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March 1, 2019

VIA: ELECTRONIC MAIL

Mr. Greg Shafer, Director Division of Economics Florida Public Service Commission Room 225E – Gerald L. Gunter Building 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Tampa Electric Company's Summary of 2018 DSM Program Accomplishments

Dear Mr. Shafer:

Enclosed for filing is Tampa Electric Company's Summary of 2018 Demand Side Management Program Accomplishments, including an Appendix A (DSM Energy Education and Awareness Activities of 2018).

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

JDB/pp Enclosure

cc: Paula K. Brown (w/o enc.)



2018

DEMAND SIDE MANAGEMENT PROGRAM ACCOMPLISHMENTS

FILED: March 1, 2019

TAMPA ELECTRIC COMPANY - SUMMARY OF 2018 DEMAND SIDE MANAGEMENT PROGRAM ACCOMPLISHMENTS

Tampa Electric received approval of its 2015-2024 Demand Side Management ("DSM") goals in Docket No. 130201-El, Order No. PSC-14-0696-FOF-EU, issued December 16, 2014. The company received approval of its 2015-2024 DSM Plan on August 11, 2015 in Docket No. 150081-EG, Order No. PSC-15-0323-PAA-EG. Tampa Electric transitioned to the DSM programs within the 2015-2024 DSM Plan on November 3, 2015 pursuant to receiving final approval of the supporting DSM standards on September 24, 2015.

For 2018, Tampa Electric achieved all the annual and cumulative residential, commercial/industrial ("Comm/Ind") and combined DSM goals. The company achieved the following summer demand ("SkW"), winter demand ("WkW") and annual energy ("AE") reductions identified at the generator:

2018 Residential G	oals	Actual Residential [OSM Achieved
SkW:	2.7 MW	SkW:	5.6 MW
WkW:	6.5 MW	WkW:	8.0 MW
AE:	6.1 GWh	AE:	17.1 GWh
2018 Comm/Ind Go	nals	Actual Comm/Ind D	SM Achieved
SkW:	3.3 MW	SkW:	15.0 MW
WkW:	1.7 MW	WkW:	13.0 MW
AE:	9.2 GWh	AE:	33.7 GWh
2018 Combined Go	als	Actual Combined D	SM Achieved
SkW:	6.0 MW	SkW:	20.5 MW
WkW:	8.2 MW	WkW:	21.0 MW
AE:	15.3 GWh	AE:	50.8 GWh

In 2018, Tampa Electric also received approval for and initiated the new Street and Outdoor Lighting conversion program. During 2018, the company converted 31,936 street and outdoor lighting luminaires to Light Emitting Diode ("LED") technology. While this program does not supplement the company's conservation efforts toward achieving the Commission's annual demand and energy goals above, these luminaire replacements contributed the following additional demand and annual energy savings at the generator:

SkW: 0.00 MW WkW: 4.247 MW AE: 18.395 GWh

In 2018, the company also continued to make progress with Research and Development ("R&D") efforts with battery storage and finalized the commercial low-income weatherization analysis. In addition, Tampa Electric continued collaborating with the other FEECA utilities in the development of the Technical Potential which will be used as the basis for the next set of goals the company's petitions the Commission for approval in 2019. A summary of 2018 energy education and awareness activities is

TAMPA ELECTRIC COMPANY UNDOCKETED DSM ACCOMPLISHMENTS FILED: MARCH 1, 2019

included as an appendix to this report. The R&D report for commercial low-income weatherization is also included as an appendix to this report.

For 2019, Tampa Electric remains committed to offering DSM programs that advance the policy objectives of FEECA, are directly monitorable and yield measurable results and are cost-effective to deliver. The company will continue its advertising campaign of bill inserts, print media and television advertisements aimed at educating customers on opportunities to participate in programs to assist in meeting their energy efficiency requirements.

The attached pages present individual program participation levels and summaries that demonstrate the company achieved its annual residential, commercial and combined DSM goals as described in Rule 25-17, (4), Florida Administrative Code.

FILED: MARCH 1, 2019	DSM ACCOMPLISHMENTS	UNDOCKETED	TAMPA ELECTRIC COMPANY

Jtility: Program N Program S Reporting I	tart Date:	Tampa Electri RESIDENTIAI May 1981 Annual 2018		AUDIT (aka Wal	k-Thru Audit or EA	Free)			
а	b Total Number of	c Total Number of Eligible	d Total Number of Projected	e Projected Cumulative Number of Program	f Projected Cumulative Penetration Level %	g Actual Annual Number of Program	h Actual Cumulative Number of Program	i Actual Cumulative Penetration Level %	j Actual Participation Over (Under Projected Participants
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Customers 628,392 640,090 651,770 662,917	Customers 628,392 640,090 651,770 662,917	Participants 8,400 8,400 7,800 6,000	Participants 6,000 12,000 18,000 24,000	[(d/c)x100] 1.0% 1.9% 2.8% 3.6%	Participants 8,304 6,902 5,501 7,667	Participants 8,304 15,206 20,707 28,374	[(g/c)x100] 1.3% 2.4% 3.2% 4.3%	(g-d) 2,304 3,206 2,707 4,374
nnual De	emand and Ene	rgy Savings - 2		stallation @ Generator	Participants Progran @ Meter	7,667 n <u>Total</u> @ Generator			

	1 01 111	otaliation	i iogia	iii i otai
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.07	0.08	536.69	575.87
Winter kW Reduction	0.08	0.09	621.03	666.36
Annual kWh Reduction	395	417	3,028,465	3,198,059

246 1,888.2 (1,907.0)

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000): Note 1: Demand and energy savings not included in achievements

			De	emand Side Mai	nagement Annu	al Report			<u> </u>
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri RESIDENTIA June 1996 Annual 2018		ASSISTED AUD	DITS				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,392 640,090 651,770 662,917	Total Number of Projected Participants 1,390 1,200 500 800	Projected Cumulative Number of Program Participants 500 1,000 1,500 2,000	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% 0.2% 0.2% 0.3%	Actual Annual Number of Program Participants 658 1,017 409 27,734	Actual Cumulative Number of Program Participants 658 1,675 2,084 29,818	Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 0.3% 0.3% 4.5%	Actual Participatior Over (Under Projected Participants (g-d) 158 675 584 27818
Summer k\ Winter kW	emand and Ene W Reduction Reduction In Reduction	rgy Savings - 2		stallation @ Generator 0.06 0.07 313	Participants Program @ Meter 1,469.90 1,691.77 8,209,264	27,734 m Total @ Generator 1,577.20 1,815.27 8,668,983			
Total Progi Net Benefi	per Installation ram Cost of the ts of Measures l	Utility (\$000): nstalled During		, ,	14 398.0 864.7				

TAMPA ELECTRIC COMPANY UNDOCKETED DSM ACCOMPLISHMENTS FILED: MARCH 1, 2019	_	_	_	_
A ELECTRIC COMICKETED CCOMPLISHMENT MARCH 1, 2019	ED:	A MSC	JNDO	'AMP
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	2019	MEN.		COM

			D	emand Side Man	agement Annua	l Report			
Utility: Program N Program S Reporting	start Date:	Tampa Electri RESIDENTIAI January 1981 Annual 2018		Computer Assiste	ed - Paid)				
а	b	С	d	е	f	g	h	i	, į
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,392 640,090 651,770 662,917	Total Number of Projected Participants 0 4 10 10	Projected Cumulative Number of Program Participants 1 2 3 4	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 5 9 4 2	Actual Cumulative Number of Program Participants 5 14 18 20	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) 4 12 15 16
Summer k\	emand and Ener W Reduction Reduction /h Reduction	rgy Savings - 2		@ Generator 0.08 0.09 417	Participants Prograr @ Meter 0.14 0.16 790	2 m Total @ Generator 0.15 0.17 834			

824 1.6 (5.0)

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000): Note 1: Demand and energy savings not included in achievements Program Name:

RESIDENTIAL CEILING INSULATION

Program Start Date:

November 1982

Reporting Period:

Annual 2018

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									Actual
				Projected	Projected	Actual	Actual	Actual	Participation
		Total	Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Number of	Penetration	Number of	Number of	Penetration	Projected
	Number of	Eligible	Projected	Program	Level %	Program	Program	Level %	Participants
Year	Customers	Customers	Participants	Participants	[(d/c)x100]	Participants	Participants	[(g/c)x100]	(g-d)
2015	628,392	494,802	7,200	1,000	0.2%	3,057	3,057	0.6%	2,057
2016	640,090	491,745	2,760	2,000	0.4%	1,293	4,350	0.9%	2,350
2017	651,770	490,452	1,255	3,000	0.6%	945	5,295	1.1%	2,295
2018	662,917	489,507	1,300	4,000	0.8%	594	5,889	1.2%	1,889
2019									
2020									

Annual Demand and Energy Savings - 2018

Participants

594

	Per In	stallation	Progra	m Total
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.26	0.28	153.85	165.08
Winter kW Reduction	0.37	0.40	220.97	237.10
Annual kWh Reduction	848	895	503,712	531,920

Utility Cost per Installation (\$): 367 Total Program Cost of the Utility (\$000): 217.9 Net Benefits of Measures Installed During Reporting Period (\$000): 518.2

FILED: MARCH 1, 2019	DSM ACCOMPLISHMENTS	UNDOCKETED	TAMPA ELECTRIC COMPANY

e: :Date: iod:		_ DUCT REPAI	R					
b	С	d	е	f	g	h	i	j Actual
Total Number of <u>Customers</u> 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 480,750 478,855 477,562 476,386	Total Number of Projected Participants 1,680 2,040 1,530 1,300	Projected Cumulative Number of Program Participants 750 1,500 2,250 3,000	Projected Cumulative Penetration Level % [(d/c)x100] 1.9% 1.9% 1.9% 1.9%	Actual Annual Number of Program Participants 1,895 1,293 1,176 1,997	Actual Cumulative Number of Program Participants 1,895 3,188 4,364 6,361	Actual Cumulative Penetration Level % [(g/c)x100] 0.8% 0.8% 0.8% 0.8%	Participation Over (Under) Projected Participants (g-d) 1,145 1,688 2,114 3,361
and and Ener Reduction Eduction Reduction	gy Savings - 2		stallation @ Generator 0.18 0.23 315	Participants Program @ Meter 341.49 433.35 595,106	1,997 m Total @ Generator 366.42 464.98 628,432			
I C	b Total Number of Customers 628,392 640,090 651,770 662,917	b c Total Number of Customers 628,392 640,090 640,090 651,770 662,917 Annual 2018 Total Number of Eligible Customers 480,750 477,562 477,562 476,386	b c d Total Number of Eligible Customers 628,392 480,750 1,680 640,090 478,855 2,040 651,770 477,562 1,530 662,917 476,386 1,300 Total Number of Eligible Projected Participants 1,680 40,090 478,855 2,040 651,770 477,562 1,530 662,917 476,386 1,300	Description Description	Decision Color C	b c d d e f g Total Total Number of Number of Eligible Customers	b c d d e f g h Total Total Number of Sustemers Projected Cumulative Number of Projected Participants Par	Decision Columbia Columbia

178 356.2 275.6

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000): Utility: Program Name: Program Start Date: Reporting Period:

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Tampa Electric Company

November 2011 Annual 2018

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Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,392 640,090 651,770 662,917	Total Number of Projected Participants 0 0 0 0	Projected Cumulative Number of Program Participants 5 15 35 70	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 4 0 0	Actual Cumulative Number of Program Participants 4 4 4 4	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Participation Over (Under) Projected Participants (g-d) (1) (11) (31) (66)
Annual De	mand and Ene	rgy Savings - 2	Per In:	stallation		0 m Total			
		rgy Savings - 2	Per In:	@ Generator	Progra @ Meter	m Total @ Generator			
Summer kV Winter kW	V Reduction Reduction	rgy Savings - 2	Per In: @ Meter 0.15 0.14	@ Generator 0.16 0.15	Progra @ Meter 0.00 0.00	m Total @ Generator 0.00 0.00			
Summer kV Winter kW	V Reduction	rgy Savings - 2	Per In: @ Meter 0.15	@ Generator 0.16	Progra @ Meter 0.00	m Total @ Generator 0.00			

Demand Side Management Annual Report

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Actual

RESIDENTIAL ELECTRONICALLY COMMUTATED MOTORS

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Utility: Tampa Electric Company

Program Name: ENERGY EDUCATION, AWARENESS AND AGENCY OUTREACH

Program Start Date: May 2011
Reporting Period: Annual 2018

2022 2023 2024

а	b	С	d	е	f	g	h	i	j
									Actual
				Projected	Projected	Actual	Actual	Actual	Participation
		Total	Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Number of	Penetration	Number of	Number of	Penetration	Projected
	Number of	Eligible	Projected	Program	Level %	Program	Program	Level %	Participants
Year	Customers	Customers	Participants	Participants	[(d/c)x100]	Participants	Participants	[(g/c)x100]	(g-d)
2015	628,392	628,392	2,000	500	0.1%	1,412	1,412	0.2%	912
2016	640,090	640,090	2,000	1,000	0.2%	461	1,873	0.3%	873
2017	651,770	651,770	500	1,500	0.2%	975	2,848	0.4%	1,348
2018	662,917	662,917	750	2,000	0.3%	806	3,654	0.6%	1,654
2019									
2020									
2021									

Annual Demand and Energy Savings - 2	Participants	806			
	Per In	stallation	Program Total		
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	0.03	0.03	21.76	23.35	
Winter kW Reduction	0.05	0.05	39.49	42.38	
Annual kWh Reduction	377	398	303,862	320,878	

Utility Cost per Installation (\$): 153
Total Program Cost of the Utility (\$000): 123.5
Net Benefits of Measures Installed During Reporting Period (\$000): (95.0)

				Demand Side I	Management Annu	al Report			
Utility: Tampa Electric Company Program Name: ENERGY STAR for NEW MULTI-FAMILY RESIDENCES Program Start Date: June 2017 Reporting Period: Annual 2018									
а	b	С	d	е	f	g	h	i	j Actual
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Participation Over (Under) Projected Participants (g-d)
2015	0	0	0	0	0.0%	0	0	0.0%	0
2016 2017 2018	0 201,074 207,026	0 3,820 5,952	0 600 600	0 600 600	0.0% 15.7% 10.1%	0 0 0	0 0 0	0.0% 0.0% 0.0%	0 (600) (600)
2019 2020 2021 2022 2023 2024									
Summer k\	emand and Ene W Reduction Reduction	ergy Savings - :		stallation @ Generator 0.39 0.26	Participants Program @ Meter 0.00 0.00	0 n Total @ Generator 0.00 0.00			
Utility Cost Total Progl	t per Installation ram Cost of the ts of Measures I	Utility (\$000):	1,239	1,308	0 1.2 0.0	0			

FILED: MARCH 1, 2019	DSM ACCOMPLISHMENTS	UNDOCKETED	I AMPA ELECTRIC COMPA

				Damand Cida N	1 A	al Damant			
				Demand Side I	/lanagement Annua	а кероп			
Utility: Program N Program S Reporting I	tart Date:		AR for NEW HC	` ,	RESIDENTIAL NEW GY STAR Novembe		N)		
а	b	С	d	е	f	g	h	i	j Actual
				Projected	Projected	Actual	Actual	Actual	Participation
		Total	Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Number of	Penetration	Number of	Number of	Penetration	Projected
	Number of	Eligible	Projected	Program	Level %	Program	Program	Level %	Participants
Year	Customers	Customers	Participants	Participants	[(d/c)x100]	Participants	Participants	[(g/c)x100]	(g-d)
2015	628,392	4,361	2,400	100	2.3%	2,494	2,494	57.2%	2,394
2016	640,090	3,870	1,200	300	7.8%	403	2,897	74.9%	2,597
2017	651,770	2,953	1,000	550	18.6%	640	3,537	119.8%	2,987
2018	662,917	9,544	1,000	800	8.4%	823	4,360	45.7%	3,560
2019									
2020									
2021									
2022									
2023									
2024									

Annual Demand and Energy Sav	Annual Demand and Energy Savings - 2018						
	Per In	stallation	Program Total				
	@ Meter	@ Generator	@ Meter	@ Generator			
Summer kW Reduction	0.53	0.57	437.01	468.91			
Winter kW Reduction	0.49	0.53	403.27	432.71			
Annual kWh Reduction	2 489	2.628	2.048.447	2 163 160			

Utility Cost per Installation (\$):

Total Program Cost of the Utility (\$000):

Net Benefits of Measures Installed During Reporting Period (\$000):

496.0

				Demand Sig	le Management A	nnual Report			
Utility: Program N Program S Reporting	Start Date:	Tampa Electri RESIDENTIA July 2000 Annual 2018	ic Company L HEATING AN	D COOLING					
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,392 640,090 651,770 662,917	Total Number of Projected Participants 3,840 3,480 4,200 4,000	e Projected Cumulative Number of Program Participants 1,000 2,000 2,950 3,850	f Projected Cumulative Penetration Level % [(d/c)x100] 0.2% 0.3% 0.5% 0.6%	g Actual Annual Number of Program Participants 5,214 3,693 3,341 3,371	h Actual Cumulative Number of Program Participants 5,214 8,907 12,248 15,619	i Actual Cumulative Penetration Level % [(g/c)x100] 1.0% 1.0% 1.0%	j Actual Participation Over (Under) Projected Participants (g-d) 4,214 6,907 9,298 11,769
Summer k' Winter kW	emand and Ene W Reduction Reduction /h Reduction	rgy Savings - 2		Generator 0.11 0.36 392	Participants Program @ Meter 343.84 1,122.54 1,250,641	3,371 m Total @ Generator 368.94 1,204.49 1,320,677			
Total Prog	t per Installation ram Cost of the its of Measures I	Utility (\$000):	Reporting Perio	d (\$000):	162 544.9 1,298.2				

				Demand Side	Management Annu	ial Report			
Utility: Program N Program S Reporting	Start Date:	Tampa Electr NEIGHBORH March 2008 Annual 2018	ic Company OOD WEATHE	RIZATION					
а	b	С	d	е	f	g	h	i	j Actual
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 109,703 111,745 113,784 115,730	Total Number of Projected Participants 6,600 7,250 6,250 7,000	Projected Cumulative Number of Program Participants 5,000 10,750 17,000 23,750	Projected Cumulative Penetration Level % [(d/c)x100] 4.6% 9.6% 14.9% 20.5%	Actual Annual Number of Program Participants 7,912 5,495 6,550 7,389	Actual Cumulative Number of Program Participants 7,912 13,407 19,957 27,346	Actual Cumulative Penetration Level % [(g/c)x100] 7.2% 12.0% 17.5% 23.6%	Participation Over (Under) Projected Participants (g-d) 2,912 2,657 2,957 3,596
Summer k Winter kW	emand and Ene W Reduction Reduction The Reduction	ergy Savings -		stallation @ Generator 0.26 0.36 1,325	Participants	7,389 m Total @ Generator 1,942.46 2,687.73 9,792,494			
Total Prog	t per Installation gram Cost of the its of Measures I	Utility (\$000):	Reporting Perio	od (\$000):	574 4,237.9 (6,643.6)				

Utility: Program N Program S Reporting	Start Date:	Tampa Electri ENERGY PLA September 20 Annual 2018	ANNER						
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,392 640,090 651,770 662,917	Total Number of Projected Participants 1,000 1,000 1,000	Projected Cumulative Number of Program Participants 1,000 2,000 3,000 4,000	Projected Cumulative Penetration Level % [(d/c)x100] 0.2% 0.3% 0.5% 0.6%	Actual Annual Number of Program Participants 1,088 910 574 747	Actual Cumulative Number of Program Participants 1,088 1,998 2,572 3,319	Actual Cumulative Penetration Level % [(g/c)x100] 0.2% 0.3% 0.4% 0.5%	Actual Participation Over (Under) Projected Participants (g-d) 88 (2) (428) (681)
Annual De	emand and Ene	rgy Savings - 2			Participants	747			
			Per In @ Meter	stallation @ Generator	Program @ Meter	m Total @ Generator			
Winter kW	W Reduction Reduction h Reduction		2.01 3.13 242	2.16 3.36 256	1,502.96 2,341.10 180,774	1,612.68 2,512.00 190,897			
Total Prog Net Benefi	t per Installation ram Cost of the lits of Measures li ility costs based	Utility (\$000): nstalled During			4,748 3,546.9 8,779.6				

Demand Side Management Annual Report

			Dei	mand Side Man	agement Annua	l Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri RESIDENTIA March 2008 Annual 2018	c Company L WALL INSUL	ATION					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 628,392 640,090 651,770 662,917	Total Number of Eligible Customers 628,329 639,905 651,580 662,722	Total Number of Projected Participants 20 12 7 10	Projected Cumulative Number of Program Participants 28 56 84 112	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 5 5 2	Actual Cumulative Number of Program Participants 122 127 132 134	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) 94 71 48 22
Annual De	emand and Ene	rgy Savings - 2		stallation	Participants Prograr	2 m Total			
Winter kW	W Reduction Reduction 'h Reduction		@ Meter 0.10 0.23 399	@ Generator 0.11 0.24 421	@ Meter 0.21 0.45 798	@ Generator 0.22 0.48 843			
Total Progr	per Installation ram Cost of the ts of Measures I	Útílity (\$000):	Reporting Perio	od (\$000):	156 0.3 1.2				

Utility:

Program Name:

Reporting Period:

а

Year 2015

2016

2017

2018

2019 2020 2021

Program Start Date:

b

Total

Number of

Customers

628,392

640,090

651,770

662,917

Tampa Electric Company

March 2008

Annual 2018

С

Total

Number of

Eligible

Customers

619,895

629,783

640,046

649,710

RESIDENTIAL WINDOW REPLACEMENT

d

Total

Number of

Projected

Participants

1,608

1,584

1,800

1,600

е

Projected

Cumulative

Number of

Program

Participants

500

1,000

1,500

2,000

Annual Demand and Energy Savings - 2018 Participants 1,817 Per Installation Program Total @ Meter @ Generator @ Meter @ Generator Summer kW Reduction 0.31 0.33 565.09 606.34 Winter kW Reduction 0.21 0.23 385.20 413.32 Annual kWh Reduction 1,121 1,184 2,036,857 2,150,921
@ Meter @ Generator @ Meter @ Generator Summer kW Reduction 0.31 0.33 565.09 606.34 Winter kW Reduction 0.21 0.23 385.20 413.32
Summer kW Reduction 0.31 0.33 565.09 606.34 Winter kW Reduction 0.21 0.23 385.20 413.32
Winter kW Reduction 0.21 0.23 385.20 413.32
Utility Cost per Installation (\$): 442
Total Program Cost of the Utility (\$000): 803.5
Net Benefits of Measures Installed During Reporting Period (\$000): 1,918.9

Demand Side Management Annual Report

Projected

Cumulative

Penetration

Level %

[(d/c)x100]

0.1%

0.2%

0.2%

0.3%

g

Actual

Annual

Number of

Program

Participants

1,811

1,417

1,482

1,817

h

Actual

Cumulative

Number of

Program

Participants

1,811

3,228

4,710

6,527

Actual

Cumulative

Penetration

Level %

[(g/c)x100]

0.3%

0.5%

0.7%

1.0%

Actual Participation

Over (Under)

Projected

Participants

(g-d)

1,311

2,228

3,210

4,527

FILED: MARCH 1, 2019	DSM ACCOMPLISHMENTS	UNDOCKETED	

				Demand Side I	Management Ar	nnual Report			
Jtility: Program N Program S Reporting	start Date:	Tampa Electri RESIDENTIAI March 2008 Annual 2018	ic Company L WINDOW FIL	M					
а	b	С	d	е	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2015	628,392	625,431	324	1,200	0.2%	379	379	0.1%	(821
2017 2018 2019 2020 2021 2022 2023 2024									
Annual De	emand and Ene	rgy Savings - 2		stallation @ Generator	Participants Program @ Meter	0 m Total @ Generator			

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000):

			Dei	mand Side Man	agement Annu	al Report			
Utility: Program Na Program Sta Reporting Po	art Date:	Tampa Electr RESIDENTIA November 20 Annual 2018	L HVAC RÉ-CC	MMISSIONING	6				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020	Total Number of Customers 628,392	Total Number of Eligible Customers 627,437	Total Number of Projected Participants 180	Projected Cumulative Number of Program Participants 7,500 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 1.2% retired on Nove	Actual Annual Number of Program Participants 138 ember 3, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (7,362)
2021 2022 2023 2024									
Annual Dan	nand and End	ergy Savings - 2	2049		Participants	0			
Annual Den	nano ano Ene	ergy Savings - A		stallation		m Total			
			@ Meter	@ Generator	@ Meter	@ Generator			
Summer kW Winter kW F			0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00			
Annual kWh			0.00	0.00	0.00	0.00			
	oer Installation								
	m Cost of the of Measures		Reporting Perio	od (\$000):					

			De	emand Side Mar	nagement Annua	al Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri FREE COMM July 1983 Annual 2018	c Company ERCIAL/INDUS	TRIAL AUDIT					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 888 860 870 1,200	Projected Cumulative Number of Program Participants 700 1,400 2,150 2,950	Projected Cumulative Penetration Level % [(d/c)x100] 0.9% 1.7% 2.6% 3.6%	Actual Annual Number of Program Participants 913 764 1,211 797	Actual Cumulative Number of Program Participants 913 1,677 2,888 3,685	Actual Cumulative Penetration Level % [(g/c)x100] 1.1% 2.1% 3.5% 4.5%	Actual Participation Over (Under) Projected Participants (g-d) 213 277 738 735
Summer k\ Winter kW	W Reduction	rgy Savings - 2	•	stallation @ Generator 0.10 0.10 859	Participants Prograt @ Meter 74.12 74.92 651,149	797 m Total @ Generator 79.31 80.16 685,009			
Total Progi Net Benefi					356 283.6 (189.9)				

			De	mand Side Man	agement Annu	al Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri COMPREHEN May 1981 Annual 2018		RCIAL/INDUSTI	RIAL AUDIT				
а	b	С	d	е	f	g	h	i	į
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 6 10 8 4	Projected Cumulative Number of Program Participants 4 8 12 16	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 1 4 0 1	Actual Cumulative Number of Program Participants 5 5 6	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (3) (3) (7) (10)
Summer k\ Winter kW	emand and Ene W Reduction Reduction /h Reduction	rgy Savings - 2		stallation @ Generator 0.10 0.10 859	Participants Program @ Meter 0.09 0.09 817	1 m Total @ Generator 0.10 0.10 859			
Total Progr Net Benefit	per Installation ram Cost of the ts of Measures I mand and energ	Utility (\$000): nstalled During			725 0.7 (3.0)				

				Demand Side N	lanagement Annu	al Report			
Utility: Program N Program S Reporting	Start Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	ic Company L CEILING INS	ULATION					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,026 79,985 79,971 79,966	Total Number of Projected Participants 57 50 15 8	Projected Cumulative Number of Program Participants 50 100 150 200	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% 0.1% 0.2% 0.3%	Actual Annual Number of Program Participants 41 14 5	Actual Cumulative Number of Program Participants 41 55 60 68	Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 0.1% 0.1% 0.1%	Actual Participation Over (Under) Projected Participants (g-d) (9) (45) (90) (132)
Summer k Winter kW	emand and Ene aw Reduction / Reduction Vh Reduction	rgy Savings - 2		stallation @ Generator 0.30 0.01 2,799	Participants Program @ Meter 2.26 0.06 21,288	8 m Total @ Generator 2.42 0.06 22,395			
Total Prog Net Benef	et per Installation gram Cost of the its of Measures I avings from meas	Utility (\$000): nstalled During	Reporting Peric	od (\$000):	1,110 8.9 50.7				

			[Demand Side M	anagement Annua	al Report			1
Utility: Program N Program S Reporting	tart Date:	Tampa Electri COMMERCIA March 2008 Annual 2018							
а	b	С	d	е	f	g	h	i	į
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 7,733 8,851 8,887 9,023	Total Number of Projected Participants 10 11 8	Projected Cumulative Number of Program Participants 5 10 15 20	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% 0.1% 0.2% 0.2%	Actual Annual Number of Program Participants 7 5 7 1	Actual Cumulative Number of Program Participants 7 12 19 20	Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 0.1% 0.2% 0.2%	Actual Participation Over (Under) Projected Participants (g-d) 2 2 4 0
Summer k' Winter kW	emand and Ener W Reduction Reduction /h Reduction	rgy Savings - 2		stallation @ Generator 9.13 6.85 17,204	Participants Program @ Meter 8.54 6.40 16,354	1 n Total @ Generator 9.13 6.85 17,204			
Total Prog Net Benefi	t per Installation ram Cost of the ts of Measures I vings from meas	Utility (\$000): nstalled During	Reporting Perio	d (\$000):	1,487 1.5 49.0				

			I	Demand Side M	anagement Annua	al Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri CONSERVAT April 1991 Annual 2018							
а	b	С	d	е	f	g	h	i	j Actual
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 4 4 3 2	Projected Cumulative Number of Program Participants 2 4 6 8	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 4 2 0	Actual Cumulative Number of Program Participants 4 6 6 6	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Participation Over (Under Projected Participants (g-d) 2 2 0 (2
Summer k\ Winter kW	W Reduction	rgy Savings - 2		stallation @ Generator 198.38 0.00 20,245	Participants Program @ Meter 0.00 0.00 0	0 n Total @ Generator 0.00 0.00 0			
Total Progr Net Benefit	per Installation ram Cost of the s of Measures I vings from meas	Utility (\$000): nstalled During	Reporting Perio	od (\$000):	0 0.0 199.5				

			С	emand Side Ma	anagement Annua	l Report			
Utility: Program N Program Si Reporting F	tart Date:	Tampa Electri COMMERCIA May 2011 Annual 2018	ic Company LL COOL ROOF						
а	b	С	d	е	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2015	80,277	80,128	35	20	0.0%	45	45	0.1%	25
2016	80,875	80,681	25	40	0.0%	25	70	0.1%	30
2017 2018 2019 2020	81,532 81,740	81,313 81,508	25 20	60 80	0.1% 0.1%	13 21	83 104	0.1% 0.1%	23 24
2021 2022 2023 2024									
Annual De	mand and Ene	rgy Savings - 2		stallation	Participants Program				
Cummorld	N Reduction		@ Meter	@ Generator 14.10	@ Meter 276.80	@ Generator 296.18			
Summer kv Winter kW			13.18 0.00	0.00	0.00	0.00			
	h Reduction		41,977	44,160	881,517	927,356			
Total Progr Net Benefit	per Installation ram Cost of the ts of Measures I vings from meas	Utility (\$000): nstalled During	Reporting Perio	d (\$000):	9,550 200.5 89.7				

			I	Demand Side M	anagement Annu	al Report			
Utility: Program Nam Program Start Reporting Per	t Date:	Tampa Electri COMMERCIA July 2000 Annual 2018	c Company L COOLING - E	×					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 127 130 16 5	Projected Cumulative Number of Program Participants 100 200 300 400	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% 0.2% 0.4% 0.5%	Actual Annual Number of Program Participants 234 9 0 25	Actual Cumulative Number of Program Participants 234 243 243 268	Actual Cumulative Penetration Level % [(g/c)x100] 0.3% 0.3% 0.3% 0.3%	Actual Participation Over (Under) Projected Participants (g-d) 134 43 (57) (132)
Annual Dema	and and Ener	gy Savings - 2	•	otollotion	Participants Prograi	25			
			@ Meter	stallation @ Generator	@ Meter	@ Generator			
Summer kW F	Reduction		3.34	3.57	83.48	89.32			
Winter kW Re			0.00	0.00	0.00	0.00			
Annual kWh F	Reduction		6,107	6,425	152,675	160,614			
Utility Cost pe Total Program Net Benefits o Note 1: Savin	n Cost of the U of Measures Ir	Utility (\$000): estalled During	Reporting Perio	d (\$000):	211 5.3 8.7				

			De	mand Side Man	agement Annu	al Report			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L COOLING - F	PTAC					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants 18 This portion	Projected Cumulative Number of Program Participants 35 of Commmercia	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% al Cooling was r	Actual Annual Number of Program Participants 0 retired on Nover	Actual Cumulative Number of Program Participants 0 nber 3, 2015.	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (35)
2018 2019 2020 2021 2022 2023 2024									
	V Reduction	rgy Savings - 2		stallation @ Generator 0.00 0.00	Participants Progra @ Meter 0.00 0.00	0 m Total @ Generator 0.00 0.00			
Utility Cost Total Progr	per Installation		0	0	0	0			

			D	emand Side Ma	nagement Annual	Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L DEMAND RE	SPONSE					
а	b	С	d	е	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)
2015	80,277	12,302	1	1	0.0%	4	4	0.0%	3
2016	80,875	12,937	1	2	0.0%	0	4	0.0%	2
2017 2018 2019	81,532 81,740	13,383 13,730	1	3 4	0.0% 0.0%	0	4 5	0.0% 0.0%	1
2020 2021 2022 2023 2024									
Summer k\ Winter kW	emand and Ener W Reduction Reduction 'h Reduction	rgy Savings - 20		stallation @ Generator 1,760.15 1,760.15 129,791	Participants Program @ Meter 1,645.00 1,645.00 123,375	1 Total @ Generator 1,760.15 1,760.15 129,791			
Total Progr Net Benefit Note 1: Sa	per Installation ram Cost of the I ts of Measures Ii vings from meas lity costs based I	Utility (\$000): nstalled During sured data		, ,	39,716 3,931.9 1,191.3				

			D	emand Side Ma	nagement Annu	al Report			
Jtility: Program Na Program St Reporting F	tart Date:	Tampa Electr COMMERCIA March 2008 Annual 2018	ic Company L DUCT REPA	R					
а	b	С	d	е	f	g	h	i	j Actual
	Total Number of	Total Number of Eligible	Total Number of Projected	Projected Cumulative Number of Program	Projected Cumulative Penetration Level %	Actual Annual Number of Program	Actual Cumulative Number of Program	Actual Cumulative Penetration Level %	Participation Over (Under Projected Participants
Year	Customers	Customers	Participants	Participants	[(d/c)x100]	Participants	Participants	[(g/c)x100]	(g-d)
2015	80,277	70,369	550	250	0.4%	257	257	0.4%	7
2016	80,875	70,112 70,016	300	500 750	0.7% 1.1%	96	353 356	0.5% 0.5%	(147
2017 2018	81,532 81,740	70,016	130 25	1,000	1.1%	3 6	362	0.5%	(394 (638
2019 2020 2021 2022 2023 2024	01,740	70,013	20	1,000	1.470	Ü	302	0.570	(030
Annual De	mand and Ene	rgy Savings - 2			Participants	6			
				stallation		m Total			
	A/ Dealers the se		@ Meter	@ Generator	@ Meter	@ Generator			
	V Reduction Reduction		1.55 0.02	1.66 0.02	9.31 0.10	9.96 0.10			
	h Reduction		6,862	7,219	41,172	43,313			
Aillual KVV	II Neduction		0,002	1,219	41,172	43,313			

Utility Cost per Installation (\$):

Total Program Cost of the Utility (\$000):

Net Benefits of Measures Installed During Reporting Period (\$000):

Note 1: Savings from measured data

Jtility: Program Na Program St Reporting F	tart Date:	Tampa Electr COMMERCIA November 20 Annual 2018	ic Company L ELECTRONIO		nagement Annu	·			
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 10 10 20 200	e Projected Cumulative Number of Program Participants 5 10 20	f Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	g Actual Annual Number of Program Participants 85 1,225 202 0	h Actual Cumulative Number of Program Participants 85 1,310 1,512 1,512	i Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 1.6% 1.9% 1.8%	j Actual Participation Over (Under) Projected Participants (g-d) 80 1,300 1,497 1,492
Summer kV Winter kW	mand and Ene W Reduction Reduction h Reduction	rgy Savings - 2		stallation @ Generator 0.25 0.00 34	Participants Program @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00			

0 0.0 378.0

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000): Note 1: Savings from measured data

Utility: Program N Program S Reporting I	tart Date:	Tampa Electric INDUSTRIAL September 19 Annual 2018	LOAD MANAGE	EMENT					
а	b	С	d	е	f	g	h	i	j .
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 79,457 80,875 81,532 81,740	Total Number of Eligible Customers 820 848 816 954	Total Number of Projected Participants 0 0 0	Projected Cumulative Number of Program Participants 1 2 3 4	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% 0.2% 0.4% 0.4%	Actual Annual Number of Program Participants 1 0 0 1	Actual Cumulative Number of Program Participants 1 1 2	Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 0.1% 0.2%	Actual Participation Over (Under) Projected Participants (g-d) 0 (1) (2) (2)
Annual De	emand and Ene	rgy Savings - 2	018, Note 1		Participants	1			
			Per Ins	stallation	Program				
Winter kW	W Reduction Reduction 'h Reduction		@ Meter 5,060.25 4,756.50 1,184,085	@ Generator 5,414.47 5,089.46 1,245,657	@ Meter 5,060.25 4,756.50 1,184,085	@ Generator 5,414.47 5,089.46 1,245,657			
Total Progr Net Benefit Note 1: Sa	per Installation ram Cost of the Its of Measures It vings from meas lity costs based	Utility (\$000): nstalled During F sured data			517,539 17,596.3 1,779.0				

Demand Side Management Annual Report

				Demand Side N	Management Annua	al Report			
Utility: Program N Program S Reporting	Start Date:	Tampa Electri COMMERCIA January 1991 Annual 2018	L LIGHTING - C	CONDITIONED	SPACE				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 6 57 75 110	Projected Cumulative Number of Program Participants 25 50 75 100	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.1% 0.1% 0.1%	Actual Annual Number of Program Participants 86 159 228 193	Actual Cumulative Number of Program Participants 86 245 473 666	Actual Cumulative Penetration Level % [(g/c)x100] 0.1% 0.3% 0.6% 0.8%	Actual Participation Over (Under) Projected Participants (g-d) 61 195 398 566
Annual De	emand and Ene	rgy Savings - 2		of all afficient	Participants	193			
			@ Meter	stallation @ Generator	Program @ Meter	@ Generator			
Summer k	W Reduction		22.68	24.27	4,377.24	4,683.65			
	Reduction		17.65	18.89	3,406.45	3,644.90			
Annual kW	/h Reduction		103,027	108,384	19,884,211	20,918,190			
Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000): Note 1: Savings from measured data					3,048 588.2 9,870.1				

				Demand Side M	anagement Annua	al Report				
Utility: Program N Program S Reporting	Start Date:	Tampa Electric Company COMMERCIAL LIGHTING - UNCONDITIONED SPACE March 2008 Annual 2018								
а	b	С	d	е	f	g	h	i	j	
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Actual Participation Over (Under) Projected Participants (g-d)	
2015	80,277	80,277	2	5	0.0%	16	16	0.0%	11	
2016 2017 2018	80,875 81,532 81,740	80,875 81,532 81,740	13 50 50	10 15 20	0.0% 0.0% 0.0%	60 338 246	76 414 660	0.1% 0.5% 0.8%	66 399 640	
2019 2020 2021 2022 2023 2024										
	emand and Ene	rgy Savings - 2		stallation @ Generator 7.54	Participants Program Meter 1,734.05	246 n Total @ Generator 1,855.44				
Winter kW	/ Reduction /h Reduction		7.05 36,922	7.54 38,842	1,734.05 1,734.05 9,082,812	1,855.44 9,555,118				
Total Prog Net Benefi	t per Installation gram Cost of the its of Measures I avings from meas	Utility (\$000): nstalled During	Reporting Perio	od (\$000):	729 179.4 792.0					

2017 0 2018 209,821 209,8 2019 2020 2021 2022 2023 2024	0 0 21 42,115	0 42,115	0.0% 20.1%	31,936	0 31,936	0.0% 15.2%	(10,179)
Annual Demand and Energy Saving Summer kW Reduction Winter kW Reduction Annual kWh Reduction	Per Insta		Participants	31,936 Total @ Generator 0.00 4,544.81 19,351,683			
Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000 Net Benefits of Measures Installed Du Note 1: Demand and energy savings i	iring Reporting Period (119 3,795.5 1,521.9				

Demand Side Management Annual Report

Projected

Cumulative

Penetration

Level %

[(d/c)x100]

0.0%

0.0%

g

Actual

Annual

Number of

Program

Participants

0

0

h

Actual

Cumulative

Number of

Program

Participants

0

0

Actual

Cumulative

Penetration

Level %

[(g/c)x100]

0.0%

0.0%

Actual

Participation

Over (Under) Projected

Participants

(g-d)

0

0

COMMERCIAL STREET AND OUTDOOR LIGHTING CONVERSION

е

Projected

Cumulative

Number of

Program

Participants

0

0

Tampa Electric Company

d

Total

Number of

Projected

Participants

0

0

February 2018

Annual 2018

С

Total

Number of

Eligible

Customers

0

0

Utility: Program Name:

а

Year

2015

2016

Program Start Date:

b

Total

Number of

Customers

0

0

Reporting Period:

				Demand Side M	lanagement Annu	al Report			
Utility: Program Name: Program Start Da Reporting Period:		Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L OCCUPANC\	/ SENSORS					
а	b	С	d	е	f	g	h	i	, j
Year Cus 2015 2016 2017	Fotal mber of stomers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 20 15 15 12	Projected Cumulative Number of Program Participants 15 30 45 60	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.1% 0.1%	Actual Annual Number of Program Participants 2 12 4 7	Actual Cumulative Number of Program Participants 2 14 18 25	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (13) (16) (27) (35)
Annual Demand	and Ener	gy Savings - 2		stallation	Participants Progra	7 m Total			
Summer kW Red Winter kW Reduc Annual kWh Redu	tion		@ Meter 37.60 30.08 80,892	@ Generator 40.23 32.19 85,098	@ Meter 263.21 210.57 566,244	@ Generator			
Utility Cost per Ins Total Program Co Net Benefits of M Note 1: Savings fi	ost of the l easures Ir	Utility (\$000): estalled During	Reporting Perio	d (\$000):	3,498 24.5 10.0				

Utility: Program N Program Si Reporting F	tart Date:	Tampa Electri COMMERCIA January 1988 Annual 2018	L LOAD MANA	GEMENT- EXT	ENDED				
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 0 0 0 0	Projected Cumulative Number of Program Participants 1 2 3 4	f Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	g Actual Annual Number of Program Participants 0 0 0 0	h Actual Cumulative Number of Program Participants 0 0 0 0	i Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	j Actual Participation Over (Under) Projected Participants (g-d) (1) (2) (3) (4)
Summer kV Winter kW	mand and Ener W Reduction Reduction h Reduction	rgy Savings - 2		stallation @ Generator 98.44 64.20 0	Participants Program @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00 0			
Total Progr	per Installation of the last of Measures In	Jtility (\$000):	Reporting Perio	od (\$000):	0 0.0 0.0				

Demand Side Management Annual Report

Utility: Program Na Program St Reporting F	tart Date:	Tampa Electri COMMERCIA January 1988 Annual 2018	c Company L LOAD MANA(GEMENT- CYC	LIC				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 0 0 0 0	Projected Cumulative Number of Program Participants 1 2 3 4	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 0 0 0	Actual Cumulative Number of Program Participants 0 0 0	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (1) (2) (3) (4)
Annual De	mand and Ene	rgy Savings - 2	018		Participants	0			
		3,	Per Ins	stallation	Progran	n Total			
Winter kW	V Reduction Reduction h Reduction		@ Meter 13.20 0.00 0	@ Generator 14.12 0.00 0	@ Meter 0.00 0.00 0	@ Generator 0.00 0.00 0			
Total Progr Net Benefit	per Installation am Cost of the I s of Measures I ity costs based	Utility (\$000): nstalled During			1 7.0 0.0				

Demand Side Management Annual Report

Year Number of Customers Customers 2015 80,277 2016 80,875 2017 81,532 2018 81,740 2019 2020 2021 2022 2023 2024	Eligible Customers 8,028 8,088 8,153 8,174	Projected Participants 2 2 2 2 2	Program Participants 1 2 4 6	Level % [(d/c)x100] 0.0% 0.0% 0.1%	Program Participants 0 0 0 0	Program Participants 0 0 0 0	Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Participants (g-d) (1) (2) (4) (6)
Annual Demand and Energy Summer kW Reduction Winter kW Reduction Annual kWh Reduction	_		stallation @ Generator 0.86 1.41 13,606	Participants Prograt @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00 0			
Utility Cost per Installation (\$): Total Program Cost of the Utili Net Benefits of Measures Insta	ty (\$000):	eporting Perio	d (\$000):	0 0.3 0.0				

Demand Side Management Annual Report

f

Projected

Cumulative

Penetration

h

Actual

Cumulative

Number of

Actual

Cumulative

Penetration

Actual

Participation

Over (Under)

Projected

g

Actual

Annual

Number of

COMMERCIAL/INDUSTRIAL REFRIGERATION (ANTI-CONDENSATE)

е

Projected

Cumulative

Number of

Tampa Electric Company

d

Total

Number of

March 2008

Annual 2018

С

Total

Number of

Utility:

Program Name:

Program Start Date:

b

Total

Reporting Period:

а

					ianagomone 7 min	•			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri STANDBY GE January 1991 Annual 2018							
а	b	С	d	е	f	g	h	i	j
<u>Year</u> 2015	Total Number of Customers 80,277	Total Number of Eligible Customers 2,304	Total Number of Projected Participants 0	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100] 0.0%	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants 4	Actual Cumulative Penetration Level % [(g/c)x100] 0.2%	Actual Participation Over (Under) Projected Participants (g-d) 3
2016 2017 2018 2019 2020 2021 2022 2023 2024	80,875 81,532 81,740	2,449 2,430 2,486	1 1 1	2 3 4	0.1% 0.1% 0.2%	0 6 1	4 10 11	0.2% 0.4% 0.4%	2 7 7
Annual Dei	mand and Ener	gy Savings - 20	018, Note 1		Participants	1			
				stallation		m Total			
Winter kW	V Reduction Reduction h Reduction		@ Meter 429.00 429.00 42,900	@ Generator 459.03 459.03 45,131	@ Meter 429.00 429.00 42,900	@ Generator 459.03 459.03 45,131			
					3,738,152				

Demand Side Management Annual Report

			Der	mand Side Man	agement Annua	l Report			
Utility: Program N Program S Reporting l	tart Date:	Tampa Electric Co THERMAL ENERO November 2015 Annual 2018							
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 7,733 7,791 7,845 7,865	Total Number of Projected Participants 1 6 3 3	Projected Cumulative Number of Program Participants 1 3 6 11	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.1% 0.1%	Actual Annual Number of Program Participants 0 0 1 1	Actual Cumulative Number of Program Participants 0 0 1 2	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (1) (3) (5) (9)
Annual De	emand and Enei	rgy Savings - 2018	Dorlin	atallatian	Participants	1 Tatal			
Winter kW	W Reduction Reduction /h Reduction		@ Meter 101.00 0.00 468	estallation @ Generator 108.07 0.00 492	Program @ Meter 101.00 0.00 468	@ Generator 108.07 0.00 492			
Total Prog	t per Installation (ram Cost of the l ts of Measures II		orting Period (\$	000):	56,500 56.5 85.1				

			Dei	mand Side Man	agement Annu	al Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L WALL INSUL	ATION					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 1 1 1 1	Projected Cumulative Number of Program Participants 2 4 6 8	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 0 0 0	Actual Cumulative Number of Program Participants 0 0 0	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (2) (4) (6) (8)
Summer k\ Winter kW	emand and Ene W Reduction Reduction 'h Reduction	rgy Savings - 2		etallation @ Generator 0.54 0.42 717	Participants Program @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00 0			
Total Progi	per Installation ram Cost of the ts of Measures I	Utility (\$000):	Reporting Perio	d (\$000):	0 0.0 0.0				

			Dei	mand Side Man	agement Annu	al Report			
Utility: Program N Program S Reporting	tart Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L WATER HEA	TING					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of <u>Customers</u> 80,277 80,875 81,532 81,740	Total Number of Eligible Customers 80,277 80,875 81,532 81,740	Total Number of Projected Participants 1 1 3 3	Projected Cumulative Number of Program Participants 1 2 3 4	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Annual Number of Program Participants 0 0 0	Actual Cumulative Number of Program Participants 0 0 0	Actual Cumulative Penetration Level % [(g/c)x100] 0.0% 0.0% 0.0% 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (1) (2) (3) (4)
	emand and Enel W Reduction	rgy Savings - 2	Per Ins @ Meter 0.63	stallation @ Generator 0.68	Participants Program @ Meter 0.00	0 m Total @ Generator 0.00			
	Reduction /h Reduction		0.33 4,735	0.35 4,981	0.00	0.00			
Total Prog	t per Installation ram Cost of the I ts of Measures I	Jtility (\$000):	Reporting Perio	d (\$000):	0 0.8 0.0				

			De	mand Side Man	agement Annu	al Report			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L WINDOW FIL	.M					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants	Projected Cumulative Number of Program Participants 40 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Nove	Actual Annual Number of Program Participants 18 ember 3, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (22)
2017 2018 2019 2020 2021 2022 2023 2024									
		rgy Savings - 2	Per Ins	stallation @ Generator	@ Meter	0 m Total <u>@ Generator</u>			
Winter kW	V Reduction Reduction h Reduction		0.00 0.00 0	0.00 0.00 0	0.00 0.00 0	0.00 0.00 0			
Total Progra	per Installation am Cost of the s of Measures I		Reporting Perio	d (\$000):					

			Dei	mand Side Man	agement Annu	al Report			
Utility: Program N Program S Reporting I	tart Date:	Tampa Electri COMMERCIA March 2008 Annual 2018	c Company L/INDUSTRIAL	EFFICIENT MC	OTORS				
а	b	С	d	е	f	g	h	i	j
Year 2015	Total Number of Customers 80,277	Total Number of Eligible Customers 12,302	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100] 0.4%	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (50)
2016 2017 2018 2019 2020 2021 2022 2023 2024				Program was	retired on Nove	ember 3, 2015.			
Annual De	emand and Ene	rgy Savings - 2		stallation @ Generator	Participants Program @ Meter	0 m Total @ Generator			
Winter kW	W Reduction Reduction 'h Reduction		0.00 0.00 0	0.00 0.00 0	0.00 0.00 0	0.00 0.00 0			
Total Progr	per Installation ram Cost of the ts of Measures I	Utility (\$000):	Reporting Perio	d (\$000):					

			De	emand Side Mar	nagement Annu	al Report			
Jtility: Program Na Program Sta Reporting P	art Date:	Tampa Electri COMMERCIA May 2011 Annual 2018	ic Company LL LIGHTING - E	exit signs.					
а	b	С	d	е	f	g	h	i	j Actual
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100]	Participation Over (Under Projected Participants (g-d)
2015 2016	80,277	80,277	72	540 Program was	0.7% s retired on Nove	2 ember 3, 2015.	2	0.0%	(538
2017 2018 2019 2020 2021 2022 2023 2024									
Annual Den	mand and Ener	rgy Savings - 2			Participants	0			
				stallation		m Total			
	/ Reduction		@ Meter 0.00	@ Generator 0.00	@ Meter 0.00	@ Generator 0.00			
Vinter kW F	Reduction Reduction		0.00	0.00	0.00	0.00			

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000):

			D	emand Side Mai	nagement Annu	al Report			
Utility: Program Na Program St Reporting F	tart Date:	Tampa Electr COMMERCIA November 20 Annual 2018	L HVAC RE-CO	OMMISSIONING	i				
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants 225	e Projected Cumulative Number of Program Participants 490 Program was	f Projected Cumulative Penetration Level % [(d/c)x100] 0.6% s retired on Nove	g Actual Annual Number of Program Participants 250 ember 3, 2015.	h Actual Cumulative Number of Program Participants 250	i Actual Cumulative Penetration Level % [(g/c)x100] 0.3%	j Actual Participation Over (Under) Projected Participants (g-d) (240)
Summer kV Winter kW	mand and Ene V Reduction Reduction h Reduction	rgy Savings - 2		stallation @ Generator 0.00 0.00 0	Participants Progra @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00			

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000):

				Demand Side N	/Janagement Annu	al Report			
Utility: Program Na Program St Reporting F	tart Date:	Tampa Electri COMMERCIA May 2011 Annual 2018	c Company L ENERGY RE	COVERY VEN	TILATION				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants	Projected Cumulative Number of Program Participants 44 Program	Projected Cumulative Penetration Level % [(d/c)x100] 0.1% was retired on Nove	Actual Annual Number of Program Participants 0 ember 3, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (44)
2017 2018 2019 2020 2021 2022 2023 2024									
Annual De	emand and Ene	ergy Savings - 2		stallation @ Generator	Participants Progra @ Meter	0 <u>m Total</u> @ Generator			
Winter kW	W Reduction Reduction 'h Reduction		0.00 0.00 0	0.00 0.00 0	0.00 0.00 0	0.00 0.00 0			
Total Progr	per Installation ram Cost of the ts of Measures		Reporting Peric	od (\$000):					

			De	mand Side Mar	nagement Annu	ıal Report			
Utility: Program Na Program St Reporting F	tart Date:	Tampa Electri COMMERCIA May 2011 Annual 2018	c Company L ROOF INSU	LATION					
а	b	С	d	е	f	g	h	i	, j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants 2	Projected Cumulative Number of Program Participants 5 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Nov	Actual Annual Number of Program Participants 2 ember 3, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (3)
Summer kV Winter kW	V Reduction	rgy Savings - 2		stallation @ Generator 0.00 0.00 0	Participants Progra @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00 0			
Total Progr	per Installation ram Cost of the s of Measures I		Reporting Perio	d (\$000):					

			De	mand Side Man	agement Annu	al Report			
Utility: Program Na Program St Reporting F	tart Date:	Tampa Electri RESIDENTIAI April 2011 Annual 2018							
а	b	С	d	е	f	g	h	i	j
Year 2015 2016	Total Number of Customers 628,392	Total Number of Eligible Customers 628,392	Total Number of Projected Participants	Projected Cumulative Number of Program Participants 60 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Dece	Actual Annual Number of Program Participants 53 mber 31, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (7)
2017 2018 2019 2020 2021 2022 2023 2024									
Summer kV Winter kW	W Reduction	rgy Savings - 2		stallation @ Generator 0.00 0.00 0	Participants Program @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00 0			
Total Progr	per Installation ram Cost of the ts of Measures I		Reporting Perio	od (\$000):					

			De	mand Side Man	agement Annu	al Report			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri RENEWABLE April 2011 Annual 2018	c Company : - SOLAR WAT	ER HEATING					
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017	Total Number of Customers 628,392	Total Number of Eligible Customers 628,392	Total Number of Projected Participants 0	Projected Cumulative Number of Program Participants 15 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Dece	Actual Annual Number of Program Participants 54 mber 31, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) 39
2018 2019 2020 2021 2022 2023 2024									
	mand and Ene V Reduction	rgy Savings - 2		stallation @ Generator 0.00	Participants Progra @ Meter 0.00	0 m Total @ Generator 0.00			
Winter kW			0.00	0.00	0.00	0.00			
Total Progr	per Installation am Cost of the s of Measures I		Reporting Perio	d (\$000):					

			De	mand Side Man	agement Annu	al Report			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri RENEWABLE April 2011 Annual 2018		ME WATER HEA	ATING				
а	b	С	d	е	f	g	h	i	j
Year 2015 2016 2017	Total Number of Customers 628,392	Total Number of Eligible Customers 125,678	Total Number of Projected Participants	Projected Cumulative Number of Program Participants 5 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Dece	Actual Annual Number of Program Participants 0 mber 31, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (5)
2017 2018 2019 2020 2021 2022 2023 2024									
Annual De	mand and Ene	rgy Savings - 2		stallation	Participants Progra	0 m Total			
			@ Meter	@ Generator	@ Meter	@ Generator			
Winter kW	V Reduction Reduction h Reduction		0.00 0.00 0	0.00 0.00 0	0.00 0.00 0	0.00 0.00 0			
Total Progra	per Installation am Cost of the	Utility (\$000):	Reporting Peric	od (\$000):					

-			De	mand Side Man	agement Annu	al Report			-
Utility: Program Na Program St Reporting F	tart Date:	Tampa Electri Commercial F April 2011 Annual 2018							
а	b	С	d	е	f	g	h	i	, j
Year 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	Total Number of Customers 80,277	Total Number of Eligible Customers 80,277	Total Number of Projected Participants 0	Projected Cumulative Number of Program Participants 5 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.0% retired on Dece	Actual Annual Number of Program Participants 1 mber 31, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.0%	Actual Participation Over (Under) Projected Participants (g-d) (4)
Summer kV Winter kW	mand and Ene V Reduction Reduction h Reduction	rgy Savings - 2		stallation @ Generator 0.00 0.00 0	Participants Progra @ Meter 0.00 0.00 0	0 m Total @ Generator 0.00 0.00			
Utility Cost Total Progr	per Installation am Cost of the	Utility (\$000):	U Reporting Perio		0	0			

			De	emand Side Mai	nagement Annu	al Report			
Utility: Program Na Program St Reporting P	art Date:	Tampa Electri RENEWABLE April 2011 Annual 2018	c Company E - PV FOR SCH	IOOLS					
а	b	С	d	е	f	g	h	i	j Actual
Year 2015	Total Number of Customers 79,457	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(d/c)x100] 0.3%	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.3%	Participation Over (Under Projected Participants (g-d) 0
2016 2017 2018 2019 2020 2021 2022 2023 2024				Program was	retired on Dece	mber 31, 2015.			
	mand and Ene	rgy Savings - 2	018		Participants	0			
		3, 11	Per Ins	stallation	Progra	m Total			
Vinter kW	V Reduction Reduction n Reduction		@ Meter 0.00 0.00 0	@ Generator 0.00 0.00 0	@ Meter 0.00 0.00 0	@ Generator 0.00 0.00 0			

Utility Cost per Installation (\$): Total Program Cost of the Utility (\$000): Net Benefits of Measures Installed During Reporting Period (\$000):

-			D	emand Side Ma	nagement Annu	al Report			
Utility: Program Na Program St Reporting F	art Date:	Tampa Electri RENEWABLE April 2011 Annual 2018	ic Company E - PV FOR SCH	HOOLS					
а	b	С	d	е	f	g	h	i	j ,
Year 2015 2016 2017	Total Number of Customers 79,457	Total Number of Eligible Customers 301	Total Number of Projected Participants	Projected Cumulative Number of Program Participants 1 Program was	Projected Cumulative Penetration Level % [(d/c)x100] 0.3% retired on December 1	Actual Annual Number of Program Participants 1 mber 31, 2015.	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(g/c)x100] 0.3%	Actual Participation Over (Under) Projected Participants (g-d) 0
2018 2019 2020 2021 2022 2023 2024									
Annual Dei	mand and Ene	rgy Savings - 2		stallation @ Generator	Participants Program Meter	0 n Total @ Generator			
Winter kW	V Reduction Reduction n Reduction		0.00 0.00 0	0.00 0.00 0	0.00 0.00 0	0.00 0.00 0			
Total Progra	per Installation am Cost of the s of Measures I		Reporting Peric	od (\$000):					

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TAMPA ELECTRIC COMPANY UNDOCKETED DSM ACCOMPLISHMENTS FILED: MARCH 1, 2019

Comparison of Annual Achieved kW and kWh Reductions with Public Service Commission Established Goals Savings at the Generator

Utility: TAMPA ELECTRIC COMPANY

	Wint	ter Peak MW Red	duction	Sumr	ner Peak MW Re	eduction	GW	h Energy Reduc	tion
	Commission			Commission			Commission		
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	12.3	2.6	473.1%	10.8	1.1	981.8%	21.2	1.8	1,177.8%
2016	7.7	4.1	187.8%	5.1	1.6	318.8%	13.2	3.5	377.1%
2017	6.9	5.2	132.7%	4.7	2.2	213.6%	14.9	4.8	310.4%
2018	8.0	6.5	123.0%	5.6	2.7	205.7%	17.1	6.1	280.3%
2019									
2020									
2021									
2022									
2023									
2024									

Commercial/Industrial

	Win	ter Peak MW Re	duction	Sumr	mer Peak MW Re	eduction	GW	Vh Energy Reduc	tion
		Commission			Commission			Commission	
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	8.1	1.2	675.0%	11.7	1.7	688.2%	12.5	3.9	320.5%
2016	2.9	1.3	223.1%	4.4	2.5	176.0%	17.8	6.0	296.7%
2017	9.2	1.6	575.0%	10.4	2.7	385.2%	30.2	8.0	377.5%
2018	13.0	1.7	767.1%	15.0	3.3	453.6%	33.7	9.2	365.9%
2019									
2020									

ł

	Wint	ter Peak MW Red	duction	Sumr	ner Peak MW Re	eduction	GW	h Energy Reduc	tion
	Commission			Commission			Commission		
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	20.4	3.8	536.8%	22.5	2.8	803.6%	33.7	5.7	591.2%
2016	10.6	5.4	196.3%	9.5	4.1	231.7%	31.0	9.5	326.3%
2017	16.1	6.8	236.8%	15.1	4.9	308.2%	45.1	12.8	352.3%
2018	21.0	8.2	256.5%	20.5	6.0	342.1%	50.8	15.3	331.8%
2019									
2020									
2021									
2022									
2023									
2024									

Comparison of Cumulative Achieved kW and kWh Reductions with Public Service Commission Established Goals Savings at the Generator

2024

				Residential					
	Winter Peak MW Reduction			Sumn	ner Peak MW Re	duction	GW	h Energy Reduc	tion
	Commission			Commission			Commission		
.,	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	12.3	2.6	473.1%	10.8	1.1	981.8%	21.2	1.8	1,177.8%
2016	20.0	6.7	298.5%	15.9	2.7	588.9%	34.4	5.3	649.1%
2017	26.9	11.9	226.1%	20.6	4.9 7.6	420.4%	49.3	10.1	488.1%
2018 2019	34.9	18.4	189.6%	26.2	7.0	344.1%	66.4	16.2	409.9%
2019									
2021									
2022 2023									
2023 2024									
2024									
				Commercia	al/Industrial				
	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
		Commission		Commission			Commission		
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	8.1	1.2	675.0%	11.7	1.7	688.2%	12.5	3.9	320.5%
2016	11.0	2.5	440.0%	16.1	4.2	383.3%	30.3	9.9	306.1%
2017	20.2	4.1	492.7%	26.5	6.9	384.1%	60.5	17.9	338.0%
2018	33.2	5.8	573.1%	41.5	10.2	406.6%	94.2	27.1	347.5%
2019									
2020									
2021									
2022									
2023									
2024									
				Coml	oined				
	Wint	er Peak MW Red	duction	Summer Peak MW Reduction			GWh Energy Reduction		
	Commission			Commission			Commission		
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance	Achieved	Goal	Variance	Achieved	Goal	Variance
2015	20.4	3.8	536.8%	22.5	2.8	803.6%	33.7	5.7	591.2%
2016	31.0	9.2	337.0%	32.0	6.9	463.8%	64.7	15.2	425.7%
2017	47.1	16.0	294.4%	47.1	11.8	399.2%	109.8	28.0	392.1%
2018	68.1	24.2	281.6%	67.6	17.8	379.9%	160.6	43.3	370.8%
2019									
2020									
2021 2022 2023									

TAMPA ELECTRIC COMPANY-SUMMARY OF 2018 DEMAND SIDE MANAGEMENT PROGRAM ACCOMPLISHMENTS

Appendix A

DSM Energy Education and Awareness Activities of 2018

Tampa Electric Company participated in over 80 designated energy education and awareness events across the company's service area in 2018. These events do not include the daily interactions of energy education that Tampa Electric Team Members have with customers through email or phone calls, one-on-one discussions nor with customers that are participating in one of Tampa Electric's Commission approved DSM programs. These events cover educating all ages, income classes and rate classes of customers on energy education and awareness. Several highlighted events include:

- Plant City MLK Festival
- MM Fitness
- Continuous Improvement Showcase
- Strawberry Ridge Vendor Fair
- Steam Night
- CPSA Family Fun Night
- Farm Night BBQ
- Fiesta Day
- GRCC Monthly Membership Meeting Luncheon
- Chester W. Taylor Jr. Elementary School
- Crime Free Multi Housing Class- Presentation
- Taste of Winter Haven
- Ruby Lake Annual HOA meeting
- Springhill Park Community Center
- Southshore Chamber 26th Annual Apollo Beach Manatee 3/10
- Go Green at the Amalie
- Forest Hill Park Community Center
- Lifestyles After 50 Fun Fest
- Kids Rock Science
- New Tampa Regional Library
- The Great American Teach-In
- The Greater Temple Terrace Chamber of Commerce Business Expo
- 2nd Annual Wimauma Heart of Hillsborough
- Solar Fair 2018
- Spring Trade Show
- Lawton Chiles Elementary
- MetLife Earth Day Fair
- Brandon Lions Club
- YMCA at Big Bend Rd
- YMCA at Valrico Camp Family

- ECO Fest
- Grow Financial Earth Day
- Lifestyles After 50 Hurricane Preparedness
- Walk A Mile in Her Shoes
- Let's Beat Ovarian Cancer
- Clean Air Fair
- Traditions Clubhouse Vendor Fair
- TECO Energy Safety, Health & Emergency Preparedness
- Lawton Chiles Elementary Science Night
- 2018 Hillsborough County Neighborhoods Conference
- Lawton Chiles Elementary Solar Car Race
- Summer Family Resource Fair
- College Hill Church of God in Christ
- Four Lakes Coffee Talk
- Kids with a Call, INC
- Richard's Father's Day Walk
- Coffee at Lake Ashton
- Valrico Lake Advantage Academy
- Manufactured Homes
- Swindle Medical Arts Center Plant City
- Lennard High School Ruskin
- Bowers Whitley Career Center University
- Middleton High School East Tampa
- Kids Day 2018
- Howard W. Blake High School West Tampa
- Tampa Home Show 8/25
- City of Oldsmar 8/31
- Lifestyles After 50 Fun Fest
- Crop Mania Joshua House
- Girl Scouts of West Central Florida
- South Tampa Chamber of Commerce
- Community Picnic Health Fair
- Temple Terrace National Night Out
- Sun City Center Chamber of Commerce Fall Business Expo
- Bloomingdale Medical Assoc.
- Birding & Nature Festival
- Cub Scouts
- Hillsborough Country Building
- How to Fix It
- Valencia Lakes Fraud Prevention Day
- Haunted Happenings
- Fall Festival
- 30th Annual Ruskin Seafood Festival
- Brandon Chamber Luncheon

- Wellness & Benefit Fair DART
- A Walk for Life
- Great American Teach-In

Tampa Electric's Commercial Low-Income Weatherization Research & Development Project 2017 - 2018

Purpose:

Determine the potential summer and winter demand, annual energy savings, and feasibility of offering a commercial weatherization demand side management ("DSM") program designed toward small to midsize commercial customers operating businesses in low-income areas within Tampa Electric's service territory.

Table of Contents:

- 1. Background
- 2. Project scope
- 3. Instrumentation
- 4. Weather
- 5. Results
- 6. M & V Graphs

Background:

Tampa Electric has proven success with facilitating the residential Weatherization DSM program. In the beginning of 2017, Tampa Electric's Regulatory Staff requested the company's Commercial Energy Management Services Team to develop and implement a Research and Development ("R&D") project that would provide a series of energy conservation measures that would directly reduce the weather sensitive peak for small to midsize commercial customers that operated within low-income areas within Tampa Electric's service territory. This project would identify the summer and winter demand and associated annual energy savings to the installed energy conservation measures in addition to determining the feasibility of potentially offering a commercial low-income weatherization DSM program.

Project Scope:

Evaluate the energy and demand savings of an energy saving kit offering energy efficiency measures for small to midsize commercial customers in low-income areas.

Tampa Electric's Commercial Energy Management team initially identified 12 potential energy efficiency measures that could be utilized in a kit for small commercial business. This initial list was compiled based on the team's knowledge and experience gained from performing energy audits.

The initial energy efficiency measures that were identified were:

- Duct seal
- Insulation
- LED lighting
- Weather-stripping for conditioned to non-conditioned space doors
- Seal and caulk windows
- Programmable thermostats
- Insulation of air conditioner refrigerant lines
- Ceiling tile repair/replacement
- Occupancy sensor
- Hot water pipe insulation/wrap
- HVAC recommissioning
- Refrigerator gaskets and seals

The Commercial Energy Management team determined that further validation was required in order to establish what measures would effectively work as a kit in a potential DSM program offering. Because the types of small commercial businesses varies significantly, as well as having quite different demand and energy usage profiles, it was essential to refine the potential energy efficiency measures. To perform this refinement, the team determined that this would could be effectively accomplished by performing

energy audits to obtain information and data from a sampling of small commercial businesses.

The Commercial Energy Management team determined that to obtain an effective sample, the company would need to perform approximately 30 energy audits. Of these facilities that received an energy audit, the team decided that approximately 10 of these sites would be selected to receive the energy efficiency measures that would be identified as the final kit. The team utilized Florida Census Tract data to determine low-income target areas for the performance of the energy audits. The team then canvassed the target areas to create a pool of 30 businesses which would be used to establish the final R&D participants.

Each of the 30 business owners were contacted personally and received a detailed explanation of the energy audit and also potential participation in the R&D project. In the performance of the energy audit, the customers received the same comprehensive high-quality commercial walk-through energy audit, performed by a Tampa Electric commercial energy analyst, the company performs on a daily basis. The commercial energy analyst evaluated energy-consuming equipment at the customer's facility. Recommended low-cost/no-cost measures, as well as measures with short and longer paybacks. The commercial energy analyst followed up with a detailed report of energy saving opportunities along with billing history, energy usage graphs, energy usage and cost forecasting, as well as benchmarking and greenhouse gas emissions information. In the process of performing the audit, the commercial energy analyst also identified a list of measures that would reduce the weather sensitive peak to that specific customer.

After the performance of the energy audits, the specific energy efficiency measures identified that could potentially become part of the kit were evaluated. Each measure was examined to determine which ones would have the best opportunity for energy and demand savings, which of these measures were applicable to most or all of these businesses and finally which ones could effectively be part of a potential energy kit offering. From this evaluation, the following energy efficiency measures were chosen:

- Duct seal
- Ceiling and wall insulation
- LED lighting (screw in type)
- Weather-stripping for conditioned to non-conditioned space doors
- Programmable thermostats

Once this final list of measures was established for the kits, the Commercial Energy Management team met with Regulatory to present the findings and to receive approval to move forward with the installation of the energy efficiency measures identified. In this meeting and several additional follow-up meetings, the company selected 11 businesses that would receive the energy efficiency measures. The market segments of these businesses provided a good cross section for the R&D project. The market segments varied from grocery store, retail, photography, restaurant and office space. The company procured a weatherization contractor that would install the needed measures for that specific business. If the business already had one of the selected measures, the business would receive the remaining other measures.

Each customer that was selected was contacted, and an appointment was scheduled to install the applicable measures. At each installation, a Tampa Electric Commercial Energy Analyst was also at the business to monitor the installation of the measures.

Following the installation of the energy efficiency measures, the Commercial Energy Management team reviewed the monthly demand and energy usage three months after the measures were installed and again after six months. This data was used to validate the potential demand and energy savings. During this time, Tampa Electric's Commercial Energy Analysts conducted site visits to each site to verify any changes in the participating businesses. The analysts reported any changes and made recommendations that would aide the participating business.

The final measure and verification was completed in December 2018 and the findings are enclosed in this report. They were obtained utilizing the monthly electric meter data. Two of the initial participants had limited data because they relocated their business from the original site location.

While there were some favorable results, a majority of the participants demonstrated an increase in energy and/or demand use. Seven of the original 11 participants showed an increase and four participants showed a decrease in their energy usage. Base on the data collected and analyzed, it would indicate that a prescribed kit type program is not advantageous at this time. The factors found during the commissioning follow-up visits indicated:

- Poor use of thermostat equipment had the highest negative effect. The team found that customers would manually override the programmable thermostats and leave them on this inefficient setting.
- Incompatible equipment. The company found that some programmable thermostats do not communicate effectively with some existing HVAC equipment thus making the system inefficient.
- Damage to facility. In two cases, facility damage prevented the facility from receiving the full benefits of the energy efficiency measures.
- Volatility in the market for low-income area businesses. While it is evident that a program like this is advantageous, from offering it as a DSM program has concerns for reliable demand and sustained energy savings over time.
- It also appeared that with the energy efficiency measures installed, some customers took advantage of the higher energy efficiency of the overall site but changed temperature setpoints, causing more energy and demand to be consumed.

Instrumentation:

Electric meter data collected monthly and historical billing data.

Weather:

The weather climate during the monitoring period was similar and thus not a factor in the evaluation process. This was validated using degree day information at the National Climate Data Center (NCDC) at http://www.ncdc.noaa.gov.

Results:

Business Type	Current Trend	Increase or Decrease (kWh)	kWh Change	Increase or Decrease (SkW)	SkW Change	Increase or Decrease (WkW)	WkW Change
Apartment Clubhouse/Office	Upward	Increase	6,248	Increase	1.3	Increase WkW	2.2
Apartment Clubhouse/Office	Downward	Increase	3,893	Note 1		Note 1	
Auto tire Store	Upward	Increase	309	Note 1		Note 1	
Retail Consignment Shop	Upward	Increase	1,985	Decrease	-0.3	Decrease	-0.6
Maternity Photography	Downward	Decrease	-500	Note 1		Note 1	
Neighborhood Food Market	Stable	Decrease	-16,977	Decrease	-1.6	Decrease	-3.6
Historical Museum Office	Upward	Increase	3,403	Note 1		Note 1	
Retail Seafood	Downward	Decrease	-6,310	Note 1		Note 1	
Sushi Restaurant	Upward	Decrease	-6,549	Note 1		Note 1	
Computer Software	Upward	Increase	4,215	Note 1		Note 1	
Education Center	Upward	Increase	3,707	Increase	3.7	Decrease	-1.4

Note 1: Customer is General Service (non-demand)

Graphs:

Participant #1: 1,679 Sq. Ft. Apartment Clubhouse/Office

Measures Installed: Added R19 insulation

Installed (2) "Nest" Programmable Thermostat

Sealed Air Duct Systems

Installed 4 LED screwing lamps

Note: The thermostats installed at this location were not compatible with the customer's air conditioning equipment. The customer eventually replaced the Nest thermostats with standard digital thermostats.



Measures Installed: Added R19 insulation

Installed (1) "Nest" Programmable Thermostat

Sealed Air Duct System

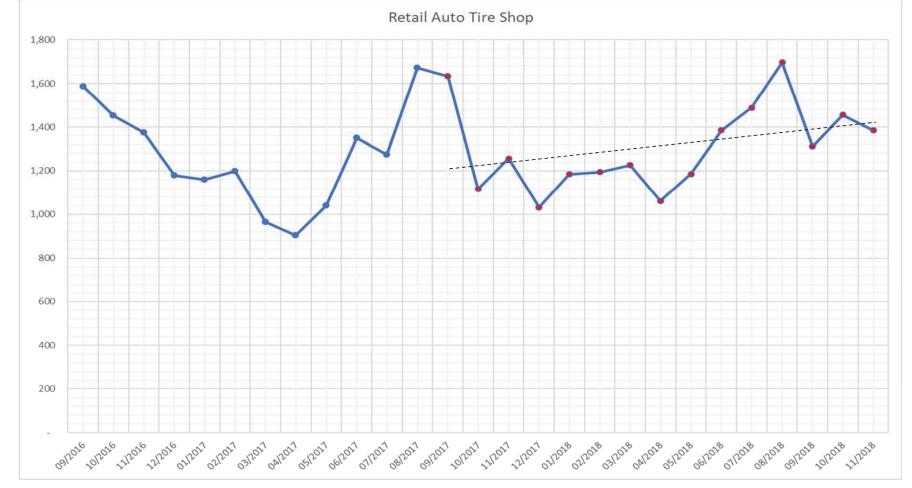
Installed 6 LED screwing lamps

Note: Initially the customer was still operating the thermostat manually and overriding the Nest thermostat. The customer received additional education during follow-up site visit from Tampa Electric's commercial energy management staff.



Measures Installed: Added 600 Sq. Ft. of R19 batted wall insulation to one wall

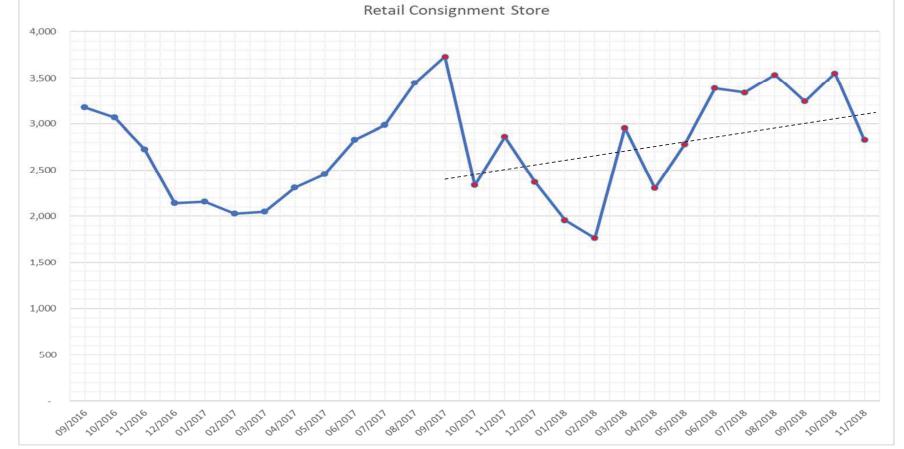
Note: This was a small facility with a window air conditioning system. The majority of energy usage was attributed to automotive repair equipment. Thus, the wall insulation did not significantly affect the energy consumption.



Measures Installed: Installed (1) "Honeywell" Programmable Thermostat

Installed Weather-stripping to front door

Note: During the follow-up site visit, it was discovered the Honeywell thermostat was not operating correctly, so it was not controlling the air conditioning systems efficiently. In addition, the damage to the front door was so severe that the weather-stripping had minimal impact on decreasing the electric usage.

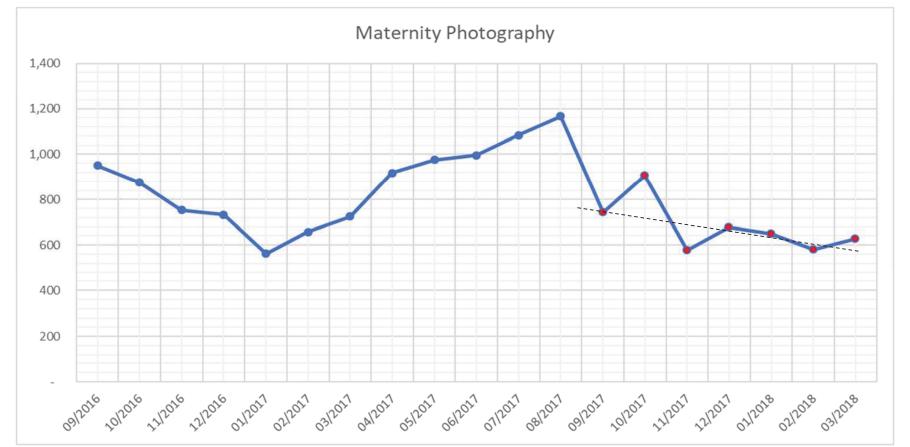


Installed R19 Ceiling Insulation

Seal Air Duct System

Installed 6 LED Screw-in lamps

Note: This facility showed a decrease in the energy consumption compared to the same time the previous year. Unfortunately, the business relocated seven months after the measures were installed so data is limited.



Participant #6: 1,300 Sq. Ft. Neighborhood Food Market

Measures Installed: Installed (1) "Honeywell" Programmable Thermostat

Installed R19 Ceiling Insulation

Seal Air Duct System

Installed 6 LED Screw-in lamps

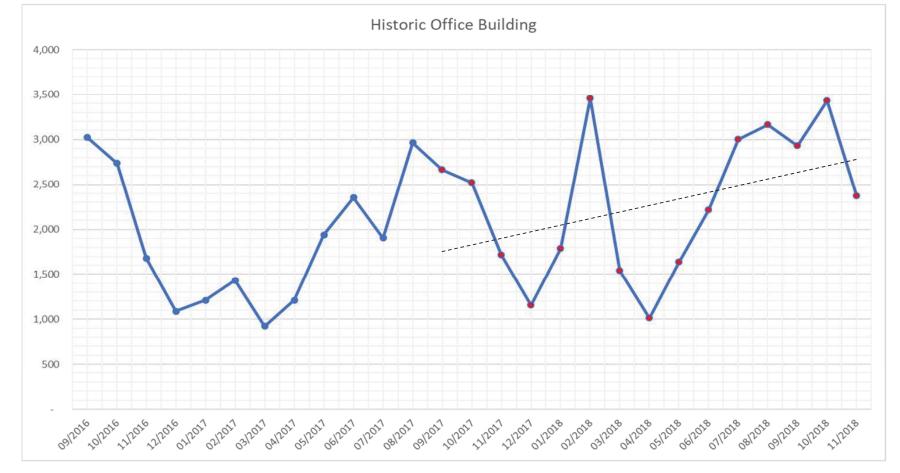
Note: This facility showed a decrease in both energy consumption and demand reduction compared to the same time the previous year.



Measures Installed: Installed (3) "Honeywell" Programmable Thermostat

> Installed R19 Ceiling Insulation Installed 6 LED Screw-in lamps

Note: This facility showed an increase in energy consumption due to the customer manually overriding the programmable thermostat settings.



Measures Installed: Installed (1) "Honeywell" Programmable Thermostat

Installed R19 Ceiling Insulation Installed 6 LED Screw-in lamps

Note: This facility showed a decrease in the energy consumption compared to the same time the previous year. Unfortunately, the business relocated seven months after the measures were installed so data is limited.



Sealed Air Duct System

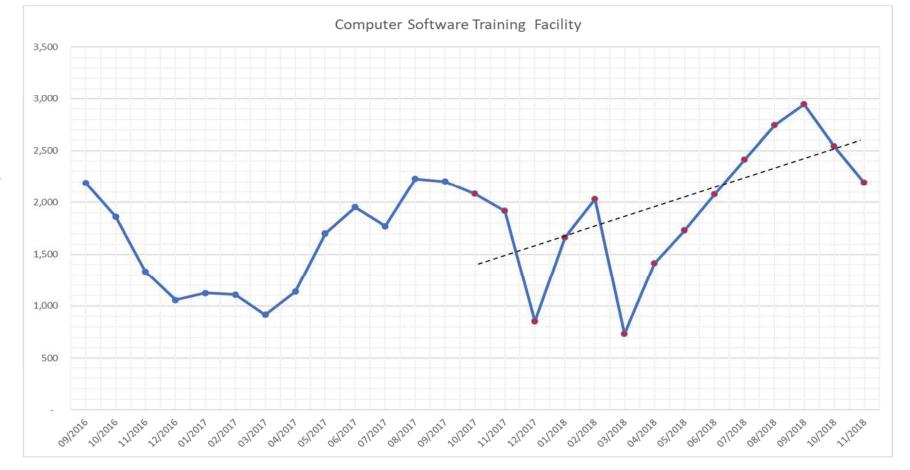
Note: This facility showed a decrease in the energy consumption compared to the same time the previous year.



Participant #10: 1,300 Sq. Ft. Computer Software Training Facility

Measures Installed: Added R19 Ceiling Insulation Sealed Air Duct System

Note: This facility showed no decrease in the energy consumption compared to the same time the previous year. Customer manually overrides the existing programmable thermostat. In addition, the building was older frame construction and the building envelope was not sealed tight which allows for nonconditioned air infiltration.



Participant #11: 3,000 Sq. Ft. Education Center with Residential Quarters

Measures Installed: Added R19 Ceiling Insulation

Sealed Air Duct System

Installed (1) "Honeywell" Programmable Thermostat

Installed (6) Screw-in LED lamps

Note: This facility showed no decrease in the energy consumption compared to the same time the previous year. Customer manually overrides the existing programmable thermostat. In addition, this is an older frame two story building and the building envelope was not sealed tight which allows for outside nonconditioned air infiltration.

