

AUSLEY McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

123 SOUTH CALHOUN STREET
P.O. BOX 391 (ZIP 32302)
TALLAHASSEE, FLORIDA 32301
(850) 224-9115 FAX (850) 222-7560

May 1, 2018

VIA: ELECTRONIC FILING

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

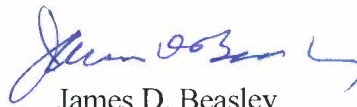
Re: Energy Conservation Cost Recovery Clause
FPSC Docket No. 20180002-EG

Dear Ms. Stauffer:

Attached for filing in the above docket on behalf of Tampa Electric Company is the Testimony of Mark R. Roche and Exhibit MRR-1, entitled Schedules Supporting Conservation Cost Recovery Factor, Actual, for the period January 2017 – December 2017.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp
Attachment



**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

DOCKET NO. 20180002-EG

IN RE: ENERGY CONSERVATION COST RECOVERY CLAUSE

TESTIMONY AND EXHIBIT

OF

MARK R. ROCHE

FILED: May 1, 2018

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **MARK R. ROCHE**

5
6 **Q.** Please state your name, address, occupation and employer.

7
8 **A.** My name is Mark R. Roche. My business address is 702
9 North Franklin Street, Tampa, Florida 33602. I am
10 employed by Tampa Electric Company ("Tampa Electric" or
11 "the company") as Manager, Regulatory Rates in the
12 Regulatory Affairs Department.

13
14 **Q.** Please provide a brief outline of your educational
15 background and business experience.

16
17 **A.** I graduated from Thomas Edison State College in 1994 with
18 a Bachelor of Science degree in Nuclear Engineering
19 Technology and from Colorado State University in 2009
20 with a Master's degree in Business Administration. My
21 work experience includes twelve years with the US Navy in
22 nuclear operations as well as twenty years of electric
23 utility experience. My utility work has included various
24 positions in Marketing and Sales, Customer Service,
25 Distributed Resources, Load Management, Power Quality,

1 Distribution Control Center operations, Meter Department,
2 Meter Field Operations, Service Delivery, Revenue
3 Assurance, Commercial and Industrial Energy Management
4 Services, and Demand Side Management ("DSM") Planning and
5 Forecasting. In my current position, I am responsible
6 for the company's Energy Conservation Cost Recovery
7 ("ECCR") Clause and Storm Hardening.

8
9 **Q.** What is the purpose of your testimony in this proceeding?

10
11 **A.** The purpose of my testimony is to present and support for
12 Commission review and approval the company's actual DSM
13 programs related true-up costs incurred during the
14 January through December 2017 period.

15
16 **Q.** Did you prepare any exhibits in support of your
17 testimony?

18
19 **A.** Yes. Exhibit No. MRR-1, entitled "Tampa Electric
20 Company, Schedules Supporting Conservation Cost Recovery
21 Factor, Actual, January 2017-December 2017" was prepared
22 under my direction and supervision. This Exhibit
23 includes Schedules CT-1 through CT-6 which support the
24 company's actual and prudent DSM program related true-up
25 costs incurred during the January through December 2017

1 period.

2

3 **Q.** What were Tampa Electric's actual January through
4 December 2017 conservation costs?

5

6 **A.** For the period, January through December 2017, Tampa
7 Electric incurred actual net conservation costs of
8 \$37,585,598.

9

10 **Q.** What is the final end of period true-up amount for the
11 conservation clause for January through December 2017?

12

13 **A.** The final conservation clause end of period true-up for
14 January through December 2017 is an under-recovery,
15 including interest, of \$649,400. This calculation is
16 detailed on Schedule CT-1, page 1 of 1.

17

18 **Q.** Please summarize how Tampa Electric's actual program
19 costs for January through December 2017 period compare to
20 the actual/estimated costs presented in Docket No.
21 20170002-EG?

22

23 **A.** For the period, January through December 2017, Tampa
24 Electric had a variance of \$2,235,839 or 5.59 percent
25 less than the estimated amount. The estimated total

1 program costs were projected to be \$39,821,438 which was
2 the amount approved in Order No. PSC 2017-0434-FOF-EG,
3 issued November 14, 2017 as compared to the incurred
4 actual net conservation costs of \$37,585,598.

5
6 **Q.** Please summarize the reasons why the actual expenses were
7 less than projected expenses by \$2,235,839?

8
9 **A.** The variance was a result of the following actual
10 expenses being less than estimated in the following
11 residential programs: Walk-Through Energy Audits;
12 Customer Assisted Energy Audits; Computer Assisted
13 Audits; Ceiling Insulation; Electronically Commutated
14 Motors; ENERGY STAR for Multi-Family Residences; Heating
15 and Cooling; Neighborhood Weatherization; Energy Planner;
16 Wall Insulation; Window Replacement; and Prime Time.
17 Additionally, actual expenses less than estimated in the
18 following commercial/industrial programs: Energy Audits;
19 Comprehensive Energy Audits; Chiller; Conservation Value;
20 Cool Roof; Lighting Conditioned Space; Refrigeration
21 Anti-Condensate Control; Standby Generator; Thermal
22 Energy Storage; Water Heating; Conservation Research and
23 Development; and Renewable Energy Program. Common actual
24 expenses were also less than estimated. Each DSM
25 program's detailed variance and common variance

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contribution is shown on Schedule CT-2, Page 3 of 4.

Q. Are all costs listed on Schedule CT-2 directly related to the Commission's approved DSM programs?

A. Yes.

Q. When did Tampa Electric transition to the Commission approved new 2015-2024 Ten-Year DSM Plan?

A. Tampa Electric transitioned to the Commission approved new 2015-2024 Ten-Year DSM Plan on November 3, 2015 for all DSM programs except for the Renewable Energy Systems Initiative which was retired on December 31, 2015.

Q. Should Tampa Electric's cost incurred during the January through December 2017 period for energy conservation be approved by the Commission?

A. Yes, the costs incurred were prudent and directly related to the Commission's approved DSM programs and should be approved.

Q. Does that conclude your testimony?

1 **A.** Yes, it does.

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TAMPA ELECTRIC COMPANY
SCHEDULES SUPPORTING CONSERVATION
COST RECOVERY FACTOR
ACTUAL
JANUARY 2017 - DECEMBER 2017

CONSERVATION COST RECOVERY

INDEX

SCHEDULE	TITLE	PAGE
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CT-1
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TAMPA ELECTRIC COMPANY
Energy Conservation
Adjusted Net True-up
For Months January 2017 through December 2017

End of Period True-up

Principal	(\$636,746)	
Interest	(\$12,662)	
Total		(\$649,408)

Less: Projected True-up

(Last Projected Conservation Hearing)

Principal	(\$2,973,246)	
Interest	(\$23,865)	
Total		(\$2,997,111)

Adjusted Net True-up \$2,347,703

CT-2
 Page 1 of 4

TAMPA ELECTRIC COMPANY
 Analysis of Energy Conservation Program Costs
 Actual vs. Projected
 For Months January 2017 through December 2017

Description	Actual	Projected	Difference
1 Capital Investment	\$1,412,704	\$1,432,466	(\$19,762)
2 Payroll	\$3,677,384	\$4,127,706	(\$450,323)
3 Materials and Supplies	\$468,627	\$690,405	(\$221,778)
4 Outside Services	\$2,300,770	\$4,686,371	(\$2,385,601)
5 Advertising	\$686,157	\$1,101,051	(\$414,894)
6 Incentives	\$28,422,115	\$27,222,574	\$1,199,541
7 Vehicles	\$191,594	\$300,399	(\$108,805)
8 Other	\$455,202	\$588,362	(\$133,160)
9 Subtotal	\$37,614,553	\$40,149,334	(\$2,534,781)
10 Less: Renewable Revenues	(\$153,385)	(\$154,949)	\$1,564
11 Total	\$37,461,170	\$39,994,385	(\$2,533,215)
12 Less: Renewable Program	\$124,436	(\$172,948)	\$297,385
13 Total Program Costs	\$37,585,606	\$39,821,437	(\$2,235,831)
14 Beginning of Period True-up	\$789,258	\$789,258	\$0
Overrecovery			
15 Amounts included in Base Rates	\$0	\$0	\$0
16 Conservation Adjustment Revenues	(\$37,738,117)	(\$37,637,448)	(\$100,669)
17 True-up Before Interest	(\$636,746)	(\$2,973,246)	\$2,336,500
18 Interest Provision	(\$12,662)	(\$23,865)	\$11,203
19 End of Period True-up	(\$649,408)	(\$2,997,111)	\$2,347,703

TAMPA ELECTRIC COMPANY
Actual Conservation Program Costs per Program
For Months January 2017 through December 2017

Program Name	Capital Investment	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Incentives	Vehicles	Other	Program Revenues	Total
12000359 Residential Walk-Through Energy Audit	0	1,144,587	5,236	586	477,644	0	76,903	23,428	0	1,728,384
12000353-12000355 Residential Customer Assisted Audit	0	7,128	25,484	18,925	0	0	0	0	0	51,537
12000357, 12000369 Residential Computer Assisted Audit	0	5,184	0	0	0	0	49	349	0	5,582
12000381 Residential Ceiling Insulation	0	77,895	264	\$0	0	214,930	3,443	1,685	0	298,217
12000391 Residential Duct Repair	0	45,433	264	\$0	0	169,710	3,039	517	0	218,963
12000419 Residential Electronically Commutated Motors	0	36	0	\$0	0	0	0	0	0	36
12000375 Energy Education, Awareness and Agency Outre:	481	31,123	94,127	\$33,808	0	0	1,062	9,051	0	169,652
12004152 Energy Star Multi-Family	0	0	0	\$0	0	0	0	0	0	0
12000431 Energy Star for New Homes	0	27,639	0	0	0	544,000	539	4,757	0	576,935
12000349 Residential Heating and Cooling	\$0	\$76,085	\$2,458	\$0	\$0	\$451,035	\$1,107	\$1,484	\$0	\$532,169
12000425 Neighborhood Weatherization	0	165,362	227,959	\$809,294	0	2,254,567	11,456	3,264	0	3,471,902
12000433 Energy Planner	1,400,210	903,703	10,664	\$1,221,108	184,770	0	60,877	244,245	0	4,025,577
12000365 Residential Wall Insulation	0	\$166	\$0	0	0	454	3	0	0	623
12000367 Residential Window Replacement	0	78,286	0	\$0	0	508,556	819	1,457	0	589,118
12000421 Residential HVAC Re-Commissioning	0	0	0	0	0	0	0	0	0	0
12000373 Residential Window Film	0	0	0	0	0	0	0	0	0	0
12000351 Prime Time	0	7,966	0	17,042	0	0	0	228	0	25,236
12000363 Commercial/Industrial Audit (Free)	0	251,471	2,250	419	0	0	9,182	12,599	0	275,921
12000361 Comprehensive Commercial/Industrial Audit (Pai	0	60	0	0	0	0	0	372	0	432
12000397 Commercial Ceiling Insulation	0	4,543	0	0	0	1,392	29	35	0	5,999
12000411 Commercial Chiller	0	3,892	0	0	0	27,487	14	743	0	32,136
12000371 Cogeneration	0	\$66,824	\$0	0	0	0	164	8,061	0	75,049
12000389 Conservation Value	0	1,612	0	0	0	0	0	372	0	1,984
12000443 Cool Roof	0	25,464	432	0	0	171,853	100	499	0	198,348
12000429 Commercial Cooling	0	5,348	0	0	0	0	0	0	0	5,348
12000409 Demand Response	0	18,786	0	0	0	3,689,785	212	3,493	0	3,712,276
12000377 Commercial Duct Repair	0	4,314	0	0	0	450	11	0	0	4,775
12000441 Commercial ECM	0	4,118	0	0	0	23,180	5	0	0	27,303
12000379 Industrial Load Management (GLSM 2&3)	12,013	15,354	97,516	11,763	0	16,811,148	19,268	2,793	0	16,969,855
12000385 Lighting Conditioned Space	0	68,316	678	0	0	384,558	1,769	4,057	0	459,378
12003201 Lighting Non-Conditioned Space	0	44,427	0	0	0	186,255	769	239	0	231,690
12000413 Lighting Occupancy Sensors	0	1,746	0	0	0	20,491	30	0	0	22,267
12000383 CILM (GLSM 1)	0	132	0	0	0	6,993	0	0	0	7,125
12000415 Refrigeration Anti-condensate Control	0	235	0	0	0	0	19	0	0	254
12000387 Standby Generator	0	37,836	146	0	0	2,945,171	61	590	0	2,983,804
12003202 Thermal Energy Storage	0	1,390	0	0	0	10,100	40	129	0	11,659
12000399 Commercial Wall Insulation	0	104	0	0	0	0	0	0	0	104
12000417 Commercial Water Heating	0	252	0	0	0	0	0	0	0	252
12000427 Conservation Research and Development	0	8,427	0	50,000	0	0	18	3,073	0	61,518
12000393 Renewable Energy Program	0	7,161	0	7,895	12,923	0	0	970	-153,385	-124,436
12000403-12000407,120 Renewable Energy Systems Initiative	0	0	0	0	0	0	0	0	0	0
12000445 Commercial ERV	0	0	0	0	0	0	0	0	0	0
12000437 Commercial Exit Signs	0	0	0	0	0	0	0	0	0	0
12000439 Commercial HVAC Re-commissioning	0	0	0	0	0	0	0	0	0	0
12000401 Commercial Motors	0	0	0	0	0	0	0	0	0	0
12000435 Commercial Roof Insulation	0	0	0	0	0	0	0	0	0	0
12000395 Commercial Window Film	0	0	0	0	0	0	0	0	0	0
12000347 Common Expenses	0	534,980	1,149	129,930	10,820	0	606	126,712	0	804,197
Total All Programs	1,412,704	3,677,384	468,627	2,300,770	686,157	28,422,115	191,594	455,202	(153,385)	37,461,169
Less Renewable Energy Program	0	7,161	0	7,895	12,923	0	0	970	-153,385	-124,436
Total Less Renewable Energy Program	1,412,704	3,670,222	468,627	2,292,875	673,234	28,422,115	191,594	454,232	0	37,585,605

TAMPA ELECTRIC COMPANY
Conservation Program Costs per Program
Variance - Actual vs. Projected
For Months January 2017 through December 2017

Program Name	Capital Investment	Payroll & Benefits	Materials & Supplies	Outside Services	Advertising	Incentives	Vehicles	Other	Program Revenues	Total
12000359 Residential Walk-Through Energy Audit	0	-181,743	675	-32,000	-353,364	0	-19,084	-2	0	-585,518
12000353-12000355 Residential Customer Assisted Audit	0	6,648	12,836	-141,933	0	0	0	0	0	-122,449
12000357, 12000369 Residential Computer Assisted Audit	0	-6,111	0	-2,000	0	0	-85	50	0	-8,146
12000381 Residential Ceiling Insulation	0	7,221	-53	0	0	-11,834	-440	547	0	-4,559
12000391 Residential Duct Repair	0	4,387	-28	0	0	-705	-847	422	0	3,229
12000419 Residential Electronically Commutated Motors	0	0	0	-105	0	-115	0	0	0	-220
12000375 Energy Education, Awareness and Agency Outreach	-4,073	-17,269	79,350	19,654	0	0	-21,975	-5,010	0	50,677
12004152 Energy Star Multi Family	0	-406	0	0	0	-97,500	-25	-200	0	-98,131
12000431 Energy Star for New Homes	0	-1,842	0	(\$369)	0	46,750	-209	-733	0	43,597
12000349 Residential Heating and Cooling	0	3,661	0	-5,358	0	-7,965	422	1,347	0	-7,893
12000425 Neighborhood Weatherization	0	31,340	-222,887	13,820	0	-1,391,701	311	-1,323	0	-1,570,440
12000433 Energy Planner	-15,689	-108,191	-7,183	(\$26,768)	-61,201	0	141	-135,568	0	-354,459
12000365 Residential Wall Insulation	0	15	0	0	0	-229	-30	0	0	-244
12000367 Residential Window Replacement	0	9,465	0	0	0	-36,870	50	205	0	-27,150
12000421 Residential HVAC Re-Commissioning	0	0	0	0	0	0	0	0	0	0
12000373 Residential Window Film	0	0	0	0	0	0	0	0	0	0
12000351 Prime Time	0	-880	0	-3,954	0	0	0	-222	0	-5,056
12000363 Commercial/Industrial Audit (Free)	0	-12,618	-897	0	-10,000	0	425	629	0	-22,461
12000361 Comprehensive Commercial/Industrial Audit (Paid)	0	-8,110	-2,500	0	0	0	0	-108	0	-10,718
12000397 Commercial Ceiling Insulation	0	2,646	0	0	0	-1,953	-97	35	0	631
12000411 Commercial Chiller	0	1,072	0	0	0	-3,492	-97	743	0	-1,774
12000371 Cogeneration	0	10,606	0	0	0	0	0	0	0	10,606
12000389 Conservation Value	0	1,612	-6,625	0	-3,252	0	-60,000	222	0	-68,043
12000443 Cool Roof	0	-2,014	0	0	0	-72,955	-224	499	0	-74,694
12000429 Commercial Cooling	0	1,886	0	0	0	0	-320	-150	0	1,416
12000409 Demand Response	0	-6,657	0	-1,530,000	0	1,853,785	-198	-11	0	316,919
12000377 Commercial Duct Repair	0	1,455	0	0	0	-450	-64	0	0	941
12000441 Commercial ECM	0	-74	0	-500	0	16,895	-45	0	0	16,276
12000379 Industrial Load Management (GLSM 2&3)	0	-441	0	0	0	993,629	-213	0	0	992,975
12000385 Lighting Conditioned Space	0	-17,398	0	0	0	-24,024	821	1,833	0	-38,768
12003201 Lighting Non-Conditioned Space	0	4,548	0	0	0	72,211	493	185	0	77,437
12000413 Lighting Occupancy Sensors	0	1,043	0	0	0	91	-31	0	0	1,103
12000383 CILM (GLSM 1)	0	132	0	0	0	6,993	-6,790	0	0	335
12000415 Refrigeration Anti-condensate Control	0	-81	0	0	0	-1,500	-25	0	0	-1,606
12000387 Standby Generator	0	-63,514	-75,000	-303,700	0	-24,456	-153	590	0	-466,233
12003202 Thermal Energy Storage	0	-2,141	0	-592	0	-90,100	-12	129	0	-92,716
12000399 Commercial Wall Insulation	0	104	0	0	0	0	0	0	0	104
12000417 Commercial Water Heating	0	-65	0	0	0	-2,000	-25	0	0	-2,090
12000427 Conservation Research and Development	0	1,850	0	-17,036	0	-22,964	-382	-227	0	-38,759
12000393 Renewable Energy Program	0	-11,871	0	-300,000	12,923	0	0	0	1,564	-297,384
12000403-12000407, 1200(Renewable Energy Systems Initiative	0	0	0	0	0	0	0	0	0	0
12000445 Commercial ERV	0	0	0	0	0	0	0	0	0	0
12000437 Commercial Exit Signs	0	0	0	0	0	0	0	0	0	0
12000439 Commercial HVAC Re-commissioning	0	0	0	0	0	0	0	0	0	0
12000401 Commercial Motors	0	0	0	0	0	0	0	0	0	0
12000435 Commercial Roof Insulation	0	0	0	0	0	0	0	0	0	0
12000395 Commercial Window Film	0	0	0	0	0	0	0	0	0	0
12000347 Common Expenses	0	-98,587	534	-54,760	0	0	-97	2,958	0	-149,952
44 Total All Programs	-19,762	-450,323	-221,778	-2,385,601	-414,894	1,199,541	-108,805	-133,160	1,564	-2,533,215
Less Renewable Energy Program	0	-11,871	0	-300,000	12,923	0	0	0	1,564	-297,384
Total Less Renewable Energy Program	-19,762	-438,452	-221,778	-2,085,601	-427,817	1,199,541	-108,805	-133,160	0	-2,235,831

CT-2
Page 4 of 4

TAMPA ELECTRIC COMPANY
Description for Accounts
For Months January 2017 through December 2017

Internal Order	Program Name
12000359	Residential Walk-Through Energy Audit (Free Energy Check)
12000353	Residential Customer Assisted Energy Audit (Online)
12000355	Residential Customer Assisted Energy Audit (Phone)
12000357	Residential Computer-Assisted Energy Audit ("RCS")
12000369	Residential Building Energy Ratings System (BERS) Energy Audit
12000363	Commercial/Industrial Energy Audit (Free)
12000361	Comprehensive Commercial/Industrial Energy Audit (Paid)
12000381	Residential Ceiling Insulation
12000391	Residential Duct Repair
12000419	Residential Electronically Commutated Motors
12000375	Energy Education, Awareness and Agency Outreach
12000431	Energy Star for New Homes
12004152	Energy Star for Mult-Family Residences
12000349	Residential Heating and Cooling
12000425	Neighborhood Weatherization
12000433	Energy Planner
12000365	Residential Wall Insulation
12000367	Residential Window Replacement
12000421	Residential HVAC Re-Commissioning
12000373	Residential Window Film
12000351	Prime Time
12000397	Commercial Ceiling Insulation
12000411	Commercial Chiller
12000371	Cogeneration
12000389	Conservation Value
12000443	Cool Roof
12000429	Commercial Cooling
12000409	Demand Response
12000377	Commercial Duct Repair
12000441	Commercial ECM
12000379	Industrial Load Management (GSLM 2&3)
12000385	Lighting Conditioned Space
12003201	Lighting Non-Conditioned Space
12000413	Lighting Occupancy Sensors
12000383	CILM (GSLM 1)
12000415	Refrigeration Anti-condensate Control
12000387	Standby Generator
12003202	Thermal Energy Storage
12000399	Commercial Wall Insulation
12000417	Commercial Water Heating
12000427	Conservation Research and Development (R&D)
12000393	Renewable Energy Program
12000405	Renewable Energy Systems Initiative
12000405	Renewable Energy Systems Initiative
12000403	Renewable Energy Systems Initiative
12000407	Renewable Energy Systems Initiative
12000423	Renewable Energy Systems Initiative
12000445	Commercial ERV
12000437	Commercial Exit Signs
12000439	Commercial HVAC Re-Commissioning
12000401	Commercial Motors
12000435	Commercial Roof Insulation
12000395	Commercial Window Film
12000347	Common Expenses

TAMPA ELECTRIC COMPANY
Energy Conservation Adjustment
Summary of Expenses by Program by Month
For Months January 2017 through December 2017

Program Name	January	February	March	April	May	June	July	August	September	October	November	December	Total
12000359 Residential Walk-Through Energy Audit	54,728	169,037	189,911	159,103	161,972	128,779	144,464	166,369	165,208	114,116	131,827	142,869	1,728,384
12000353-12000355 Residential Customer Assisted Audit	0	2,528	18,328	2,519	2,533	2,970	5,720	4,446	1,478	3,057	3,499	4,460	51,537
12000357, 12000369 Residential Computer Assisted Audit	0	640	3,207	422	1,076	0	0	187	0	0	50	0	5,582
12000381 Residential Ceiling Insulation	19,628	20,987	28,756	28,795	34,110	39,535	28,106	29,137	15,852	23,288	12,364	17,661	298,217
12000391 Residential Duct Repair	16,781	14,115	15,697	9,668	19,640	32,475	9,512	32,746	5,912	8,214	11,092	43,111	218,963
12000419 Residential Electronically Commutated Motors	0	0	0	0	0	36	0	0	0	0	0	0	36
12000375 Energy Education, Awareness and Agency Outr	1,221	3,475	17,708	5,895	5,983	10,227	3,046	7,872	2,108	53,692	13,581	44,845	169,651
12000431 Energy Star for New Homes	96,974	35,370	19,825	48,228	17,973	41,348	58,156	84,336	23,368	13,778	93,975	43,605	576,935
12000349 Residential Heating and Cooling	31,367	34,857	44,917	44,214	55,534	56,804	57,687	57,727	39,020	54,339	35,882	19,820	532,170
12000425 Neighborhood Weatherization	151,519	156,004	193,084	\$253,237	445,237	308,994	275,809	388,751	532,077	112,040	224,133	431,017	3,471,902
12000433 Energy Planner	663,120	308,941	351,501	283,062	290,621	290,653	286,342	299,778	342,180	244,335	275,456	389,588	4,025,577
12000365 Residential Wall Insulation	86	148	19	0	0	0	117	80	138	0	0	36	623
12000367 Residential Window Replacement	53,906	49,463	54,053	\$52,429	51,961	51,311	42,794	60,677	45,917	45,871	44,750	35,986	589,117
12000421 Residential HVAC Re-Commissioning	0	0	0	0	0	0	0	0	0	0	0	0	0
12000373 Residential Window Film	0	0	0	0	0	0	0	0	0	0	0	0	0
12000351 Prime Time	4,890	507	3,228	481	3,116	2,661	1,182	3,625	252	405	3,633	1,256	25,236
12000363 Commercial/Industrial Audit (Free)	13,242	28,044	27,580	18,423	20,613	25,047	25,536	35,417	15,890	20,036	29,486	16,607	275,921
12000361 Comprehensive Commercial/Industrial Audit (Pa	0	60	0	0	0	0	372	0	0	0	0	0	432
12000397 Commercial Ceiling Insulation	173	167	450	0	78	388	257	758	70	841	1,573	1,245	6,000
12000411 Commercial Chiller	4,684	859	2,864	13,532	147	439	7,882	589	116	953	70	0	32,136
12000371 Cogeneration	3,850	12,133	10,829	3,789	5,594	5,945	4,603	9,513	3,842	4,961	6,005	3,985	75,049
12000389 Conservation Value	404	508	0	64	173	0	372	231	116	0	116	0	1,984
12000443 Cool Roof	68,386	10,638	24,351	2,139	1,718	61,103	5,167	13,697	1,277	2,743	2,898	4,232	198,348
12000429 Commercial Cooling	404	411	610	523	424	439	555	589	116	549	174	553	5,348
12000409 Demand Response	306,957	1,399	614,481	310,903	307,399	1,701	613,104	308,135	1,204	307,519	307,893	631,582	3,712,276
12000377 Commercial Duct Repair	404	283	578	439	147	439	439	654	577	462	301	52	4,775
12000441 Commercial ECM	173	946	2,300	439	205	439	439	589	116	21,582	70	5	27,303
12000379 Industrial Load Management (GLSM 2&3)	1,583,294	1,489,655	1,491,547	1,255,382	1,412,675	1,424,139	1,421,450	1,353,643	1,440,258	1,553,531	1,286,995	1,257,288	16,969,854
12000385 Lighting Conditioned Space	8,904	59,648	15,549	68,996	61,742	35,826	36,457	34,157	12,512	45,077	66,338	14,170	459,378
12003201 Lighting Non-Conditioned Space	17,186	27,335	13,158	6,189	8,460	13,581	16,162	54,959	2,635	45,877	7,595	18,553	231,690
12000413 Lighting Occupancy Sensors	0	0	0	0	17,600	11	19	3,401	966	270	0	0	22,267
12000383 CILM (GLSM 1)	0	0	0	907	999	884	1,272	1,065	999	999	0	0	7,125
12000415 Refrigeration Anti-condensate Control	0	19	64	32	0	0	0	0	35	0	104	0	254
12000387 Standby Generator	254,042	238,546	234,754	254,555	265,491	231,318	234,585	260,600	251,990	248,455	241,148	268,321	2,983,804
12003202 Thermal Energy Storage	0	263	152	10,100	116	0	38	245	150	0	191	404	11,659
12000399 Commercial Wall Insulation	0	0	0	0	0	0	0	0	104	0	0	0	104
12000417 Commercial Water Heating	0	0	0	32	116	0	0	0	35	0	70	0	252
12000427 Conservation Research and Development	144	231	0	0	1,514	632	1,738	4,787	1,332	330	520	50,289	61,517
12000393 Renewable Energy Program	-12,061	-12,479	-13,159	-3,413	-12,513	-14,498	-12,869	-11,506	-12,147	-12,257	1,913	-9,448	-124,436
12000403-12000407, 120Renewable Energy Systems Initiative	0	0	0	0	0	0	0	0	0	0	0	0	0
12000445 Commercial ERV	0	0	0	0	0	0	0	0	0	0	0	0	0
12000437 Commercial Exit Signs	0	0	0	0	0	0	0	0	0	0	0	0	0
12000439 Commercial HVAC Re-commissioning	0	0	0	28	-28	0	0	0	0	0	0	0	0
12000401 Commercial Motors	0	0	0	0	0	0	0	0	0	0	0	0	0
12000435 Commercial Roof Insulation	0	0	0	0	0	0	0	0	0	0	0	0	0
12000395 Commercial Window Film	0	0	0	0	0	0	0	0	0	0	0	0	0
12000347 Common Expenses	61,690	90,055	108,999	100,701	65,472	68,409	56,245	73,758	42,583	46,815	40,952	48,517	804,197
Total	3,406,098	2,744,792	3,475,342	2,931,815	3,247,899	2,822,033	3,326,760	3,281,014	2,938,281	2,961,877	2,844,653	3,480,607	37,461,169
Less: Renewable Energy Program	(12,061)	(12,479)	(13,159)	(3,413)	(12,513)	(14,498)	(12,869)	(11,506)	(12,147)	(12,257)	1,913	(9,448)	(124,436)
Recoverable Conservation Expenses	3,418,159	2,757,271	3,488,501	2,935,228	3,260,411	2,836,530	3,339,629	3,292,519	2,950,428	2,974,134	2,842,740	3,490,055	37,585,605

TAMPA ELECTRIC COMPANY
Energy Conservation Adjustment
Calculation of True-up and Interest Provision
For Months January 2017 through December 2017

Description	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 Residential Conservation Audit Fees (A)	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Conservation Adjustment Revenues *	2,810,991	2,575,105	2,584,417	2,800,577	3,288,946	3,489,588	3,562,364	3,720,827	3,806,673	3,507,311	2,933,656	2,657,662	37,738,117
3 Total Revenues	2,810,991	2,575,105	2,584,417	2,800,577	3,288,946	3,489,588	3,562,364	3,720,827	3,806,673	3,507,311	2,933,656	2,657,662	37,738,117
4 Prior Period True-up	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(\$133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,245)</u>	<u>(133,250)</u>	<u>(1,598,945)</u>
5 Conservation Revenue Applicable to Period	2,677,746	2,441,860	2,451,172	<u>\$2,667,332</u>	3,155,701	3,356,343	3,429,119	3,587,582	3,673,428	3,374,066	2,800,411	2,524,412	36,139,172
6 Conservation Expenses	<u>3,418,159</u>	<u>2,757,271</u>	<u>3,488,501</u>	<u>2,935,228</u>	<u>3,260,411</u>	<u>2,836,530</u>	<u>3,339,629</u>	<u>3,292,519</u>	<u>2,950,428</u>	<u>2,974,134</u>	<u>2,842,740</u>	<u>3,490,055</u>	37,585,605
7 True-up This Period (Line 5 - Line 6)	(740,413)	(315,411)	(1,037,329)	(267,896)	(104,710)	519,813	89,490	295,063	723,000	399,932	(42,329)	(965,643)	(1,446,433)
8 Interest Provision This Period	(667)	(864)	(1,343)	(1,916)	(1,957)	(1,931)	(1,687)	(1,373)	(651)	(136)	138	(275)	(12,662)
9 True-up & Interest Provision Beginning of Period	(789,258)	(1,397,093)	(1,580,123)	<u>(2,485,550)</u>	(2,622,117)	(2,595,539)	(1,944,412)	(1,723,364)	(1,296,429)	(440,835)	92,206	183,260	(16,599,254)
10 Prior Period True-up Collected (Refunded)	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,245</u>	<u>133,250</u>	<u>1,598,945</u>
11 End of Period Total Net True-up	<u>(1,397,093)</u>	<u>(1,580,123)</u>	<u>(2,485,550)</u>	<u>(2,622,117)</u>	<u>(2,595,539)</u>	<u>(1,944,412)</u>	<u>(1,723,364)</u>	<u>(1,296,429)</u>	<u>(440,835)</u>	<u>92,206</u>	<u>183,260</u>	<u>(649,408)</u>	<u>(16,459,404)</u>

* Net of Revenue Taxes

(A) Included in Line 6

TAMPA ELECTRIC COMPANY
Energy Conservation Adjustment
Calculation of True-up and Interest Provision
For Months January 2017 through December 2017

Interest Provision	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 Beginning True-up Amount	(789,258)	(1,397,093)	(1,580,123)	(2,485,550)	(2,622,117)	(2,595,539)	(1,944,412)	(1,723,364)	(1,296,429)	(440,835)	92,206	183,260	
2 Ending True-up Amount Before Interest	(1,396,426)	(1,579,259)	(2,484,207)	(2,620,201)	(2,593,582)	(1,942,481)	(1,721,677)	(1,295,056)	(440,184)	92,342	183,122	(649,133)	
3 Total Beginning & Ending True-up	<u>(2,185,684)</u>	<u>(2,976,352)</u>	<u>(4,064,330)</u>	<u>(5,105,751)</u>	<u>(5,215,699)</u>	<u>(4,538,020)</u>	<u>(3,666,089)</u>	<u>(3,018,420)</u>	<u>(1,736,613)</u>	<u>(348,493)</u>	<u>275,328</u>	<u>(465,873)</u>	
4 Average True-up Amount (50% of Line 3)	<u>(1,092,842)</u>	<u>(1,488,176)</u>	<u>(2,032,165)</u>	<u>(2,552,876)</u>	<u>(2,607,850)</u>	<u>(2,269,010)</u>	<u>(1,833,045)</u>	<u>(1,509,210)</u>	<u>(868,307)</u>	<u>(174,247)</u>	<u>137,664</u>	<u>(232,937)</u>	
5 Interest Rate - First Day of Month	0.720000	0.740000	0.640000	1	0.860000	0.950000	1.080000	1.120000	1.060000	0.730000	1.140000	1.250000	
6 Interest Rate - First Day of Next Month	0.740000	0.640000	0.940000	1	0.950000	1.080000	1.120000	1.060000	0.730000	1.140000	1.250000	1.580000	
7 Total (Line 5 + Line 6)	1.460000	1.380000	1.580000	2	1.810000	2.030000	2.200000	2.180000	1.790000	1.870000	2.390000	2.830000	
8 Average Interest Rate (50% of Line 7)	0.730000	0.690000	0.790000	1	0.905000	1.015000	1.100000	1.090000	0.895000	0.935000	1.195000	1.415000	
9 Monthly Average Interest Rate (Line 8/12)	0.000610	0.000580	0.000660	0.000750	0.000750	0.000850	0.000920	0.000910	0.000750	0.000780	0.001000	0.001180	
10 Interest Provision (Line 4 x Line 9)	(667)	(864)	(1,343)	(1,916)	(1,957)	(1,931)	(1,687)	(1,373)	(651)	(136)	138	(275)	

TAMPA ELECTRIC COMPANY
Schedule of Capital Investment, Depreciation and Return
For Months January 2017 through December 2017

PRICE RESPONSIVE LOAD MANAGEMENT

Description	Beginning of Period	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 Investment		1,050	61,066	23,034	52,216	47,726	44,093	32,210	68,597	33,666	58,323	50,283	100,197	572,461
2 Retirements		96,654	112,575	160,676	21,432	20,915	101,805	0	27,546	58,804	106,677	22,187	22,405	751,675
3 Depreciation Base		5,913,735	5,862,226	5,724,584	5,755,368	5,782,179	5,724,467	5,756,677	5,797,728	5,772,590	5,724,236	5,752,332	5,830,123	
4 Depreciation Expense		99,359	98,133	96,557	95,666	96,146	95,888	95,676	96,287	96,419	95,807	95,638	96,407	1,157,983
5 Cumulative Investment	6,009,339	5,913,735	5,862,226	5,724,584	5,755,368	5,782,179	5,724,467	5,756,677	5,797,728	5,772,590	5,724,236	5,752,332	5,830,123	5,830,123
6 Less: Accumulated Depreciation	2,952,069	2,954,775	2,940,333	2,876,214	2,950,448	3,025,679	3,019,762	3,115,438	3,184,179	3,221,794	3,210,924	3,284,375	3,358,377	3,358,377
7 Net Investment	3,057,269	2,958,960	2,921,893	2,848,370	2,804,920	2,756,500	2,704,705	2,641,239	2,613,549	2,550,796	2,513,312	2,467,957	2,471,746	2,471,746
8 Average Investment		3,008,115	2,940,427	2,885,132	2,826,645	2,780,710	2,730,603	2,672,972	2,627,394	2,582,173	2,532,054	2,490,635	2,469,852	
9 Return on Average Investment - Equity Component		17,632	17,235	16,911	16,568	16,299	16,005	15,601	15,335	15,071	14,779	14,537	14,396	190,369
10 Return on Average Investment - Debt Component		5,055	4,941	4,848	4,750	4,673	4,588	4,000	3,932	3,864	3,789	3,727	3,691	51,858
11 Total Depreciation and Return		122,046	120,309	118,316	116,984	117,118	116,481	115,277	115,554	115,354	114,375	113,902	114,494	1,400,210

Note: Depreciation expense is calculated using a useful life of 60 months.
Line 9 x 7.0336% x 1/12 (Jan-Jun) and Line 9 x 7.0440% x1/12 (Jul-Dec). Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
Line 10 x 2.0164% x 1/12 (Jan-Jun) and Line 10 x 1.7959% x 1/12 (Jul-Dec).

TAMPA ELECTRIC COMPANY
Schedule of Capital Investment, Depreciation and Return
For Months January 2017 through December 2017

INDUSTRIAL LOAD MANAGEMENT

Description	Beginning of Period	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 Investment		0	0	0	0	0	0	0	0	0	0	0	0	0
2 Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
3 Depreciation Base		55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	
4 Depreciation Expense		919	919	919	919	919	919	919	919	919	919	919	919	11,028
5 Cumulative Investment	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126	55,126
6 Less: Accumulated Depreciation	38,615	39,534	40,453	41,372	42,291	43,210	44,129	45,048	45,967	46,886	47,805	48,724	49,643	49,643
7 Net Investment	16,511	15,592	14,673	13,754	12,835	11,916	10,997	10,078	9,159	8,240	7,321	6,402	5,485	5,485
8 Average Investment		16,051	15,133	14,214	13,295	12,376	11,457	10,538	9,619	8,700	7,781	6,862	5,944	
9 Return on Average Investment		94	89	83	78	73	67	62	56	51	45	40	35	773
10 Return Requirements		27	25	24	22	21	19	16	14	13	12	10	9	212
11 Total Depreciation and Return		1,040	1,033	1,026	1,019	1,013	1,005	997	989	983	976	969	963	12,013

Note: Depreciation expense is calculated using a useful life of 60 months.
Line 9 x 7.0336% x 1/12 (Jan-Jun) and Line 9 x 7.0440% x 1/12 (Jul-Dec). Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
Line 10 x 2.0164% x 1/12 (Jan-Jun) and Line 10 x 1.7959% x 1/12 (Jul-Dec).

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TAMPA ELECTRIC COMPANY
Schedule of Capital Investment, Depreciation and Return
For Months January 2017 through December 2017

ENERGY EDUCATION AWARENESS

Description	Beginning of Period	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 Investment		0	0	0	0	0	0	0	0	0	0	10,039	12,523	22,562
2 Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
3 Depreciation Base		0	0	0	0	0	0	0	0	0	0	10,039	22,562	
4 Depreciation Expense		0	0	0	0	0	0	0	0	0	0	83	272	355
5 Cumulative Investment	0	0	0	0	0	0	0	0	0	0	0	10,039	22,562	22,562
6 Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	83	355	355
7 Net Investment	0	0	0	0	0	0	0	0	0	0	0	9,956	22,207	22,207
8 Average Investment		0	0	0	0	0	0	0	0	0	0	4,978	16,082	
9 Return on Average Investment - Equity Component		0	0	0	0	0	0	0	0	0	0	0	94	94
10 Return on Average Investment - Debt Component		0	0	0	0	0	0	0	0	0	0	8	24	32
11 Total Depreciation and Return		0	0	0	0	0	0	0	0	0	0	91	390	481

Note: Depreciation expense is calculated using a useful life of 60 months.
Line 9 x 7.0336% x 1/12 (Jan-Jun) and Line 9 x 7.0440% x 1/12 (Jul-Dec). Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
Line 10 x 2.0164% x 1/12 (Jan-Jun) and Line 10 x 1.7959% x 1/12 (Jul-Dec).

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TAMPA ELECTRIC COMPANY
Reconciliation and Explanation of
Difference Between Filing and FPSC Audit
For Months January 2017 through December 2017

The audit has not been completed as of the date of this filing.

Program Description and Progress

Program Title: Energy Audits

Program Description: Energy audits are a conservation program designed to save demand and energy by increasing customer awareness of energy use in personal residences, commercial facilities and industrial plants. Five types of audits are available to Tampa Electric customers; three types are for residential class customers and two types are for commercial/industrial customers.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating:
Residential Walk-Through: 5,501
Residential Customer Assisted: 409
Residential Computer Assisted: 4
Commercial/Industrial: 1,211
Commercial/Industrial Comprehensive: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$2,061,856.

Program Progress Summary: Through this reporting period 349,589 customers have participated in on-site audits. Additionally, 124,504 customers have participated in company processed residential and commercial customer assisted audits.

Program Description and Progress

Program Title: Residential Ceiling Insulation

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 945

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$298,217.

Program Progress Summary: Through this reporting period 122,768 customers have participated.

Program Description and Progress

Program Title: Residential Duct Repair

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 1,176

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$218,963.

Program Progress Summary: Through this reporting period 100,398 customers have participated.

Program Description and Progress

Program Title: Residential Electronically Commutated Motors (ECM)

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$36.

Program Progress Summary: Through this reporting period five customers have participated.

Program Description and Progress

Program Title: Energy Education, Awareness and Agency Outreach

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

Program Accomplishments: January 1, 2017 to December 31, 2017

In this reporting period Tampa Electric partnered with 7 local schools to present Energy Education to 855 students through 14 classroom presentations. Tampa Electric also continues to partner with Junior Achievement BizTown presenting Energy Education to 19,530 students representing 212 local schools. In addition, the company gave 7 presentations to civic organizations and distributed 975 energy saving kits to participating customers.

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$169,644.

Program Progress Summary: Through this reporting period Tampa Electric has partnered with 116 local schools to present Energy Education to 35,434 students. In addition, the company gave 144 presentations to civic organizations that generated 837 customer assisted audits and distributed 5,777 energy saving kits to participating customers.

Program Description and Progress

Program Title: ENERGY STAR for New Multi-Family Residences

Program Description: The ENERGY STAR for New Multi-Family Residences Program is a residential new construction conservation program designed to reduce the growth of peak demand and energy in the residential new construction apartment and condominium residence market. The program utilizes a rebate to encourage the construction of new multi-family residences to meet the requirements to achieve the ENERGY STAR certified apartments and condominium label. By receiving this certificate, the new residence will use less energy and demand which will help reduce the growth of Tampa Electric's peak demand.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$0.

Program Progress Summary: Tampa Electric received Commission approval to implement this program on May 4, 2017. Through this reporting period zero customers have participated.

Program Description and Progress

Program Title: ENERGY STAR for New Homes

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. This program replaced the prior Residential New Construction program.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 640

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$576,935.

Program Progress Summary: Through this reporting period 12,811 customers have participated.

Program Description and Progress

Program Title: Residential Heating and Cooling

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 3,341

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$532,169.

Program Progress Summary: Through this reporting period 201,395 customers have participated.

Program Description and Progress

Program Title: Neighborhood Weatherization

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 6,550

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$3,471,902.

Program Progress Summary: Through this reporting period 35,932 customers have participated.

Program Description and Progress

Program Title: Residential Price Responsive Load Management
(Energy Planner)

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of net customers participating: 574

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$4,025,577.

Program Progress Summary: Through this reporting period 4,536 customers have participated.

Program Description and Progress

Program Title: Residential Wall Insulation

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 5

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$623.

Program Progress Summary: Through this reporting period 195 customers have participated.

Program Description and Progress

Program Title: Residential Window Replacement

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 1,482

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$589,118.

Program Progress Summary: Through this reporting period 13,206 customers have participated.

Program Description and Progress

Program Title: Prime Time

Program Description: This load management incentive program encourages residential customers to allow the control for reducing weather-sensitive heating, cooling and water heating through a radio signal control mechanism. The participating customers receive monthly incentives as credits on their electric bills. Per Commission Order No. PSC-15-0434-CO-EG issued October 12, 2015, the Prime Time Program began its systematic phased closure. This program was retired on May 11, 2016.

Program Accomplishments: January 1, 2017 to December 31, 2017

See Program Progress Summary below.

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$25,236.

Program Progress Summary: This program was retired on May 11, 2016.

Program Description and Progress

Program Title: Commercial Ceiling Insulation

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 5

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$5,999.

Program Progress Summary: Through this reporting period 311 customers have participated.

Program Description and Progress

Program Title: Commercial Chiller

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 7

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$32,136.

Program Progress Summary: Through this reporting period 68 customers have participated.

Program Description and Progress

Program Title:	<u>Cogeneration</u>
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.
Program Accomplishments:	<u>January 1, 2017 to December 31, 2017</u> The company continued communication and interaction with all present and potential customers. Tampa Electric completed the development and publication of the 20-Year Cogeneration Forecast, reviewed proposed cogeneration opportunities for cost-effectiveness and answered data requests from existing cogenerators. The company also attended meetings as scheduled with cogeneration customer personnel at selected facilities.
Program Fiscal Expenditures:	<u>January 1, 2017 to December 31, 2017</u> Actual expenses were \$75,049.
Program Progress Summary:	At the end of 2017, there are eight cogeneration Qualifying Facilities ("QFs") that are on-line in Tampa Electric's service area. The total nameplate generation capacity of these eight interconnected cogeneration facilities is 443.3 MW. During 2017, the company received 187.60 GWh from these facilities. The company continues interaction with current and potential cogeneration developers regarding on-going and future cogeneration activities.

Program Description and Progress

Program Title: Conservation Value

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$1,984.

Program Progress Summary: Through this reporting period 51 customers have participated.

Program Description and Progress

Program Title: Cool Roof

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 13

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$198,348.

Program Progress Summary: Through this reporting period 232 customers have participated.

Program Description and Progress

Program Title: Commercial Cooling

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$5,348.

Program Progress Summary: Through this reporting period 2,298 customers have participated.

Program Description and Progress

Program Title: Demand Response

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

See Program Progress Summary below.

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$3,712,276.

Program Progress Summary: Through this reporting period the company's vendor maintains a portfolio of participating customers providing an available total of 40 MW for demand response control.

Program Description and Progress

Program Title: Commercial Duct Repair

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 3

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$4,775.

Program Progress Summary: Through this reporting period 11,033 customers have participated.

Program Description and Progress

Program Title: Commercial Electronically Commutated Motors (ECM)

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 202

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$27,303.

Program Progress Summary: Through this reporting period 1,512 customers have participated.

Program Description and Progress

Program Title: Industrial Load Management (GSLM 2&3)

Program Description: This load management program is for large industrial customers with interruptible loads of 500 kW or greater.

Program Accomplishments: January 1, 2017 to December 31, 2017
Net new customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017
Actual expenses were \$16,969,855.

Program Progress Summary: This program was approved by the Commission in Docket No. 990037-EI, Order No. PSC-99-1778-FOF-EI, issued September 10, 1999.

Beginning May 2009, Tampa Electric transferred existing IS (non-firm) customers to a new IS (firm) rate schedule. These customers are now incented under GSLM-2 or GSLM-3 rate riders with expenses recovered through the ECCR clause.

Program Description and Progress

Program Title: Lighting Conditioned Space

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 228

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$459,378.

Program Progress Summary: Through this reporting period 2,172 customers have participated.

Program Description and Progress

Program Title: Lighting Non-Conditioned Space

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 338

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$231,690.

Program Progress Summary: Through this reporting period 551 customers have participated.

Program Description and Progress

Program Title: Lighting Occupancy Sensors

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 4

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$22,267.

Program Progress Summary: Through this reporting period 216 customers have participated.

Program Description and Progress

Program Title: Commercial Load Management

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 Accomplishments: January 1, 2017 to December 31, 2017

Net new customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$7,125.

Program Progress Summary: Through this reporting period there are six participating customers on cyclic control and zero customers on extended control.

Program Description and Progress

Program Title: Refrigeration Anti-Condensate Control

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$254.

Program Progress Summary: Through this reporting period zero customers have participated. Expenses incurred were associated with administration and participation protocols.

Program Description and Progress

Program Title: Standby Generator

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 Accomplishments: January 1, 2017 to December 31, 2017

Net new customers participating: 6

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$2,983,804.

Program Progress Summary: Through this reporting period there are 94 participating customers.

Program Description and Progress

Program Title: Thermal Energy Storage

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 1

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$11,659.

Program Progress Summary: Through this reporting period one customer has participated.

Program Description and Progress

Program Title: Commercial Wall Insulation

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$104.

Program Progress Summary: Through this reporting period two customers have participated.

Program Description and Progress

Program Title: Commercial Water Heating

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 Accomplishments: January 1, 2017 to December 31, 2017

Number of customers participating: 0

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$252.

Program Progress Summary: Through this reporting period zero customers have participated.

Program Description and Progress

- Program Title: DSM Research and Development (R&D)
- 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 and as communicated to the commission the company will also provide the results of R&D activities in the company's annual DSM Report.
- Program Accomplishments: January 1, 2017 to December 31, 2017
See Program Progress Summary below.
- Program Fiscal Expenditures: January 1, 2017 to December 31, 2017
Actual expenses were \$61,518.
- Program Progress Summary: For 2017, Tampa Electric continued exploring several R&D projects. These projects were: partnering with the University of South Florida on Battery Storage and Electric Vehicles, incorporation of heat pump water heaters within the Energy Planner program; and studying the potential for a Low Income Commercial Weatherization program.

Program Description and Progress

Program Title: Renewable Energy Program

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.

Program Accomplishments: January 1, 2017 to December 31, 2017

Year-end customers participating:	1,600
Number of net customers participating:	-149
Blocks of energy purchased:	2,374
One-time blocks of energy sold:	202

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$28,949.
Actual program revenues were \$153,385.

Program Progress Summary: Through this reporting period 43,365 monthly and one-time blocks of renewable energy have been purchased.

Program Description and Progress

Program Title: Common Expenses

Program Description: These are expenses common to all programs.

Program Accomplishments: January 1, 2017 to December 31, 2017

N/A

Program Fiscal Expenditures: January 1, 2017 to December 31, 2017

Actual expenses were \$804,197.

Program Progress Summary: N/A