	0	28	(10)	41
2030	18	0	0	0	18	0	28	0	28	(11)	37
2031	18	0	0	0	18	0	29	0	29	(11)	33
2032	19	0	0	0	19	0	30	0	30	(11)	30
2033	19	0	0	0	19	0	31	0	31	(11)	27
2034	20	0	0	0	20	0	31	0	31	(11)	24
2035	21	0	0	0	21	0	32	0	32	(11)	21
2036	22	0	0	0	22	0	33	0	33	(11)	19
2037	23	0	0	0	23	0	34	0	34	(10)	17
2038	25	0	0	0	25	0	34	0	34	(9)	15
2039	26	0	0	0	26	0	35	0	35	(9)	13
NOMINAL	409	0	120	0	529	0	632	0	632	-102	
NPV:	167	0	108	0	275	0	262	0	262	13	
In service year of gen unit:			2019		1.0510771						
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Standby Generator									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED GEN UNIT					NET	CUMULATIVE	
	INCREASED	UTILITY					UNIT & FUEL	AVOIDED				BENEFITS	DISCOUNTED	
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	BENEFITS	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET	
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS		BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	6	30	1	0	37	1	0	0	0	1	(36)	(36)	
2016	0	7	30	2	0	39	3	0	0	0	3	(36)	(70)	
2017	0	8	30	3	0	41	4	0	0	0	4	(37)	(101)	
2018	0	8	30	5	0	43	6	0	0	0	6	(36)	(131)	
2019	0	2	0	5	0	7	359	0	0	0	359	352	134	
2020	0	2	0	5	0	7	352	0	0	0	352	344	376	
2021	0	2	0	5	0	7	346	0	0	0	346	338	597	
2022	0	2	0	5	0	7	340	0	0	0	340	333	800	
2023	0	2	0	5	0	7	335	0	0	0	335	327	986	
2024	0	2	0	6	0	7	330	0	0	0	330	322	1156	
2025	0	2	0	6	0	8	328	0	0	0	328	320	1314	
2026	0	2	0	6	0	8	328	0	0	0	328	320	1461	
2027	0	2	0	6	0	8	328	0	0	0	328	320	1598	
2028	0	2	0	6	0	8	328	0	0	0	328	320	1725	
2029	0	2	0	6	0	8	327	0	0	0	327	319	1843	
2030	0	2	0	6	0	8	328	0	0	0	328	319	1954	
2031	0	2	0	6	0	8	328	0	0	0	328	320	2057	
2032	0	2	0	6	0	8	328	0	0	0	328	319	2152	
2033	0	2	0	6	0	8	327	0	0	0	327	319	2241	
2034	0	2	0	6	0	9	329	0	0	0	329	321	2325	
2035	0	2	0	6	0	9	331	0	0	0	331	322	2403	
2036	0	3	0	6	0	9	328	0	0	0	328	319	2475	
2037	0	3	0	6	0	9	330	0	0	0	330	321	2543	
2038	0	3	0	6	0	9	326	0	0	0	326	317	2605	
2039	0	3	0	6	0	9	330	0	0	0	330	321	2663	
NOMINAL	0	75	120	132	0	327	6,996	0	0	0	6,996	6,669		
NPV:	0	44	108	57	0	209	2,872	0	0	0	2,872	2,663		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				13.73					

Program: Thermal Energy Storage

Program Start Date: TBD

Program Description

The Commercial TES Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing off-peak air conditioning systems to help reduce their demand while reducing Tampa Electric's weather sensitive peak demand. Tampa Electric will provide a rebate to customers who install qualifying TES systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data previously collected from the company's Conservation Value Program. The analysis yielded the following expected savings per customer participant:

Summer Demand:	185.140 kW
Winter Demand:	0.000 kW
Annual Energy:	19,244 kWh

Program Costs

Rebate: \$200 per kW transferred.

The estimated administrative cost per participant is \$2,000.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: THERMAL ENERGY STORAGE					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	1,883	1	0.1%	1
2016	76,350	1,909	2	0.2%	3
2017	77,348	1,934	3	0.3%	6
2018	78,317	1,958	5	0.6%	11
2019	79,282	1,982	5	0.8%	16
2020	80,255	2,006	5	1.0%	21
2021	81,224	2,031	5	1.3%	26
2022	82,178	2,054	5	1.5%	31
2023	83,120	2,078	5	1.7%	36
2024	84,014	2,100	5	2.0%	41

* Previous participation levels not included.

PROGRAM NAME: THERMAL ENERGY STORAGE						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	19,244	0.000	185.140	0.019	0.000	0.185
2016	19,244	0.000	185.140	0.058	0.000	0.555
2017	19,244	0.000	185.140	0.115	0.000	1.111
2018	19,244	0.000	185.140	0.212	0.000	2.037
2019	19,244	0.000	185.140	0.308	0.000	2.962
2020	19,244	0.000	185.140	0.404	0.000	3.888
2021	19,244	0.000	185.140	0.500	0.000	4.814
2022	19,244	0.000	185.140	0.597	0.000	5.739
2023	19,244	0.000	185.140	0.693	0.000	6.665
2024	19,244	0.000	185.140	0.789	0.000	7.591

PROGRAM NAME: THERMAL ENERGY STORAGE

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	20,360	0.000	197.174	0.020	0.000	0.197
2016	20,360	0.000	197.174	0.061	0.000	0.592
2017	20,360	0.000	197.174	0.122	0.000	1.183
2018	20,360	0.000	197.174	0.224	0.000	2.169
2019	20,360	0.000	197.174	0.326	0.000	3.155
2020	20,360	0.000	197.174	0.428	0.000	4.141
2021	20,360	0.000	197.174	0.529	0.000	5.127
2022	20,360	0.000	197.174	0.631	0.000	6.112
2023	20,360	0.000	197.174	0.733	0.000	7.098
2024	20,360	0.000	197.174	0.835	0.000	8.084

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Thermal Energy Storage			PAGE 1 OF 1	
			RUN DATE:	March 4, 2015
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	185.140	KW /CUST	IV. (1) BASE YEAR	2015
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	140.616	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	20.300	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64 \$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92 \$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96 \$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0 %
I. (8)* CUSTOMER KWH REDUCTION AT METER	19.244	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95 \$/KW/YR
			IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
ECONOMIC LIFE & K FACTORS			IV. (10) TRANSMISSION FIXED O & M COST	2.92 \$/KW/YR
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69 \$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4 %
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180 CENTS/KWH
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4 %
II. (5) K FACTOR FOR T & D	1.4625		IV. (15) GENERATOR CAPACITY FACTOR	13.2 %
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0		IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
			IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21 %
			IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0 \$/KW/YR
UTILITY & CUSTOMER COSTS			IV. (19)* CAPACITY COST ESCALATION RATE	0 %
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	2000.00	\$/CUST		
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR		
III. (3) UTILITY COST ESCALATION RATE	2.4	%		
III. (4) CUSTOMER EQUIPMENT COST	110346.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596 CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1 %
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640 \$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1 %
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	FACTOR FOR CUSTOMER BILL	0.69
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%		
III. (12)* UTILITY DISCOUNT RATE	0.0734			
III. (13)* UTILITY AFUDC RATE	0.0645		CALCULATED BENEFITS AND COSTS	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	37028.00	\$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO	2.37
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV)	1,180.57
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%	(3)* RIM TEST - BENEFIT/COST RATIO	1.21

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Thermal Energy Storage									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
						BENEFITS	BENEFITS					
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	2	110	0	112	0	0	0	0	0	(112)	(112)
2016	0	4	226	0	230	0	29	2	0	31	(200)	(298)
2017	0	6	347	0	353	0	30	3	0	33	(321)	(576)
2018	0	11	592	0	603	0	30	6	0	37	(567)	(1,034)
2019	0	0	0	0	0	253	55	8	0	316	316	(796)
2020	0	0	0	0	0	247	55	9	0	311	311	(578)
2021	0	0	0	0	0	242	55	10	0	307	307	(378)
2022	0	0	0	0	0	238	54	10	0	303	303	(193)
2023	0	0	0	0	0	234	54	11	0	299	299	(23)
2024	0	0	0	0	0	229	54	12	0	296	296	133
2025	0	0	0	0	0	227	54	13	0	295	295	278
2026	0	0	0	0	0	227	54	13	0	295	295	413
2027	0	0	0	0	0	227	55	14	0	295	295	539
2028	0	0	0	0	0	227	55	14	0	295	295	657
2029	0	0	0	0	0	225	55	15	0	295	295	766
2030	0	0	0	0	0	225	55	16	0	296	296	868
2031	0	0	0	0	0	225	55	17	0	297	297	964
2032	0	0	0	0	0	224	55	18	0	297	297	1,053
2033	0	0	0	0	0	223	56	18	0	297	297	1,136
2034	0	0	0	0	0	224	56	19	0	299	299	1,214
2035	0	0	0	0	0	224	56	21	0	301	301	1,287
2036	0	0	0	0	0	221	57	22	0	300	300	1,355
2037	0	0	0	0	0	222	58	23	0	303	303	1,419
2038	0	0	0	0	0	217	59	26	0	301	301	1,478
2039	0	0	0	0	0	220	59	27	0	306	306	1,534
NOMINAL	0	23	1,276	0	1,299	4,802	1,256	346	0	6,404	5,105	
NPV:	0	20	1,101	0	1,121	1,980	548	128	0	2,655	1,534	
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:				2.37					

				PARTICIPANT COSTS AND BENEFITS							PSC FORM CE 2.4
				PROGRAM: Thermal Energy Storage							Page 1 of 1
											March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN										
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	CUSTOMER	CUSTOMER				CUMULATIVE
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	EQUIPMENT	O & M	OTHER	TOTAL	NET	DISCOUNTED
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	COSTS	COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
2015	8	0	37	0	45	110	0	0	110	(65)	(65)
2016	32	0	74	0	106	226	0	0	226	(120)	(177)
2017	74	0	111	0	185	347	0	0	347	(162)	(318)
2018	141	0	185	0	326	592	0	0	592	(267)	(533)
2019	184	0	0	0	184	0	0	0	0	184	(395)
2020	186	0	0	0	186	0	0	0	0	186	(264)
2021	188	0	0	0	188	0	0	0	0	188	(141)
2022	190	0	0	0	190	0	0	0	0	190	(25)
2023	193	0	0	0	193	0	0	0	0	193	84
2024	195	0	0	0	195	0	0	0	0	195	187
2025	197	0	0	0	197	0	0	0	0	197	285
2026	199	0	0	0	199	0	0	0	0	199	376
2027	201	0	0	0	201	0	0	0	0	201	462
2028	203	0	0	0	203	0	0	0	0	203	543
2029	206	0	0	0	206	0	0	0	0	206	619
2030	208	0	0	0	208	0	0	0	0	208	691
2031	210	0	0	0	210	0	0	0	0	210	759
2032	213	0	0	0	213	0	0	0	0	213	823
2033	216	0	0	0	216	0	0	0	0	216	883
2034	218	0	0	0	218	0	0	0	0	218	940
2035	221	0	0	0	221	0	0	0	0	221	993
2036	225	0	0	0	225	0	0	0	0	225	1,044
2037	228	0	0	0	228	0	0	0	0	228	1,092
2038	232	0	0	0	232	0	0	0	0	232	1,138
2039	235	0	0	0	235	0	0	0	0	235	1,181
NOMINAL	4,603	0	407	0	5,011	1,276	0	0	1,276	3,735	
NPV:	1,930	0	352	0	2,282	1,101	0	0	1,101	1,181	
In service year of gen unit:			2019		2.0721163						
Discount rate:			0.0734								

					RATE IMPACT TEST									PSC FORM CE 2.5
					PROGRAM: Thermal Energy Storage									Page 1 of 1
														March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
							AVOIDED					NET	CUMULATIVE	
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED	
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET	
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	2	37	8	0	47	0	0	0	0	0	(46)	(46)	
2016	0	4	74	31	0	109	2	29	0	0	31	(78)	(119)	
2017	0	6	111	70	0	188	3	30	0	0	33	(155)	(254)	
2018	0	11	185	134	0	330	6	30	0	0	37	(293)	(491)	
2019	0	0	0	175	0	175	261	55	0	0	316	141	(384)	
2020	0	0	0	177	0	177	256	55	0	0	311	134	(290)	
2021	0	0	0	178	0	178	252	55	0	0	307	128	(206)	
2022	0	0	0	180	0	180	248	54	0	0	303	123	(132)	
2023	0	0	0	182	0	182	245	54	0	0	299	117	(65)	
2024	0	0	0	184	0	184	241	54	0	0	296	112	(6)	
2025	0	0	0	186	0	186	240	54	0	0	295	109	48	
2026	0	0	0	187	0	187	240	54	0	0	295	107	97	
2027	0	0	0	189	0	189	240	55	0	0	295	106	142	
2028	0	0	0	191	0	191	241	55	0	0	295	104	183	
2029	0	0	0	193	0	193	240	55	0	0	295	102	221	
2030	0	0	0	195	0	195	241	55	0	0	296	101	256	
2031	0	0	0	197	0	197	242	55	0	0	297	100	288	
2032	0	0	0	199	0	199	242	55	0	0	297	98	317	
2033	0	0	0	201	0	201	242	56	0	0	297	96	344	
2034	0	0	0	203	0	203	243	56	0	0	299	96	369	
2035	0	0	0	205	0	205	245	56	0	0	301	96	393	
2036	0	0	0	207	0	207	243	57	0	0	300	93	414	
2037	0	0	0	209	0	209	245	58	0	0	303	94	433	
2038	0	0	0	211	0	211	243	59	0	0	301	90	451	
2039	0	0	0	213	0	213	247	59	0	0	306	93	468	
NOMINAL	0	23	407	4,306	0	4,737	5,148	1,256	0	0	6,404	1,667		
NPV:	0	20	352	1,815	0	2,187	2,107	548	0	0	2,655	468		
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.21					

Program: Commercial Wall Insulation

Program Start Date: March 2008

Program Description

The Commercial Wall Insulation Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing wall insulation to help reduce their energy consumption and demand while reducing Tampa Electric's weather sensitive peak demand. Wall insulation is designed to reduce demand and energy by decreasing the load on commercial/industrial HVAC equipment. Qualifying structures are eligible for a rebate based upon the total square footage of insulation installed in exterior walls adjacent to conditioned spaces. Certificates for participation will be issued through energy audits or by direct evaluation of the current building envelope.

Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Demand and energy savings were obtained using historical data collected from rebate submittals. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.500 kW
Winter Demand:	0.390 kW
Annual Energy:	682 kWh

Program Costs

Rebate: \$0.12 per square foot of installed qualifying insulation.

The estimated administrative cost per participant is \$88.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL WALL INSULATION					
	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	75,300	2	0.0%	2
2016	76,350	76,348	2	0.0%	4
2017	77,348	77,346	2	0.0%	6
2018	78,317	78,315	2	0.0%	8
2019	79,282	79,280	2	0.0%	10
2020	80,255	80,253	2	0.0%	12
2021	81,224	81,222	2	0.0%	14
2022	82,178	82,176	2	0.0%	16
2023	83,120	83,118	2	0.0%	18
2024	84,014	84,012	2	0.0%	20
* Previous participation levels not included.					

PROGRAM NAME: COMMERCIAL WALL INSULATION						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	682	0.390	0.500	0.001	0.001	0.001
2016	682	0.390	0.500	0.003	0.002	0.002
2017	682	0.390	0.500	0.004	0.002	0.003
2018	682	0.390	0.500	0.005	0.003	0.004
2019	682	0.390	0.500	0.007	0.004	0.005
2020	682	0.390	0.500	0.008	0.005	0.006
2021	682	0.390	0.500	0.010	0.005	0.007
2022	682	0.390	0.500	0.011	0.006	0.008
2023	682	0.390	0.500	0.012	0.007	0.009
2024	682	0.390	0.500	0.014	0.008	0.010

PROGRAM NAME: COMMERCIAL WALL INSULATION

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	722	0.415	0.533	0.001	0.001	0.001
2016	722	0.415	0.533	0.003	0.002	0.002
2017	722	0.415	0.533	0.004	0.002	0.003
2018	722	0.415	0.533	0.006	0.003	0.004
2019	722	0.415	0.533	0.007	0.004	0.005
2020	722	0.415	0.533	0.009	0.005	0.006
2021	722	0.415	0.533	0.010	0.006	0.007
2022	722	0.415	0.533	0.012	0.007	0.009
2023	722	0.415	0.533	0.013	0.007	0.010
2024	722	0.415	0.533	0.014	0.008	0.011

INPUT DATA - PART 1				PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Wall Insulation				PAGE 1 OF 1	
				RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES				AVOIDED GENERATOR, TRANS. & DIST COSTS	
I. (1) CUSTOMER KW REDUCTION AT THE METER	0.500	KW /CUST	IV. (1) BASE YEAR	2015	
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.515	KW GEN/CUST	IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2019	
I. (3) KW LINE LOSS PERCENTAGE	7.0	%	IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2016	
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	719	KWH/CUST/YR	IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	650.64	\$/KW
I. (5) KWH LINE LOSS PERCENTAGE	5.2	%	IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	11.92	\$/KW
I. (6) GROUP LINE LOSS MULTIPLIER	1		IV. (6) BASE YEAR DISTRIBUTION COST	57.96	\$/KW
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0	KWH/CUST/YR	IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	3.0	%
I. (8)* CUSTOMER KWH REDUCTION AT METER	682	KWH/CUST/YR	IV. (8) GENERATOR FIXED O & M COST	11.95	\$/KW/YR
ECONOMIC LIFE & K FACTORS				IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.4 %
II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	20	YEARS	IV. (10) TRANSMISSION FIXED O & M COST	2.92	\$/KW/YR
II. (2) GENERATOR ECONOMIC LIFE	25	YEARS	IV. (11) DISTRIBUTION FIXED O & M COST	11.69	\$/KW/YR
II. (3) T & D ECONOMIC LIFE	25	YEARS	IV. (12) T&D FIXED O&M ESCALATION RATE	2.4	%
II. (4) K FACTOR FOR GENERATION	1.4625		IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.180	CENTS/KWH
II. (5) K FACTOR FOR T & D	1.4625		IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.4	%
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1		IV. (15) GENERATOR CAPACITY FACTOR	13.2	%
UTILITY & CUSTOMER COSTS				IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.70 CENTS/KWH
III. (1) UTILITY NONRECURRING COST PER CUSTOMER	88.00	\$/CUST	IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	5.21	%
III. (2) UTILITY RECURRING COST PER CUSTOMER	0	\$/CUST/YR	IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0	\$/KW/YR
III. (3) UTILITY COST ESCALATION RATE	2.4	%	IV. (19)* CAPACITY COST ESCALATION RATE	0	%
III. (4) CUSTOMER EQUIPMENT COST	806.00	\$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES		
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4	%	V. (1) NON-FUEL COST IN CUSTOMER BILL	2.596	CENTS/KWH
III. (6) CUSTOMER O & M COST	0	\$/CUST/YR	V. (2) NON-FUEL ESCALATION RATE	1	%
III. (7) CUSTOMER O & M ESCALATION RATE	2.4	%	V. (3) CUSTOMER DEMAND CHARGE PER KW	9.640	\$/KW/MO
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0	\$/CUST	V. (4) DEMAND CHARGE ESCALATION RATE	1	%
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0	%	V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL	1.00	
III. (10)* INCREASED SUPPLY COSTS	0	\$/CUST/YR	CALCULATED BENEFITS AND COSTS		
III. (11)* SUPPLY COSTS ESCALATION RATE	0	%	(1)* TRC TEST - BENEFIT/COST RATIO	1.18	
III. (12)* UTILITY DISCOUNT RATE	0.0734		(2)* PARTICIPANT NET BENEFITS (NPV)	3.48	
III. (13)* UTILITY AFUDC RATE	0.0645		(3)* RIM TEST - BENEFIT/COST RATIO	1.04	
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	121.00	\$/CUST			
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00	\$/CUST/YR			
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0	%			

			TOTAL RESOURCE COST TESTS									PSC FORM CE 2.3
			PROGRAM: Commercial Wall Insulation									Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE DISCOUNTED
	INCREASED	UTILITY	PARTICIPANT					PROGRAM				NET
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
						BENEFITS	BENEFITS					
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	2	0	2	0	0	0	0	0	(2)	(2)
2016	0	0	2	0	2	0	0	0	0	0	(2)	(3)
2017	0	0	2	0	2	0	0	0	0	0	(2)	(5)
2018	0	0	2	0	2	0	0	0	0	0	(2)	(6)
2019	0	0	0	0	0	0	0	0	0	1	1	(6)
2020	0	0	0	0	0	0	0	0	0	1	1	(5)
2021	0	0	0	0	0	0	0	0	0	1	1	(4)
2022	0	0	0	0	0	0	0	0	0	1	1	(4)
2023	0	0	0	0	0	0	0	0	0	1	1	(3)
2024	0	0	0	0	0	1	0	0	0	1	1	(3)
2025	0	0	0	0	0	1	0	0	0	1	1	(3)
2026	0	0	0	0	0	1	0	0	0	1	1	(2)
2027	0	0	0	0	0	1	0	0	0	1	1	(2)
2028	0	0	0	0	0	1	0	0	0	1	1	(1)
2029	0	0	0	0	0	1	0	0	0	1	1	(1)
2030	0	0	0	0	0	1	0	0	0	1	1	(0)
2031	0	0	0	0	0	1	0	0	0	1	1	0
2032	0	0	0	0	0	1	0	0	0	1	1	0
2033	0	0	0	0	0	1	0	0	0	1	1	1
2034	0	0	0	0	0	1	0	0	0	1	1	1
NOMINAL	0	1	7	0	7	9	2	6	0	17	10	
NPV:	0	1	6	0	7	4	1	3	0	8	1	
Discount Rate	0.0734		Benefit/Cost Ratio - [col (11)/col (6)]:				1.18					

				PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
				PROGRAM: Commercial Wall Insulation								Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	SAVINGS											
	IN					CUSTOMER	CUSTOMER					CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL	NET		DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	BENEFITS		NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	0	0	0	2	0	0	2	(1)		(1)
2016	0	0	0	0	1	2	0	0	2	(1)		(2)
2017	1	0	0	0	1	2	0	0	2	(1)		(3)
2018	1	0	0	0	1	2	0	0	2	(1)		(4)
2019	1	0	0	0	1	0	0	0	0	1		(3)
2020	1	0	0	0	1	0	0	0	0	1		(2)
2021	1	0	0	0	1	0	0	0	0	1		(2)
2022	1	0	0	0	1	0	0	0	0	1		(1)
2023	1	0	0	0	1	0	0	0	0	1		(1)
2024	1	0	0	0	1	0	0	0	0	1		(0)
2025	1	0	0	0	1	0	0	0	0	1		0
2026	1	0	0	0	1	0	0	0	0	1		1
2027	1	0	0	0	1	0	0	0	0	1		1
2028	1	0	0	0	1	0	0	0	0	1		1
2029	1	0	0	0	1	0	0	0	0	1		2
2030	1	0	0	0	1	0	0	0	0	1		2
2031	1	0	0	0	1	0	0	0	0	1		3
2032	1	0	0	0	1	0	0	0	0	1		3
2033	1	0	0	0	1	0	0	0	0	1		3
2034	1	0	0	0	1	0	0	0	0	1		3
NOMINAL	17	0	1	0	18	7	0	0	7	12		
NPV:	9	0	1	0	9	6	0	0	6	3		
In service year of gen unit:			2019		1.5786821							
Discount rate:			0.0734									

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Commercial Wall Insulation								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	0	0	0	0	0	0	0	0	0	(0)	(0)
2016	0	0	0	0	0	0	1	0	0	0	0	(0)	(1)
2017	0	0	0	0	0	0	1	0	0	0	0	(1)	(1)
2018	0	0	0	1	0	1	0	0	0	0	0	(1)	(2)
2019	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2020	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2021	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2022	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2023	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2024	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2025	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2026	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2027	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2028	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2029	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2030	0	0	0	1	0	1	1	0	0	0	1	0	(0)
2031	0	0	0	1	0	1	1	0	0	0	1	1	(0)
2032	0	0	0	1	0	1	1	0	0	0	1	1	(0)
2033	0	0	0	1	0	1	1	0	0	0	1	1	0
2034	0	0	0	1	0	1	1	0	0	0	1	1	0
NOMINAL	0	1	1	12	0	14	15	2	0	0	17	4	
NPV:	0	1	1	6	0	8	7	1	0	0	8	0	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.04				

Program: Commercial Water Heating

Program Start Date: March 2008

Program Description

The Commercial Water Heating Program is designed to encourage commercial/industrial customers to make cost-effective improvements to existing facilities. The goal is to offer customer rebates for installing energy efficient water heating systems to help reduce their energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will provide a rebate to customers who install qualifying water heating systems.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Savings

Savings were determined using ITRON data for systems across all eligible commercial market segments and participants. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.631 kW
Winter Demand:	0.329 kW
Annual Energy:	4,735 kWh

Program Costs

Rebate: \$.0250 per Btu of qualifying water heating equipment.

The estimated administrative cost per participant is \$183.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: COMMERCIAL WATER HEATING

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	1,130	1	0.0%	1
2016	76,350	1,145	1	0.0%	2
2017	77,348	1,160	1	0.3%	3
2018	78,317	1,175	1	0.3%	4
2019	79,282	1,189	1	0.4%	5
2020	80,255	1,204	1	0.5%	6
2021	81,224	1,218	1	0.6%	7
2022	82,178	1,233	1	0.6%	8
2023	83,120	1,247	1	0.7%	9
2024	84,014	1,260	1	0.8%	10

* Previous participation levels not included.

PROGRAM NAME: COMMERCIAL WATER HEATING

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	4,735	0.329	0.631	0.005	0.000	0.001
2016	4,735	0.329	0.631	0.009	0.001	0.001
2017	4,735	0.329	0.631	0.014	0.001	0.002
2018	4,735	0.329	0.631	0.019	0.001	0.003
2019	4,735	0.329	0.631	0.024	0.002	0.003
2020	4,735	0.329	0.631	0.028	0.002	0.004
2021	4,735	0.329	0.631	0.033	0.002	0.004
2022	4,735	0.329	0.631	0.038	0.003	0.005
2023	4,735	0.329	0.631	0.043	0.003	0.006
2024	4,735	0.329	0.631	0.047	0.003	0.006

PROGRAM NAME: COMMERCIAL WATER HEATING						
AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	5,010	0.350	0.672	0.005	0.000	0.001
2016	5,010	0.350	0.672	0.010	0.001	0.001
2017	5,010	0.350	0.672	0.015	0.001	0.002
2018	5,010	0.350	0.672	0.020	0.001	0.003
2019	5,010	0.350	0.672	0.025	0.002	0.003
2020	5,010	0.350	0.672	0.030	0.002	0.004
2021	5,010	0.350	0.672	0.035	0.002	0.005
2022	5,010	0.350	0.672	0.040	0.003	0.005
2023	5,010	0.350	0.672	0.045	0.003	0.006
2024	5,010	0.350	0.672	0.050	0.004	0.007

INPUT DATA - PART 1			PSC FORM CE 1.1	
PROGRAM TITLE: Commercial Water Heating			PAGE 1 OF 1	
			RUN DATE: March 4, 2015	
PROGRAM DEMAND SAVINGS & LINE LOSSES			AVOIDED GENERATOR, TRANS. & DIST COSTS	
I.	(1) CUSTOMER KW REDUCTION AT THE METER	0.631 KW /CUST	IV.	(1) BASE YEAR 2015
I.	(2) GENERATOR KW REDUCTION PER CUSTOMER	0.594 KW GEN/CUST	IV.	(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT 2019
I.	(3) KW LINE LOSS PERCENTAGE	7.0 %	IV.	(3) IN-SERVICE YEAR FOR AVOIDED T & D 2016
I.	(4) GENERATION KWH REDUCTION PER CUSTOMER	4.995 KWH/CUST/YR	IV.	(4) BASE YEAR AVOIDED GENERATING UNIT COST 650.64 \$/KW
I.	(5) KWH LINE LOSS PERCENTAGE	5.2 %	IV.	(5) BASE YEAR AVOIDED TRANSMISSION COST 11.92 \$/KW
I.	(6) GROUP LINE LOSS MULTIPLIER	1	IV.	(6) BASE YEAR DISTRIBUTION COST 57.96 \$/KW
I.	(7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR	IV.	(7) GEN, TRAN, & DIST COST ESCALATION RATE 3.0 %
I.	(8)* CUSTOMER KWH REDUCTION AT METER	4,735 KWH/CUST/YR	IV.	(8) GENERATOR FIXED O & M COST 11.95 \$/KW/YR
ECONOMIC LIFE & K FACTORS			IV.	(9) GENERATOR FIXED O&M ESCALATION RATE 2.4 %
II.	(1) STUDY PERIOD FOR CONSERVATION PROGRAM	15 YEARS	IV.	(10) TRANSMISSION FIXED O & M COST 2.92 \$/KW/YR
II.	(2) GENERATOR ECONOMIC LIFE	25 YEARS	IV.	(11) DISTRIBUTION FIXED O & M COST 11.69 \$/KW/YR
II.	(3) T & D ECONOMIC LIFE	25 YEARS	IV.	(12) T&D FIXED O&M ESCALATION RATE 2.4 %
II.	(4) K FACTOR FOR GENERATION	1.4625	IV.	(13) AVOIDED GEN UNIT VARIABLE O & M COSTS 0.180 CENTS/KWH
II.	(5) K FACTOR FOR T & D	1.4625	IV.	(14) GENERATOR VARIABLE O&M COST ESCALATION RATE 2.4 %
	(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1	IV.	(15) GENERATOR CAPACITY FACTOR 13.2 %
UTILITY & CUSTOMER COSTS			IV.	(16) AVOIDED GENERATING UNIT FUEL COST 4.70 CENTS/KWH
III.	(1) UTILITY NONRECURRING COST PER CUSTOMER	183.00 \$/CUST	IV.	(17) AVOIDED GEN UNIT FUEL ESCALATION RATE 5.21 %
III.	(2) UTILITY RECURRING COST PER CUSTOMER	0 \$/CUST/YR	IV.	(18)* AVOIDED PURCHASE CAPACITY COST PER KW 0 \$/KW/YR
III.	(3) UTILITY COST ESCALATION RATE	2.4 %	IV.	(19)* CAPACITY COST ESCALATION RATE 0 %
III.	(4) CUSTOMER EQUIPMENT COST	1445.00 \$/CUST	NON-FUEL ENERGY AND DEMAND CHARGES	
III.	(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.4 %	V.	(1) NON-FUEL COST IN CUSTOMER BILL 2.596 CENTS/KWH
III.	(6) CUSTOMER O & M COST	0 \$/CUST/YR	V.	(2) NON-FUEL ESCALATION RATE 1 %
III.	(7) CUSTOMER O & M ESCALATION RATE	2.4 %	V.	(3) CUSTOMER DEMAND CHARGE PER KW 9.640 \$/KW/MO
III.	(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0 \$/CUST	V.	(4) DEMAND CHARGE ESCALATION RATE 1 %
III.	(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0 %	V.	(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT
III.	(10)* INCREASED SUPPLY COSTS	0 \$/CUST/YR	FACTOR FOR CUSTOMER BILL 1.00	
III.	(11)* SUPPLY COSTS ESCALATION RATE	0 %		
III.	(12)* UTILITY DISCOUNT RATE	0.0734		
III.	(13)* UTILITY AFUDC RATE	0.0645	CALCULATED BENEFITS AND COSTS	
III.	(14)* UTILITY NON RECURRING REBATE/INCENTIVE	500.00 \$/CUST	(1)* TRC TEST - BENEFIT/COST RATIO 1.54	
III.	(15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR	(2)* PARTICIPANT NET BENEFITS (NPV) 9.91	
III.	(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 %	(3)* RIM TEST - BENEFIT/COST RATIO 1.05	

			TOTAL RESOURCE COST TESTS										PSC FORM CE 2.3
			PROGRAM: Commercial Water Heating										Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	INCREASED	UTILITY	PARTICIPANT					PROGRAM					CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED	AVOIDED	FUEL	OTHER	TOTAL	NET	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	GEN UNIT	T & D	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS	
						BENEFITS	BENEFITS						
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	1	0	2	0	0	0	0	0	0	(2)	(2)
2016	0	0	1	0	2	0	0	0	0	0	0	(1)	(3)
2017	0	0	2	0	2	0	0	0	0	0	0	(1)	(4)
2018	0	0	2	0	2	0	0	1	0	1	0	(1)	(5)
2019	0	0	0	0	0	0	0	1	0	1	1	1	(4)
2020	0	0	0	0	0	0	0	1	0	1	1	1	(3)
2021	0	0	0	0	0	0	0	1	0	1	1	1	(2)
2022	0	0	0	0	0	0	0	1	0	1	1	1	(2)
2023	0	0	0	0	0	0	0	1	0	1	1	1	(1)
2024	0	0	0	0	0	0	0	1	0	1	1	1	(0)
2025	0	0	0	0	0	0	0	1	0	1	1	1	1
2026	0	0	0	0	0	0	0	1	0	2	2	2	1
2027	0	0	0	0	0	0	0	1	0	2	2	2	2
2028	0	0	0	0	0	0	0	1	0	2	2	2	3
2029	0	0	0	0	0	0	0	1	0	2	2	2	3
NOMINAL	0	1	6	0	7	3	1	13	0	17	10		
NPV:	0	1	5	0	6	2	1	7	0	9	3		
Discount Rate		0.0734	Benefit/Cost Ratio - [col (11)/col (6)]:					1.54					

				PARTICIPANT COSTS AND BENEFITS								PSC FORM CE 2.4
												Page 1 of 1
												March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	SAVINGS IN PARTICIPANTS BILL	TAX CREDITS	UTILITY REBATES	OTHER BENEFITS	TOTAL BENEFITS	CUSTOMER EQUIPMENT COSTS	CUSTOMER O & M COSTS	OTHER COSTS	TOTAL COSTS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS	
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2015	0	0	1	0	1	1	0	0	1	(1)	(1)	
2016	1	0	1	0	1	1	0	0	1	(0)	(1)	
2017	1	0	1	0	1	2	0	0	2	(0)	(1)	
2018	1	0	1	0	2	2	0	0	2	0	(1)	
2019	2	0	0	0	2	0	0	0	0	2	0	
2020	2	0	0	0	2	0	0	0	0	2	2	
2021	2	0	0	0	2	0	0	0	0	2	3	
2022	2	0	0	0	2	0	0	0	0	2	4	
2023	2	0	0	0	2	0	0	0	0	2	5	
2024	2	0	0	0	2	0	0	0	0	2	6	
2025	2	0	0	0	2	0	0	0	0	2	7	
2026	2	0	0	0	2	0	0	0	0	2	8	
2027	2	0	0	0	2	0	0	0	0	2	8	
2028	2	0	0	0	2	0	0	0	0	2	9	
2029	2	0	0	0	2	0	0	0	0	2	10	
NOMINAL	23	0	2	0	25	6	0	0	6	19		
NPV:	13	0	2	0	15	5	0	0	5	10		
In service year of gen unit:			2019		2.8370485							
Discount rate:			0.0734									

					RATE IMPACT TEST								PSC FORM CE 2.5
					PROGRAM: Commercial Water Heating								Page 1 of 1
													March 4, 2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
							AVOIDED					NET	CUMULATIVE
	INCREASED	UTILITY					GEN UNIT	AVOIDED				BENEFITS	DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL	UNIT & FUEL	T & D	REVENUE	OTHER	TOTAL	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2015	0	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2016	0	0	1	0	0	1	0	0	0	0	0	(1)	(1)
2017	0	0	1	0	0	1	0	0	0	0	0	(1)	(2)
2018	0	0	1	1	0	1	1	0	0	0	1	(1)	(2)
2019	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2020	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2021	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2022	0	0	0	1	0	1	1	0	0	0	1	0	(2)
2023	0	0	0	1	0	1	1	0	0	0	1	0	(1)
2024	0	0	0	1	0	1	1	0	0	0	1	1	(1)
2025	0	0	0	1	0	1	1	0	0	0	1	1	(1)
2026	0	0	0	1	0	1	1	0	0	0	2	1	(1)
2027	0	0	0	1	0	1	2	0	0	0	2	1	(0)
2028	0	0	0	1	0	1	2	0	0	0	2	1	0
2029	0	0	0	1	0	1	2	0	0	0	2	1	0
NOMINAL	0	1	2	11	0	14	16	1	0	0	17	3	
NPV:	0	1	2	6	0	9	9	1	0	0	9	0	
Discount rate:			0.0734		Benefit/Cost Ratio - [col (12)/col (7)]:				1.05				

Program: Conservation Research and Development (“R&D”)

Program Start Date: July 1995

Program Description

This program is in response to Rule 25-17.001 (5) (f), F.A.C., that requires aggressive R&D projects be “...an ongoing part of the practice of every well managed utility’s programs.” It is also in support of FPSC Order No. 22176 dated November 14, 1989, requiring utilities to “...pursue research, development, and demonstration projects designed to promote energy efficiency and conservation.” R&D activity will be conducted on proposed measures to determine the impact to the company and its ratepayers and may occur at customer premises, Tampa Electric facilities or at independent test sites. Tampa Electric will report program progress through the annual ECCR True-Up filing.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Eligible Measures

Most technology measures are eligible for consideration including renewable and green energy sources, energy efficient construction, heat recovery, space conditioning equipment, refrigeration, cooking, fuel cells, ventilation, pumps and fan efficiency, water heating, etc.

Program Costs

Program costs are estimated at \$200,000 per year for a five-year period. Expenses for a given year may exceed \$200,000; however, total program cost shall not exceed \$1,000,000 for the five-year period.

Program Monitoring and Evaluation

Data collected shall be in support of the FPSC cost-effectiveness methodology, specifically, input data for conducting RIM, TRC, and PCT tests. Positive measure evaluation results may support future ECCR program filings by the company.

Program: Renewable Energy Program

Program Start Date: December 2006

Program Description

This program provides customers with the option to purchase 200 kWh blocks of renewable energy for five dollars per block to assist in the delivery of renewable energy to the company's grid system. This specific effort provides funding for renewable energy procurement, program administration, evaluation and market research.

Renewable energy participants will be served from the existing electrical system. Renewable energy may not be delivered to the customer, but will displace energy that would have otherwise been produced from traditional fossil fuels. Tampa Electric will report program progress through the annual ECCR True-up and Projection Filings.

Program Participation Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program and provide reports on the program's progress as required by the Commission in Docket No. 060678-EG, Order No. PSC-06-1063-TRF-EG, issued December 26, 2006.

Program: Renewable Energy Systems Initiative

Program Start Date: April 2011

Program Description

This initiative is a five-year renewable energy pilot program that uses rebates and incentives to encourage the following: 1) the installation of PV and SWH technologies on existing and new residential and commercial premises; 2) the installation of PV on emergency shelter schools coupled with an educational component for teachers and students; and 3) the installation of SWH on low income housing done in partnership with local non-profit building organizations.

The program will have annual funding capped at \$1.53 million. The projected annual allocation of the funding will be 69 percent for PV installations on residential and commercial premises, ten-percent for school PV, 11 percent for SWH installations, and ten-percent for overall program administration. With an annual funding cap in place, the company will use a reservation process to manage fund allocations. This will allow for any unused funds in a specific area to be reallocated to other components of the overall program so as to maximize the installation of various renewable technologies. This program will be offered until the end of 2015, at which time the pilot program will retire.

Residential and Commercial PV

This component of the program will provide incentives for the installation of PV on residential and commercial premises. The allocation of funds for this endeavor will be split at 60 percent for residential and 40 percent for commercial. Participants must agree to have the system interconnected to the grid with an interconnection agreement in place once installation has occurred.

Program Savings

Winter Demand:	0.0 kW
Summer Demand:	2.8 kW (for a 5 kW system)
	5.6 kW (for a 10 kW system)
Annual Energy:	7,884 kWh (for a 5 kW system)
	15,768 kWh (for a 10 kW system)

Program Costs

Rebate: \$2.00 per watt of qualifying PV panel installed up to a maximum rebate of \$20,000.

The estimated administrative cost per participant is \$1,618.

Residential SWH

This component of the program will provide incentives for the installation of SWH on residential premises. The projected allocation of funds for this endeavor will be split at a minimum of 80 percent for existing residential premises and a maximum of 20 percent for new residential premises.

Program Savings

Winter Demand:	0.61 kW
Summer Demand:	0.30 kW
Annual Energy:	2,376 kWh

Program Costs

Rebate: \$1,000 per installation of qualifying SWH.

The estimated administrative cost per participant is \$408.

Low Income SWH

This component of the program will provide for the installation of SWH systems on low income housing done in partnership with local non-profit building organizations. Based on historical building activity from these organizations, the company anticipates five installations per year for the five-year period.

Program Savings

Winter Demand:	0.61 kW
Summer Demand:	0.30 kW
Annual Energy:	2,376 kWh

Program Costs

Rebate: \$5,000 per installation of qualifying SWH.

The estimated administrative cost per participant is \$10.

School PV

This component of the program will provide capital funding for the installation of PV on emergency shelter schools and will be coupled with an educational component for teachers and students to evaluate and understand the performance and benefits of PV. Tampa Electric will explore partnership opportunities through the Florida Solar Energy Center's E-Shelter program to enhance the effectiveness and deployment of resources. The company anticipates installing one 10 kW system per year and maintaining each system for a five-year period. These five systems will allow for at least one emergency shelter school in each county of the company's service area to have PV as a backup source of power during emergencies.

Program Savings

Winter Demand:	0.0 kW
Summer Demand:	5.6 kW
Annual Energy:	15,768 kWh

Program Costs

Rebate: \$150,000 per qualifying PV installation.

The estimated administrative cost per participant is \$15,000.

Program Standards

Program Standards to be submitted 30 days after Commission order approving DSM Plan.

Program Monitoring and Evaluation

Tampa Electric will monitor and evaluate this program through cost-effectiveness techniques approved in the company's previously filed Demand Side Management Monitoring and Evaluation Plan, Docket No. 941173-EG.

PROGRAM NAME: RESIDENTIAL PV ¹

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	372,213	60	0.02%	60
2016	640,735	0	0	0.02%	60
2017	650,702	0	0	0.02%	60
2018	660,594	0	0	0.02%	60
2019	670,381	0	0	0.02%	60
2020	680,041	0	0	0.02%	60
2021	689,544	0	0	0.02%	60
2022	698,908	0	0	0.02%	60
2023	708,128	0	0	0.02%	60
2024	717,339	0	0	0.02%	60

* Previous participation levels not included.

⁽¹⁾ Pilot program will retire at the end of 2015.

PROGRAM NAME: RESIDENTIAL PV						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	7,884	0.000	2.800	0.473	0.000	0.168
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

PROGRAM NAME: RESIDENTIAL PV

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	8,357	0.000	2.985	0.501	0.000	0.179
2016	0	0.000	0.000	0.000	0.000	0.000
2017	0	0.000	0.000	0.000	0.000	0.000
2018	0	0.000	0.000	0.000	0.000	0.000
2019	0	0.000	0.000	0.000	0.000	0.000
2020	0	0.000	0.000	0.000	0.000	0.000
2021	0	0.000	0.000	0.000	0.000	0.000
2022	0	0.000	0.000	0.000	0.000	0.000
2023	0	0.000	0.000	0.000	0.000	0.000
2024	0	0.000	0.000	0.000	0.000	0.000

PROGRAM NAME: COMMERCIAL PV ¹					
Year	(a) Total Number of Customers	(b) Total Number of Eligible Customers	(c) Annual Number of Program Participants	(d) Cumulative Penetration Level %	(e) Cumulative Number of Program Participants*
2015	75,300	75,295	5	0.01%	5
2016	76,350	0	0	0.01%	5
2017	77,348	0	0	0.01%	5
2018	78,317	0	0	0.01%	5
2019	79,282	0	0	0.01%	5
2020	80,255	0	0	0.01%	5
2021	81,224	0	0	0.01%	5
2022	82,178	0	0	0.01%	5
2023	83,120	0	0	0.01%	5
2024	84,014	0	0	0.01%	5
* Previous participation levels not included.					
⁽¹⁾ Pilot program will retire at the end of 2015.					

PROGRAM NAME: COMMERCIAL PV						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	15,768	0.000	5.600	0.079	0.000	0.028
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

PROGRAM NAME: COMMERCIAL PV

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	16,683	0.000	5.964	0.083	0.000	0.030
2016	0	0.000	0.000	0.000	0.000	0.000
2017	0	0.000	0.000	0.000	0.000	0.000
2018	0	0.000	0.000	0.000	0.000	0.000
2019	0	0.000	0.000	0.000	0.000	0.000
2020	0	0.000	0.000	0.000	0.000	0.000
2021	0	0.000	0.000	0.000	0.000	0.000
2022	0	0.000	0.000	0.000	0.000	0.000
2023	0	0.000	0.000	0.000	0.000	0.000
2024	0	0.000	0.000	0.000	0.000	0.000

PROGRAM NAME: RESIDENTIAL SWH ¹

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants ²	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	630,869	372,213	20	0.0%	20
2016	640,735	378,034	0	0.0%	20
2017	650,702	383,914	0	0.0%	20
2018	660,594	389,750	0	0.0%	20
2019	670,381	395,525	0	0.0%	20
2020	680,041	401,224	0	0.0%	20
2021	689,544	406,831	0	0.0%	20
2022	698,908	412,356	0	0.0%	20
2023	708,128	417,796	0	0.0%	20
2024	717,339	423,230	0	0.0%	20

* Previous participation levels not included.

⁽¹⁾ Pilot program will retire at the end of 2015.

⁽²⁾ Includes five low income participants per year.

PROGRAM NAME: RESIDENTIAL SWH						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,376	0.610	0.300	0.048	0.012	0.006
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

PROGRAM NAME: RESIDENTIAL SWH

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	2,519	0.650	0.320	0.050	0.013	0.006
2016	0	0.000	0.000	0.000	0.000	0.000
2017	0	0.000	0.000	0.000	0.000	0.000
2018	0	0.000	0.000	0.000	0.000	0.000
2019	0	0.000	0.000	0.000	0.000	0.000
2020	0	0.000	0.000	0.000	0.000	0.000
2021	0	0.000	0.000	0.000	0.000	0.000
2022	0	0.000	0.000	0.000	0.000	0.000
2023	0	0.000	0.000	0.000	0.000	0.000
2024	0	0.000	0.000	0.000	0.000	0.000

PROGRAM NAME: SCHOOL PV ¹

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants*
2015	75,300	377	1	0.3%	1
2016	76,350	0	0	0.3%	1
2017	77,348	0	0	0.3%	1
2018	78,317	0	0	0.3%	1
2019	79,282	0	0	0.3%	1
2020	80,255	0	0	0.3%	1
2021	81,224	0	0	0.3%	1
2022	82,178	0	0	0.3%	1
2023	83,120	0	0	0.3%	1
2024	84,014	0	0	0.3%	1

* Previous participation levels not included.

⁽¹⁾ Pilot program will retire at the end of 2015.

PROGRAM NAME: SCHOOL PV						
AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	15,768	0.000	5.600	0.016	0.000	0.006
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

PROGRAM NAME: SCHOOL PV

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2015	16,683	0.000	5.964	0.017	0.000	0.006
2016	0	0.000	0.000	0.000	0.000	0.000
2017	0	0.000	0.000	0.000	0.000	0.000
2018	0	0.000	0.000	0.000	0.000	0.000
2019	0	0.000	0.000	0.000	0.000	0.000
2020	0	0.000	0.000	0.000	0.000	0.000
2021	0	0.000	0.000	0.000	0.000	0.000
2022	0	0.000	0.000	0.000	0.000	0.000
2023	0	0.000	0.000	0.000	0.000	0.000
2024	0	0.000	0.000	0.000	0.000	0.000