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September 5, 2017

VIA: ELECTRONIC FILING

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

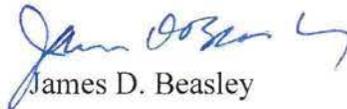
Re: Petition of Tampa Electric Company for Approval of Conservation Street and
Outdoor Lighting Conversion Program

Dear Ms. Stauffer:

Attached for filing in the above-styled matter is the Petition of Tampa Electric for
Approval of Conservation Street and Outdoor Lighting Conversion Program.

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Attachment

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric Company)
for approval of Conservation Street and)
Outdoor Lighting Conversion Program.)
_____)

DOCKET NO. _____

FILED: September 5, 2017

**PETITION OF TAMPA ELECTRIC COMPANY
FOR APPROVAL OF CONSERVATION STREET AND
OUTDOOR LIGHTING CONVERSION PROGRAM**

Tampa Electric Company ("Tampa Electric or "the company"), pursuant to Sections 366.82, 366.05 and 366.06, Florida Statutes, petitions the Florida Public Service Commission ("Commission") for approval of the company's proposed Conservation Street and Outdoor Lighting Conversion Program ("the Program") as a Demand Side Management ("DSM") program, approval of the company's program description attached hereto as Exhibit "A" and programs standards attached hereto as Exhibit "B", and to allow Tampa Electric to recover the remaining unamortized costs in rate base of its Metal Halide ("MH") and High-Pressure Sodium ("HPS") street and outdoor luminaires and associated communication expenditures of its Street and Outdoor Lighting Conversion Program through the company's Energy Conservation Cost Recovery ("ECCR") Clause. As grounds therefor, the company says:

1. Tampa Electric is an investor-owned public utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. Tampa Electric is subject to the Florida Energy Efficiency and Conservation Act ("FEECA"), Sections 366.80–85, 403.519, Florida Statutes. Pursuant to FEECA, the Commission has approved DSM goals for Tampa Electric and Tampa Electric has a DSM plan approved by the Commission designed to achieve its DSM goals.

2. Tampa Electric's address is 702 North Franklin Street, Tampa, Florida 33601. Correspondence, notices, orders and other documents concerning this petition should be sent to:

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Tampa Electric Company
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3. The objective of the proposed program is to convert the current standard MH and HPS street and outdoor luminaires to energy efficient Light Emitting Diode (“LED”) luminaires, in order to significantly reduce the quantity of electricity consumed within the company's service area for street and outdoor lighting. All new installations under the program will be energy efficient LED luminaires.

4. Tampa Electric will seek recovery of the costs of providing the LED luminaires in a separate petition requesting approval of tariff provision for addressing that service.

5. Tampa Electric is seeking approval to recover the remaining unamortized costs in rate base for these MH and HPS luminaires that will be converted in this program within the ECCR clause. The unamortized amount for the eligible luminaires is \$37,780,595 as of August 31, 2017, and if approved, will be recovered through the ECCR at a rate to coincide with conversion of the luminaires. Tampa Electric projects this conversion will add approximately 44.4 cents to the ECCR clause in each of the five years the project is active. If the Program is approved, the company would begin recovering these unamortized costs and associated communication expenditures effective with the new ECCR factors in 2019.

6. Tampa Electric has conducted cost-effectiveness tests showing that the Program is cost-effective as a DSM program with the following scores:

Rate Impact Measure Test:	1.05
Total Resource Cost Test:	2.17
Participant Cost Test:	61,884

7. Tampa Electric has approximately 242,000 street and outdoor lighting luminaires in operation at this time. Of these luminaires, 209,821 are non-LED and are eligible to be converted under the proposed conservation program.

8. Tampa Electric expects that if the Program is approved, the company will commence with the conversion project in the last quarter of 2017. The program should produce a total winter peak demand savings of 29.7 MW and an annual energy savings of approximately 127.9 GWh by the completion of this conversion project.

9. This proposal is consistent with prior Commission decisions for this type of conservation conversion of street and outdoor lighting to more energy efficient luminaires. See, e.g., Tampa Electric's Docket No. 19800701- EG.

10. Tampa Electric believes this Program satisfies a strong desire by many cities and communities within the company's service area that have requested to have LED street and outdoor installed in place of MH and HPS luminaires. Cities and communities served by Tampa Electric, like other cities and communities across the United States, view LED street and outdoor lighting as a "win-win" proposition because of the energy savings associated with LED technology, coupled with the improved physical lighting characteristics that offer the prospect of increasing roadway safety and personal security in outdoor areas after dark.

11. LED street and outdoor lights offer additional benefits to cities and communities served by Tampa Electric. LED luminaires do not contain toxic chemicals, such as mercury, thus the risks associated with the ultimate disposal is not as great. Also, with LED lighting there is no waiting period for the lights to come on as compared to older street and outdoor luminaires.

Perhaps one of the most important features of LED luminaires is the directional nature of the light source. LED luminaires minimize light pollution because the distribution of the light is focused in one direction versus a more diffusion of light in many directions. Finally, LED luminaires provide for future opportunities to decrease the potential use of energy even further through dimming controls and can be leveraged to support smart cities functionality such as automatic notifications if the light is out or blinking in an area to show emergency responders where they are needed.

12. If this program is approved, the company plans to initiate separate communications and notifications regarding the project to the communities and customers the company serves. The cost of this advertising will be approximately \$50,000 per year during the 5-year period of the program.

13. The approval of the company's proposed Conservation Street and Outdoor Lighting Conversion Program will help Tampa Electric achieve the goals of FEECA and Commission Rule 25-17.001, Florida Administrative Code, is directly monitorable and will yield measurable results.

14. Attached hereto as Exhibit "A" is Tampa Electric's proposed program description for its proposed Program.

15. Attached hereto as Exhibit "B" are Tampa Electric's proposed program standards for its proposed Program.

16. Attached hereto as Exhibit "C" is Tampa Electric's project summary for the luminaires and associated wattage changes eligible for its proposed Program.

17. Tampa Electric is not aware of any disputed issues of material fact regarding the matters asserted herein. There has not been any prior agency action in this proceeding; therefore, Tampa Electric cannot allege "when and how the petitioner received notice of the agency decision." Since there is no agency action for which Tampa Electric is seeking reversal or

modification, there are no statutes or rules Tampa Electric contends require reversal or modification of Commission action.

WHEREFORE, Tampa Electric respectfully petitions the Commission to approve the company's proposed Conservation Street and Outdoor Lighting Conversion Program, approve the program description contained in Exhibit "A" and program description and standards contained in Exhibit "B" and allow Tampa Electric to recover the remaining unamortized costs in rate base of its MH and HPS luminaires and associated communication expenditures through Tampa Electric's ECCR clause.

DATED this 5th day of September 2017.

Respectfully submitted,



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J. JEFFRY WAHLEN
Ausley McMullen
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(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

EXHIBIT A

Program: Street and Outdoor Lighting Conversion

Program Start Date: TBD

Program Description

The Street and Outdoor Lighting Conversion Program is designed to encourage the conversion from Non-Light Emitting Diode (LED) street and outdoor lighting luminaires to eligible LED luminaires in a five-year program. The goal of this program is to install energy efficient LED street and outdoor lighting technology to reduce the energy consumption and demand and reducing Tampa Electric's peak demand. Tampa Electric will recover the remaining unamortized costs in rate base with the eligible Non-LED luminaires.

Program Participation Standards

Program Standards are submitted concurrently with this program description.

Program Savings

Demand and energy savings were obtained using wattage data from each existing eligible Non-LED lamps and the proposed LED lamps that will be installed in its place. Operating hours were estimated using the United States Naval Observatory tables for Tampa, Florida. The analysis yielded the following expected savings per lamp conversion performed:

Summer Demand:	0.000 kW
Winter Demand:	0.133 kW
Annual Energy:	576 kWh

Program Costs

Unamortized depreciation capture: \$180.06 per fixture.

The estimated administrative cost per participant is \$0.

Program Monitoring and Evaluation

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

PROGRAM NAME: STREET AND OUTDOOR LIGHTING CONVERSION

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Luminaires	Total Number of Eligible Luminaires	Annual Number of Program Luminaires	Cumulative Penetration Level %	Cumulative Number of Program Luminaires
2017	209,821	209,821	3,510	1.7%	3,510
2018	209,821	206,311	42,115	21.7%	45,625
2019	209,821	164,196	42,115	41.8%	87,740
2020	209,821	122,081	42,115	61.9%	129,855
2021	209,821	79,966	42,115	82.0%	171,970
2022	209,821	37,851	37,851	100.0%	209,821
2023	209,821	0	0	100.0%	209,821
2024	209,821	0	0	100.0%	209,821

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PROGRAM NAME: STREET AND OUTDOOR LIGHTING CONVERSION

AT THE METER						
Year	Per Luminaire kWh Reduction	Per Luminaire Winter kW Reduction	Per Luminaire Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2017	576	0.133	0.000	2.022	0.467	0.000
2018	576	0.133	0.000	26.280	6.068	0.000
2019	576	0.133	0.000	50.538	11.669	0.000
2020	576	0.133	0.000	74.796	17.271	0.000
2021	576	0.133	0.000	99.055	22.872	0.000
2022	576	0.133	0.000	120.857	27.906	0.000
2023	576	0.133	0.000	120.857	27.906	0.000
2024	576	0.133	0.000	120.857	27.906	0.000

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PROGRAM NAME: STREET AND OUTDOOR LIGHTING CONVERSION

AT THE GENERATOR						
Year	Per Luminaire kWh Reduction	Per Luminaire Winter kW Reduction	Per Luminaire Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2017	609	0.142	0.000	2.139	0.497	0.000
2018	609	0.142	0.000	27.804	6.463	0.000
2019	609	0.142	0.000	53.469	12.428	0.000
2020	609	0.142	0.000	79.135	18.393	0.000
2021	609	0.142	0.000	104.800	24.359	0.000
2022	609	0.142	0.000	127.867	29.720	0.000
2023	609	0.142	0.000	127.867	29.720	0.000
2024	609	0.142	0.000	127.867	29.720	0.000

INPUT DATA - PART 1
PROGRAM TITLE: Street and Outdoor Lighting Conversion

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PROGRAM DEMAND SAVINGS & LINE LOSSES

I. (1) CUSTOMER KW REDUCTION AT THE METER	0.133 KW /CUST
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.021 KW GEN/CUST
I. (3) KW LINE LOSS PERCENTAGE	7.00 %
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	608 KWH/CUST/YR
I. (5) KWH LINE LOSS PERCENTAGE	5.20 %
I. (6) GROUP LINE LOSS MULTIPLIER	1
I. (7) CUSTOMER KWH PROGRAM INCREASE AT METER	0 KWH/CUST/YR
I. (8)* CUSTOMER KWH REDUCTION AT METER	576 KWH/CUST/YR

ECONOMIC LIFE & K FACTORS

II. (1) STUDY PERIOD FOR CONSERVATION PROGRAM	25 YEARS
II. (2) GENERATOR ECONOMIC LIFE	25 YEARS
II. (3) T & D ECONOMIC LIFE	25 YEARS
II. (4) K FACTOR FOR GENERATION	1.4181
II. (5) K FACTOR FOR T & D	1.4181
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0

UTILITY & CUSTOMER COSTS

III. (1) UTILITY NONRECURRING COST PER CUSTOMER	180.00 \$/CUST
III. (2) UTILITY RECURRING COST PER CUSTOMER	0.00 \$/CUST/YR
III. (3) UTILITY COST ESCALATION RATE	2.40 %
III. (4) CUSTOMER EQUIPMENT COST	0.00 \$/CUST
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.30 %
III. (6) CUSTOMER O & M COST	0.00 \$/CUST/YR
III. (7) CUSTOMER O & M ESCALATION RATE	2.30 %
III. (8)* CUSTOMER TAX CREDIT PER INSTALLATION	0.00 \$/CUST
III. (9)* CUSTOMER TAX CREDIT ESCALATION RATE	0.00 %
III. (10)* INCREASED SUPPLY COSTS	0.00 \$/CUST/YR
III. (11)* SUPPLY COSTS ESCALATION RATE	0.00 %
III. (12)* UTILITY DISCOUNT RATE	0.06976
III. (13)* UTILITY AFUDC RATE	0.0646
III. (14)* UTILITY NON RECURRING REBATE/INCENTIVE	0.00 \$/CUST
III. (15)* UTILITY RECURRING REBATE/INCENTIVE	0.00 \$/CUST/YR
III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0.00 %

AVOIDED GENERATOR, TRANS. & DIST COSTS

IV. (1) BASE YEAR	2017
IV. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2021
IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2018
IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	682.22 \$/KW
IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	37.16 \$/KW
IV. (6) BASE YEAR DISTRIBUTION COST	69.64 \$/KW
IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	2.40 %
IV. (8) GENERATOR FIXED O & M COST	12.27 \$/KW/YR
IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.40 %
IV. (10) TRANSMISSION FIXED O & M COST	2.24 \$/KW/YR
IV. (11) DISTRIBUTION FIXED O & M COST	8.54 \$/KW/YR
IV. (12) T&D FIXED O&M ESCALATION RATE	2.40 %
IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.198 CENTS/KWH
IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.40 %
IV. (15) GENERATOR CAPACITY FACTOR	13.20 %
IV. (16) AVOIDED GENERATING UNIT FUEL COST	3.95 CENTS/KWH
IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	3.69 %
IV. (18)* AVOIDED PURCHASE CAPACITY COST PER KW	0.00 \$/KW/YR
IV. (19)* CAPACITY COST ESCALATION RATE	0.00 %

NON-FUEL ENERGY AND DEMAND CHARGES

V. (1) NON-FUEL COST IN CUSTOMER BILL	2.727 CENTS/KWH
V. (2) NON-FUEL ESCALATION RATE	1.00 %
V. (3) CUSTOMER DEMAND CHARGE PER KW	0.000 \$/KW/MO
V. (4) DEMAND CHARGE ESCALATION RATE	1.00 %
V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL	1.00

CALCULATED BENEFITS AND COSTS	
(1)* TRC TEST - BENEFIT/COST RATIO	2.17
(2)* PARTICIPANT NET BENEFITS (NPV)	61,884
(3)* RIM TEST - BENEFIT/COST RATIO	1.05

TOTAL RESOURCE COST TESTS
PROGRAM: Street and Outdoor Lighting Conversion

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)	
2017	0	632	0	0	632	0	0	27	0	27	(605)	(605)	
2018	0	7,763	0	0	7,763	0	157	410	0	567	(7,196)	(7,331)	
2019	0	7,949	0	0	7,949	0	161	1,312	0	1,473	(6,476)	(12,990)	
2020	0	8,140	0	0	8,140	0	165	2,143	0	2,308	(5,832)	(17,754)	
2021	0	0	0	0	0	396	371	3,205	0	3,972	3,972	(14,721)	
2022	0	0	0	0	0	387	368	3,040	0	3,795	3,795	(12,013)	
2023	0	0	0	0	0	373	364	3,689	0	4,426	4,426	(9,059)	
2024	0	0	0	0	0	361	361	2,468	0	3,189	3,189	(7,070)	
2025	0	0	0	0	0	352	358	2,577	0	3,287	3,287	(5,153)	
2026	0	0	0	0	0	344	356	4,113	0	4,813	4,813	(2,530)	
2027	0	0	0	0	0	334	354	3,921	0	4,609	4,609	(181)	
2028	0	0	0	0	0	328	353	4,389	0	5,069	5,069	2,233	
2029	0	0	0	0	0	316	351	3,477	0	4,144	4,144	4,078	
2030	0	0	0	0	0	309	350	4,185	0	4,844	4,844	6,093	
2031	0	0	0	0	0	300	349	4,588	0	5,236	5,236	8,131	
2032	0	0	0	0	0	295	348	4,613	0	5,255	5,255	10,042	
2033	0	0	0	0	0	285	347	5,719	0	6,351	6,351	12,201	
2034	0	0	0	0	0	278	346	6,238	0	6,862	6,862	14,381	
2035	0	0	0	0	0	275	345	5,653	0	6,273	6,273	16,245	
2036	0	0	0	0	0	277	345	5,119	0	5,742	5,742	17,839	
2037	0	0	0	0	0	280	347	5,548	0	6,175	6,175	19,442	
2038	0	0	0	0	0	281	350	5,319	0	5,950	5,950	20,886	
2039	0	0	0	0	0	282	353	4,839	0	5,475	5,475	22,128	
2040	0	0	0	0	0	287	357	5,958	0	6,602	6,602	23,527	
2041	0	0	0	0	0	287	360	7,323	0	7,970	7,970	25,107	
NOMINAL	0	24,483	0	0	24,483	6,625	7,915	99,874	0	114,414	89,931		
NPV:	0	21,483	0	0	21,483	2,930	3,579	40,081	0	46,590	25,107		
Discount Rate		0.06976	Benefit/Cost Ratio - [col (11)/col (6)].					2.17					

PARTICIPANT COSTS AND BENEFITS
PROGRAM: Street and Outdoor Lighting Conversion

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILL \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O & M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2017	63	0	0	0	63	0	0	0	0	63	63
2018	854	0	0	0	854	0	0	0	0	854	861
2019	2,487	0	0	0	2,487	0	0	0	0	2,487	3,034
2020	4,186	0	0	0	4,186	0	0	0	0	4,186	6,453
2021	5,078	0	0	0	5,078	0	0	0	0	5,078	10,331
2022	5,192	0	0	0	5,192	0	0	0	0	5,192	14,037
2023	5,377	0	0	0	5,377	0	0	0	0	5,377	17,624
2024	5,566	0	0	0	5,566	0	0	0	0	5,566	21,096
2025	5,697	0	0	0	5,697	0	0	0	0	5,697	24,418
2026	5,815	0	0	0	5,815	0	0	0	0	5,815	27,587
2027	6,001	0	0	0	6,001	0	0	0	0	6,001	30,644
2028	6,124	0	0	0	6,124	0	0	0	0	6,124	33,561
2029	6,382	0	0	0	6,382	0	0	0	0	6,382	36,402
2030	6,526	0	0	0	6,526	0	0	0	0	6,526	39,118
2031	6,719	0	0	0	6,719	0	0	0	0	6,719	41,732
2032	6,841	0	0	0	6,841	0	0	0	0	6,841	44,220
2033	7,062	0	0	0	7,062	0	0	0	0	7,062	46,620
2034	7,242	0	0	0	7,242	0	0	0	0	7,242	48,922
2035	7,331	0	0	0	7,331	0	0	0	0	7,331	51,100
2036	7,342	0	0	0	7,342	0	0	0	0	7,342	53,138
2037	7,418	0	0	0	7,418	0	0	0	0	7,418	55,064
2038	7,562	0	0	0	7,562	0	0	0	0	7,562	56,899
2039	7,717	0	0	0	7,717	0	0	0	0	7,717	58,649
2040	7,778	0	0	0	7,778	0	0	0	0	7,778	60,299
2041	7,998	0	0	0	7,998	0	0	0	0	7,998	61,884
NOMINAL	146,356	0	0	0	146,356	0	0	0	0	146,356	
NPV:	61,884	0	0	0	61,884	0	0	0	0	61,884	
In service year of gen unit:			2021		#DIV/0!						

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RATE IMPACT TEST
PROGRAM: Street and Outdoor Lighting Conversion

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT UNIT & FUEL BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS TO ALL CUSTOMERS \$(000)	CUMULATIVE DISCOUNTED NET BENEFIT \$(000)
2017	0	632	0	28	0	659	27	0	0	0	27	(632)	(632)
2018	0	7,763	0	390	0	8,152	410	157	0	0	567	(7,585)	(7723)
2019	0	7,949	0	1,068	0	9,017	1,312	161	0	0	1,473	(7,544)	(14316)
2020	0	8,140	0	1,761	0	9,900	2,143	165	0	0	2,308	(7,592)	(20517)
2021	0	0	0	2,123	0	2,123	3,601	371	0	0	3,972	1,849	(19106)
2022	0	0	0	2,144	0	2,144	3,427	368	0	0	3,795	1,651	(17927)
2023	0	0	0	2,165	0	2,165	4,063	364	0	0	4,426	2,261	(16418)
2024	0	0	0	2,187	0	2,187	2,829	361	0	0	3,189	1,003	(15793)
2025	0	0	0	2,209	0	2,209	2,929	358	0	0	3,287	1,078	(15164)
2026	0	0	0	2,231	0	2,231	4,457	356	0	0	4,813	2,582	(13757)
2027	0	0	0	2,253	0	2,253	4,255	354	0	0	4,609	2,356	(12556)
2028	0	0	0	2,276	0	2,276	4,716	353	0	0	5,069	2,793	(11226)
2029	0	0	0	2,298	0	2,298	3,793	351	0	0	4,144	1,845	(10404)
2030	0	0	0	2,321	0	2,321	4,494	350	0	0	4,844	2,522	(9355)
2031	0	0	0	2,345	0	2,345	4,888	349	0	0	5,236	2,892	(8230)
2032	0	0	0	2,368	0	2,368	4,908	348	0	0	5,255	2,887	(7180)
2033	0	0	0	2,392	0	2,392	6,004	347	0	0	6,351	3,959	(5834)
2034	0	0	0	2,416	0	2,416	6,516	346	0	0	6,862	4,446	(4421)
2035	0	0	0	2,440	0	2,440	5,928	345	0	0	6,273	3,833	(3282)
2036	0	0	0	2,464	0	2,464	5,396	345	0	0	5,742	3,277	(2372)
2037	0	0	0	2,489	0	2,489	5,828	347	0	0	6,175	3,686	(1415)
2038	0	0	0	2,514	0	2,514	5,600	350	0	0	5,950	3,436	(581)
2039	0	0	0	2,539	0	2,539	5,121	353	0	0	5,475	2,936	85
2040	0	0	0	2,564	0	2,564	6,245	357	0	0	6,602	4,038	941
2041	0	0	0	2,590	0	2,590	7,610	360	0	0	7,970	5,380	2007
NOMINAL	0	24,483	0	52,572	0	77,055	106,499	7,915	0	0	114,414	37,358	
NPV:	0	21,483	0	23,100	0	44,583	43,011	3,579	0	0	46,590	2,007	
Discount rate:			0.06976				Benefit/Cost Ratio - [col (12)/col (7)]:		1.05				

EXHIBIT B

Program: Street and Outdoor Lighting Conversion

Program Participation Standards

1. Only active Non-Light Emitting Diode ("LED") luminaires, as identified in Tampa Electric's Street and Outdoor Lighting Conversion Program, to be converted to LED luminaires are eligible for this program.
2. The unamortized collection amount is \$180.06 per eligible converted luminaire.
3. Upon completion of the five-year Street and Outdoor Lighting Conversion Program, the company shall notify the Florida Public Service Commission within 30 days.
4. Tampa Electric will randomly perform field verifications on a minimum of 10 percent of the converted LED luminaires. All luminaires not selected for field review will have an office verification to validate installation information.
5. The reporting requirements for this program will follow Rule 25-17.0021 (5), F.A.C. Additionally, program expenses will be identified in the ECCR True-Up and Projection Filings.

EXHIBIT C

Proposed Street and Outdoor Lighting Conversion Program						
Luminaire Count	Luminaire Type	Wattage	Replacement LED Wattage	Watt/fixture saved	Total kW saved	Annual kWh saved
6,332	Cobra (closed)	62.50	27.00	35.50	224.79	973,076
20	Post Top (closed)	62.50	26.00	36.50	0.73	3,160
11,755	Cobra/Nema (closed)	87.50	27.00	60.50	711.18	3,078,616
4,088	Coach Post Top (closed)	87.50	26.00	61.50	251.41	1,088,337
82,910	Cobra	125.00	47.00	78.00	6,466.98	27,994,910
5,060	Nema	125.00	27.00	98.00	495.88	2,146,615
8,903	Classic Post Top	125.00	39.00	86.00	765.66	3,314,457
3,387	Colonial PT	125.00	70.00	55.00	186.29	806,409
18,602	Salem PT	125.00	55.00	70.00	1,302.14	5,636,834
2,211	Shoebox	125.00	88.00	37.00	81.81	354,134
14,300	Cobra	187.50	105.00	82.50	1,179.75	5,107,020
102	General PT	187.50	39.00	148.50	15.15	65,570
283	Salem PT	187.50	76.00	111.50	31.55	136,596
13	Shoebox	187.50	105.00	82.50	1.07	4,643
801	General PT	218.75	39.00	179.75	143.98	623,274
946	Salem PT	218.75	76.00	142.75	135.04	584,581
13	Shoebox (closed)	218.75	105.00	113.75	1.48	6,401
18,240	Cobra	312.50	145.00	167.50	3,055.20	13,225,655
886	Flood (closed)	312.50	199.00	113.50	100.56	435,319
1,646	Shoebox	312.50	133.00	179.50	295.46	1,279,004
131	Cobra	437.50	133.00	304.50	39.89	172,678
51	Flood	437.50	199.00	238.50	12.16	52,655
323	Shoebox	437.50	182.00	255.50	82.53	357,249
13,355	Cobra	500.00	182.00	318.00	4,246.89	18,384,362
2,043	Flood	500.00	199.00	301.00	614.94	2,662,027
375	Mongoose	500.00	225.00	275.00	103.13	446,418
1,380	Shoebox (closed)	500.00	182.00	318.00	438.84	1,899,694
534	Cobra	500.00	133.00	367.00	195.98	848,369
1,031	Flood	500.00	199.00	301.00	310.33	1,343,392
4,570	Shoebox	500.00	247.00	253.00	1,156.21	5,005,117
2,165	Flood	1250.00	255.00	995.00	2,154.18	9,325,208
3,365	Shoebox	1250.00	330.00	920.00	3,095.80	13,401,409
209,821				Total	27,896.97	120,763,189
				Avg. Per Luminaire	0.133	576