

**AUSLEY MCMULLEN**

ATTORNEYS AND COUNSELORS AT LAW

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January 10, 2017

**VIA: ELECTRONIC FILING**

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

Re: Petition of Tampa Electric Company for Approval of ENERGY STAR Program for  
New Multi-Family Residences

Dear Ms. Stauffer:

Attached for filing in the above-styled matter is Tampa Electric Company's Petition for  
Approval of ENERGY STAR Program for New Multi-Family Residences.

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 ENERGY STAR Program for )  
New Multi-Family Residences. )  
\_\_\_\_\_ )

DOCKET NO. \_\_\_\_\_

FILED: January 10, 2017

**PETITION OF TAMPA ELECTRIC COMPANY  
FOR APPROVAL OF ENERGY STAR PROGRAM  
FOR NEW MULTI-FAMILY RESIDENCES**

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 ENERGY STAR Program for New Multi-Family Residences as a Demand Side Management ("DSM") program, approval of the company's program description attached hereto as Exhibit "B", and to allow Tampa Electric to recover reasonable and prudent expenditures of its ENERGY STAR Program for New Multi-Family Residences through the company's Energy Conservation Cost Recovery ("ECCR") Clause and, as grounds therefor, 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:

James D. Beasley  
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Manager, Regulatory Coordination  
Tampa Electric Company  
Post Office Box 111  
Tampa, FL 33601  
(813) 228-1444  
(813) 228-1770 (fax)

3. On August 11, 2015 the Commission entered its Order No. PSC-15-0323-PAA-EG in Docket No. 150081-EG, approving Tampa Electric's Demand Side Management Plan. Included in that plan is an ENERGY STAR program for new homes, a program description of which is attached hereto as Exhibit "A". That program offers an \$850 rebate to encourage builders to construct new homes that meet the requirements to achieve the ENERGY STAR certified new home label. By receiving this certificate the new home will use less energy and demand which will help reduce the growth of Tampa Electric's peak demand.

4. Tampa Electric has received inquiries regarding the possibility of adopting an ENERGY STAR Program for Multi-Family Residences. Tampa Electric has conducted cost-effectiveness tests showing that an ENERGY STAR Program for Multi-Family Residences would not be cost effective if the same \$850 rebate for single-family residences were offered for multi-family residences. However, a multi-family ENERGY STAR program is cost effective if the rebate is reduced to \$325 for each unit that receives an ENERGY STAR certificate.

5. Tampa Electric views the foregoing as a very positive opportunity since many multi-family residences are being planned for construction in Tampa Electric's service area. Offering an ENERGY STAR program for new multi-family residences will be very beneficial to the community as well as future tenants of new multi-family residences by helping them become more energy focused and saving on their electric bill in the process. Attached hereto as Exhibit

"B" is the program description for Tampa Electric's proposed ENERGY STAR Program for Multi-Family Residences.

6. Attached hereto as Exhibit "C" is the result of a cost-effectiveness examination showing the proposed program to be cost effective utilizing a rebate of \$325 per new multi-family residence qualifying for the ENERGY STAR designation.

7. The approval of the company's proposed ENERGY STAR Program for New Multi-Family Residences will help Tampa Electric achieve the goals of FEECA and Commission Rule 25-17.001, Florida Administrative Code. It should allow Tampa Electric to achieve its Commission approved DSM goals at a lower cost to customers.

8. The proposed program is directly monitorable and will yield measurable results.

9. Attached hereto as Exhibit "D" are Tampa Electric's proposed program standards for its proposed ENERGY STAR Program for New Multi-Family Residences.

10. Attached hereto as Exhibit "E" are Tampa Electric's projected participation and annual demand and energy savings for its proposed ENERGY STAR Program for New Multi-Family Residences through the end of the current approved DSM Plan.

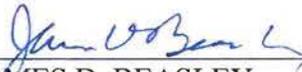
11. Tampa Electric is not aware of any disputed issues of material fact regarding the matters asserted herein. There has not been any prior agency action in this proceeding; therefore, Tampa Electric cannot allege "when and how the petitioner received notice of the agency decision." Since there is no 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 ENERGY STAR Program for New Multi-Family Residences, approve the

program description contained in Exhibit "B" and program standards contained in Exhibit "D" and allow Tampa Electric to recover its reasonable and prudent ENERGY STAR for New Multi-Family Residences Program expenditures through Tampa Electric's ECCR clause.

DATED this 10<sup>th</sup> day of January 2017.

Respectfully submitted,



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J. JEFFRY WAHLEN  
ASHLEY M. DANIELS  
Ausley McMullen  
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Tallahassee, FL 32302  
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

**EXHIBIT A**

**Program: ENERGY STAR for New Homes**

**Program Start Date:** November 2015

**Program Description**

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

**Program Participation Standards**

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

**Program Savings**

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

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

**Program Costs**

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

The estimated administrative cost per participant is \$22.

**Program Monitoring and Evaluation**

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

**EXHIBIT B**

**Program: ENERGY STAR for New Multi-Family Residences**

**Program Start Date:** TBD

**Program Description**

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

**Program Participation Standards**

Program Standards are submitted concurrently with this program description.

**Program Savings**

Savings were determined using historical participation characteristics of multi-family residences and utilizing DOE2 building simulations for a multi-family residence that would meet the current minimum Florida Building Code compared to a new multi-family residence that would meet the requirements to achieve the ENERGY STAR Certificate for the multi-family residence. The analysis yielded the following expected savings per customer participant:

Summer Demand:	0.361 kW
Winter Demand:	0.242 kW
Annual Energy:	1,239 kWh

**Program Costs**

Rebate: \$325 for a qualifying multi-family residence receiving the ENERGY STAR Certificate.

The estimated administrative cost per participant is \$15.

**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.

EXHIBIT C

**INPUT DATA - PART 1**  
**PROGRAM TITLE: ENERGY STAR - Multi-Family**

PSC FORM CE 1.1  
 PAGE 1 OF 1  
 RUN DATE: January 3, 2017

**PROGRAM DEMAND SAVINGS & LINE LOSSES**

I. (1) CUSTOMER KW REDUCTION AT THE METER	0.361 KW /CUST
I. (2) GENERATOR KW REDUCTION PER CUSTOMER	0.359 KW GEN/CUST
I. (3) KW LINE LOSS PERCENTAGE	7.30 %
I. (4) GENERATION KWH REDUCTION PER CUSTOMER	1,313 KWH/CUST/YR
I. (5) KWH LINE LOSS PERCENTAGE	5.60 %
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	1,239 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	1.3834
II. (5) K FACTOR FOR T & D	1.3834
II. (6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	0

**UTILITY & CUSTOMER COSTS**

III. (1) UTILITY NONRECURRING COST PER CUSTOMER	15.00 \$/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	1,250.00 \$/CUST
III. (5) CUSTOMER EQUIPMENT ESCALATION RATE	2.60 %
III. (6) CUSTOMER O & M COST	0.00 \$/CUST/YR
III. (7) CUSTOMER O & M ESCALATION RATE	2.60 %
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	325.00 \$/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	2020
IV. (3) IN-SERVICE YEAR FOR AVOIDED T & D	2018
IV. (4) BASE YEAR AVOIDED GENERATING UNIT COST	667.64 \$/KW
IV. (5) BASE YEAR AVOIDED TRANSMISSION COST	38.32 \$/KW
IV. (6) BASE YEAR DISTRIBUTION COST	69.94 \$/KW
IV. (7) GEN, TRAN, & DIST COST ESCALATION RATE	2.40 %
IV. (8) GENERATOR FIXED O & M COST	11.97 \$/KW/YR
IV. (9) GENERATOR FIXED O&M ESCALATION RATE	2.40 %
IV. (10) TRANSMISSION FIXED O & M COST	3.00 \$/KW/YR
IV. (11) DISTRIBUTION FIXED O & M COST	11.27 \$/KW/YR
IV. (12) T&D FIXED O&M ESCALATION RATE	2.40 %
IV. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.193 CENTS/KWH
IV. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.40 %
IV. (15) GENERATOR CAPACITY FACTOR	2.60 %
IV. (16) AVOIDED GENERATING UNIT FUEL COST	4.08 CENTS/KWH
IV. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE	4.47 %
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	5.623 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

<b>CALCULATED BENEFITS AND COSTS</b>	
(1)* TRC TEST - BENEFIT/COST RATIO	0.97
(2)* PARTICIPANT NET BENEFITS (NPV)	1,215
(3)* RIM TEST - BENEFIT/COST RATIO	1.01

TOTAL RESOURCE COST TESTS  
PROGRAM: ENERGY STAR - Multi-Family

PSC FORM CE 2.3  
Page 1 of 1  
January 3, 2017

(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	9	750	0	759	0	0	10	0	10	(749)	(749)
2018	0	9	770	0	779	0	11	30	0	40	(739)	(1,439)
2019	0	13	1,053	0	1,065	0	11	57	0	67	(998)	(2,311)
2020	0	0	0	0	0	102	24	75	0	201	201	(2,147)
2021	0	0	0	0	0	99	24	87	0	210	210	(1,987)
2022	0	0	0	0	0	96	23	82	0	201	201	(1,843)
2023	0	0	0	0	0	93	23	88	0	204	204	(1,706)
2024	0	0	0	0	0	90	23	100	0	213	213	(1,574)
2025	0	0	0	0	0	88	23	114	0	224	224	(1,443)
2026	0	0	0	0	0	85	23	109	0	217	217	(1,324)
2027	0	0	0	0	0	83	23	111	0	216	216	(1,214)
2028	0	0	0	0	0	81	23	118	0	221	221	(1,109)
2029	0	0	0	0	0	78	22	143	0	244	244	(1,000)
2030	0	0	0	0	0	76	22	134	0	233	233	(904)
2031	0	0	0	0	0	74	22	139	0	235	235	(812)
2032	0	0	0	0	0	71	22	161	0	254	254	(720)
2033	0	0	0	0	0	69	22	147	0	239	239	(638)
2034	0	0	0	0	0	67	22	172	0	261	261	(555)
2035	0	0	0	0	0	65	22	182	0	270	270	(475)
2036	0	0	0	0	0	64	22	189	0	275	275	(399)
2037	0	0	0	0	0	63	23	178	0	263	263	(331)
2038	0	0	0	0	0	62	23	187	0	272	272	(265)
2039	0	0	0	0	0	61	23	184	0	268	268	(204)
2040	0	0	0	0	0	60	23	198	0	282	282	(144)
2041	0	0	0	0	0	59	24	246	0	329	329	(79)
NOMINAL	0	31	2,572	0	2,603	1,687	523	3,241	0	5,451	2,848	
NPV:	0	29	2,389	0	2,418	797	241	1,301	0	2,339	-79	
Discount Rate		0.06976	Benefit/Cost Ratio - [col (11)/col (6)]:				0.97					

PARTICIPANT COSTS AND BENEFITS  
PROGRAM: ENERGY STAR - Multi-Family

PSC FORM CE 2.4  
Page 1 of 1  
January 3, 2017

(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	34	0	195	0	229	750	0	0	750	(521)	(521)
2018	102	0	195	0	297	770	0	0	770	(472)	(963)
2019	185	0	260	0	445	1,053	0	0	1,053	(607)	(1,493)
2020	236	0	0	0	236	0	0	0	0	236	(1,300)
2021	245	0	0	0	245	0	0	0	0	245	(1,114)
2022	246	0	0	0	246	0	0	0	0	246	(938)
2023	250	0	0	0	250	0	0	0	0	250	(771)
2024	256	0	0	0	256	0	0	0	0	256	(611)
2025	259	0	0	0	259	0	0	0	0	259	(460)
2026	262	0	0	0	262	0	0	0	0	262	(317)
2027	266	0	0	0	266	0	0	0	0	266	(181)
2028	273	0	0	0	273	0	0	0	0	273	(51)
2029	279	0	0	0	279	0	0	0	0	279	73
2030	288	0	0	0	288	0	0	0	0	288	193
2031	291	0	0	0	291	0	0	0	0	291	306
2032	298	0	0	0	298	0	0	0	0	298	415
2033	305	0	0	0	305	0	0	0	0	305	519
2034	313	0	0	0	313	0	0	0	0	313	618
2035	321	0	0	0	321	0	0	0	0	321	713
2036	327	0	0	0	327	0	0	0	0	327	804
2037	341	0	0	0	341	0	0	0	0	341	892
2038	349	0	0	0	349	0	0	0	0	349	977
2039	361	0	0	0	361	0	0	0	0	361	1,059
2040	374	0	0	0	374	0	0	0	0	374	1,138
2041	388	0	0	0	388	0	0	0	0	388	1,215
NOMINAL	6,851	0	650	0	7,501	2,572	0	0	2,572	4,929	
NPV:	3,000	0	604	0	3,604	2,389	0	0	2,389	1,215	
In service year of gen unit:			2020		1.5086544						

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**EXHIBIT D**

**Program: ENERGY STAR for New Multi-Family Residences**

**Program Participation Standards**

1. Participation is available to any new multi-family residence located in Tampa Electric's service area. All individual homes within the same facility and each individual home or unit must receive the certificate to qualify.
2. Rebate: \$325 for a qualifying multi-family residence or unit receiving the ENERGY STAR Certificate.
3. The participant must be willing to provide accessibility for a walk through of the home to verify program standards.
4. The builder will be responsible for the installation of qualifying equipment or measures as well as the correction of any items necessary to meet the program standards.
5. No payment shall be made by Tampa Electric until:
  - A complete and correct application has been submitted to Tampa Electric within 90 days of receiving the ENERGY STAR Certificate
  - A copy of the actual ENERGY STAR Certificate for each multi-family residences or unit
  - A certified document showing that all the multi-family residences or units within the same facility qualify
  - Installation has passed Tampa Electric's verification process
6. Tampa Electric will randomly perform field verification on a minimum of 10 percent of the participating Multi Family homes or units. Forms not selected for field review will have an office verification to validate information.
7. 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 E**

PROGRAM NAME:      PROGRAM NAME:      PROGRAM NAME:

	(a)	(b)	(c)	(d)	(e)
Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level %	Cumulative Number of Program Participants
2017	201,074	3,820	600	15.7%	600
2018	204,894	3,893	600	15.6%	1,200
2019	208,787	3,967	800	17.1%	2,000
2020	212,754	4,042	800	17.8%	2,800
2021	216,797	4,119	800	18.1%	3,600
2022	220,916	4,197	1,000	19.1%	4,600
2023	225,113	4,277	1,000	19.8%	5,600
2024	229,390	4,358	1,000	20.2%	6,600

PROGRAM NAME: ENERGY STAR FOR NEW MULTI-FAMILY RESIDENCES

AT THE METER						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2017	1,239	0.242	0.361	0.743	0.145	0.217
2018	1,239	0.242	0.361	1.487	0.290	0.433
2019	1,239	0.242	0.361	2.478	0.484	0.722
2020	1,239	0.242	0.361	3.469	0.678	1.011
2021	1,239	0.242	0.361	4.460	0.871	1.300
2022	1,239	0.242	0.361	5.699	1.113	1.661
2023	1,239	0.242	0.361	6.938	1.355	2.022
2024	1,239	0.242	0.361	8.177	1.597	2.383

PROGRAM NAME: ENERGY STAR FOR NEW MULTI-FAMILY RESIDENCES

AT THE GENERATOR						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual GWh Reduction	Total Annual Winter MW Reduction	Total Annual Summer MW Reduction
2017	1,313	0.258	0.385	0.788	0.155	0.231
2018	1,313	0.258	0.385	1.576	0.310	0.462
2019	1,313	0.258	0.385	2.627	0.516	0.770
2020	1,313	0.258	0.385	3.677	0.722	1.078
2021	1,313	0.258	0.385	4.728	0.929	1.385
2022	1,313	0.258	0.385	6.041	1.187	1.770
2023	1,313	0.258	0.385	7.355	1.445	2.155
2024	1,313	0.258	0.385	8.668	1.703	2.540