AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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

ORIGINAL

June 4, 2007

HAND DELIVERED

Ms. Ann Cole, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

JUN-4 PM 4: 00

04523 JUN-48

FPSC-COMMISSION CLERK

Re: Petition for approval of extension and permanent status of price responsive load management pilot program, by Tampa Electric Company; FPSC Docket No. 070056-EG

Dear Ms. Cole:

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Enclosed for filing in the above docket are the original and seven (7) copies of Tampa Electric Company's Petition for Approval of a Permanent Residential Price Responsive Load Management Program.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter. CMP COM Sindere CTR ECR GCL Lee L. Willis OPC RCA ____LLW/pp SCR ____ Enclosure SGA ____ SEC OTH DOCUMENT NUMBER-DATE

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition by Tampa Electric Company) for Approval of a Permanent Residential Price) <u>Responsive Load Management Program</u>)

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DOCKET NO. 070056-EG Filed: June 4, 2007

PETITION BY TAMPA ELECTRIC COMPANY FOR APPROVAL OF A PERMANENT RESIDENTIAL PRICE RESPONSIVE LOAD <u>MANAGEMENT PROGRAM</u>

Tampa Electric Company ("Tampa Electric" or "the company") pursuant to Section 366.075, Florida Statutes and Rule 25-17.015 (4), Florida Administrative Code, files this petition with the Florida Public Service Commission ("the Commission") for approval of the transition of the company's pilot Residential Price Responsive Load Management program to a permanent program and key component of the company's Demand Side Management ("DSM") Plan. In support of this petition the company states:

1. The name, address and telephone number of the petitioner are as follows:

Tampa Electric Company Post Office Box 111 Tampa, FL 33601 (813) 228-4111 (813) 228-1770 (fax)

2. Tampa Electric requests that copies of all pleadings, orders, notices and other documents submitted in this proceeding be furnished to the following:

Paula Brown	Lee L. Willis
Administrator, Regulatory Coordination	James D. Beasley
Tampa Electric Company	Ausley & McMullen
Post Office Box 111	Post Office Box 391
Tampa, FL 33601	Tallahassee, FL 32302
(813) 228-1444	(850) 224-9115
(813) 228-1770 (fax)	(850) 222-7952 (fax)
Post Office Box 111 Tampa, FL 33601 (813) 228-1444	Tallahassee, FL 32302 (850) 224-9115

DOCUMENT NUMBER-DATE

04523 JUN-45 FPSC-COMMISSION CLERK 3. In this petition, Tampa Electric seeks approval to (a) transition the company's existing pilot Residential Price Response Load Management program to a permanent DSM program, (b) modify appropriate tariff sheets, and (c) allow Tampa Electric to recover expenses for the permanent program through the Energy Conservation Cost Recovery ("ECCR") clause.

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Background

4. In Docket No. 040033-EG, Order No. PSC-05-0181-PAA-EG, issued February 16, 2005, the Commission approved Tampa Electric's pilot Price Responsive Load Management program as part of the company's 2005-2014 Ten-Year DSM Plan. The pilot was designed to determine the magnitude of reduction of weather sensitive peak loads that could be attained through offering customers a time-sensitive, multi-tiered rate in conjunction with control and communication devices installed in their residences. Subsequent to Commission approval of the pilot program, Tampa Electric began developing business relationships with vendors and contractors and selecting program participants. Installation of equipment, which included a twoway communication device and "smart" thermostat for each residence, began in May 2005. Data collection was initiated July 1, 2005.

5. The maximum duration of the pilot was anticipated to be 24 months. The main determination for the duration was the need for consistent, normal weather. Consistent summer data from the program was gathered and analyzed; however, Tampa Electric experienced mild winter weather and was unable to fully evaluate winter demand reduction. Therefore, the company petitioned for an extension of the pilot program in order to gather additional data during the 2006-2007 winter. This would allow for a more complete analysis of winter demand reduction and as well as annual energy savings. In Docket No. 070056-EG, Order No. PSC-07-

0151-PAA-EG, issued February 21, 2007, the Commission approved the pilot program extension through August 31, 2007.

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Pilot Program Results

6. The extension of time granted by this Commission has allowed Tampa Electric to complete a comprehensive analysis of the pilot Residential Price Responsive Load Management program.

7. First, participating customers were educated as to the increasing cost of energy during times of higher demand. This was accomplished through a rate design that encouraged customers to shift energy consumption away from periods of higher demand and greater expense to periods of lower demand and less expense. In essence, the multi-tiered rates were designed to enable customers to decide when and how to operate specific appliances in their homes to better reflect the cost of energy. This gave the customers the choice to modify electric consumption in a manner that is good for them, Tampa Electric and of its ratepayers.

8. Second, through a series of customer surveys, Tampa Electric discovered participants are pleased with the pilot program. Eighty-nine percent of the participants liked the ability to have control over their energy usage, especially the capability to pre-program the major energy consuming appliances in their home, and would recommend the program to friends and relatives. In addition, 93 percent of the participants indicated they would like to remain on the program if it became a permanent offering.

9. Finally, the demand and energy reductions from the pilot program are very favorable. Summer and winter demand reductions and annual energy savings were determined to be 2.4 kW, 3.1 kW and 1,071 kWh, respectively. Results were determined using the pilot group of customers on the program compared to a control group.. Periodic evaluations were

conducted throughout the pilot period to verify that the control group remained valid for comparison.

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Program Permanency

10. Having concluded the pilot and identified the significant benefits to customers participating in the program, Tampa Electric requests permanent status for the company's Price Responsive Load Management Program. Appendix A to this petition contains the program description and standards for the proposed program. Appendix B contains the required cost-effectiveness tests results for the proposed program. Appendix C provides the 2007 proposed rates for the Price Responsive Load Management program. Appendix D includes Tariff revisions necessary to implement Tampa Electric's proposed program, in both clean and legislative format.

11. It is anticipated that the overall rates for the four tiers of the Price Responsive Load Management program will change annually and be established during the cost recovery hearings in November of each year prior to their effective date in the following January. Documentation supporting the proposed rates for the next year will be a component of Tampa Electric's annual ECCR Projection Filing.

12. Tampa Electric will begin marketing the program as soon as the permanent infrastructure has been established. Ultimately, the company anticipates a graduated participation increase to approximately 1,500 customers a year.

13. Tampa Electric is not aware of any disputed issues of material fact relative to the DSM program proposed herein. Tampa Electric's proposed Price Responsive Load Management program description and program standards, as reflected in Appendix A, should be approved, including the Tariff revisions to sheet nos. 6.020, 6.560, 6.565, 6.570 and 7.785 (Appendix C),

which are necessary to implement the proposed modifications. The Commission should authorize recovery of reasonable and prudent expenditures associated with Tampa Electric's proposed program through the company's ECCR clause. The statutes and rule which entitle Tampa Electric to relief are Sections 366.82(2), 366.06(1), and Florida Administrative Code Rule 25-17.0021 (2007).

WHEREFORE, Tampa Electric respectfully requests that the Commission: (1) approve Tampa Electric's proposed Price Responsive Load Management program description and program standards, as reflected in Appendix A to this petition, as well as the Tariff revisions in Appendix C, (2) authorize Tampa Electric to recover through its ECCR clause reasonable and prudent expenditures associated with the implementation of the proposed program, and (3) grant such other relief as may be appropriate. Further, Tampa Electric requests expedited treatment of this petition so that Tampa Electric's customers may realize the benefits of the proposed modifications in the near term.

DATED this $\underline{\Psi^{12}}$ day of June, 2007.

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Respectfully submitted,

Vee L. Willis and James IV Beasley Ausley & McMullen Post Office Box 391 Tallahassee, FL 32302 (850) 224-9115 ATTORNEYS FOR TAMPA ELECTRIC COMPANY

Appendix A

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TAMPA ELECTRIC COMPANY DOCKET NO. 070056-EG APPENDIX A PAGE 1 OF 6 FILED: JUNE 4, 2007

Program: Energy Planner - Residential Price Responsive Load Management

Program Start Date: 2007

Description:

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

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

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

Program Participation Standards:

- 1. Applicable to any single-family detached homes in Tampa Electric service area who signs a tariff agreement for the Residential Variable Pricing Program are eligible to participate.
- 2. Residences must have central heating and cooling systems to be eligible for participation. Window units are not eligible.
- 3. Hard-wired touch tone telephone service is required. Cellular or VOIP service is not compatible with program equipment.
- 4. Service entrance panel or house power panel rated at 200 amps or less is required.
- 5. Electric water heaters, pool pumps or other devices controlled by equipment provided through the program must be no larger than 30 amps and 240 volts.

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- 6. Existing metering equipment must be compatible with the program management equipment.
- 7. Summer rate period May 1 through October 31
- 8. Summer rate tiers will occur during the following times.

Week days	P 1 P 2	11 P.M. to 6 A.M. 6 A.M. to 1 P.M. 6 P.M. to 11 P.M.
	P 3	1 P.M. to 6 P.M.
Weekends	P 1 P 2	11 P.M. to 6 A.M. 6 A.M. to 11 P.M.

- 9. Winter rate period November 1 through April 30
- 10. Winter rate tiers will occur during the following times.

Week days	P 1 P 2	11 P.M. to 5 A.M. 5 A.M. to 6 A.M. 10 A.M. to 11 P.M.
	P 3	6 A.M. to 10 A.M.
Weekends	P 1 P 2	11 P.M. to 6 A.M. 6 A.M. to 11 P.M.

- 11. The pricing period for the following observed holidays will be the same as the weekend hour price levels: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
- 12. Critical price period (P 4) can occur at any time but will be limited to 1.5 percent of the year. (e.g., .015 X 8,760 = 131.4 hrs.).
- 13. There is no additional participation fee for this program.

Program Savings:

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Demand and energy savings were determined by comparing the energy consumption of the pilot price responsive load management customers with a non-participating control group verified to have similar energy usage

TAMPA ELECTRIC COMPANY DOCKET NO. 070056-EG APPENDIX A PAGE 3 OF 6 FILED: JUNE 4, 2007

characteristics. Fifteen minute interval data was used to analyze both pilot and control samples. The resulting reductions in demand and energy are as follows:

Winter Demand 3.1 kW

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Summer Demand 2.4 kW

Annual Energy 1,071 **Program Costs:**

Administration, Equipment installation & maintenance	\$1,281
Recurring Costs per customer	\$62
Recurring rate incentive	\$103

Program Monitoring and Evaluation

Interval data will be collected on a monthly basis and shall supply inputs necessary to confirm DSM cost-effectiveness as defined in Rule 25-17.008, F.A.C.

	(a) (b)		(c)	(d)	(e)	
		Total	Annual	Cumulative	Cumulative	
	Total	Number of	Number of	Penetration	Number of	
	Number of	Eligible	Program	Level	Program	
Year	Customers	Customers	Participants	%	Participants*	
2005	558,217	329,348	0	0.0%	0	
2006	571,386	337,118	0	0.0%	0	
2007	583,878	344,488	200	0.1%	200	
2008	596,472	351,919	750	0.3%	950	
2009	610,379	360,123	1,000	0.5%	1,950	
2010	625,351	368,957	1,250	0.9%	3,200	
2011	640,734	378,033	1,350	1.2%	4,550	
2012	656,186	387,150	1,450	1.5%	6,000	
2013	669,200	394,828	1,500	1.9%	7,500	
2014	682,426	402,632	1,500	2.2%	9,000	

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT

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	AT THE METER											
	Per	Per	Per	Total	Total	Total						
	Customer	Customer	Customer	Annual	Annual	Annuai						
	kWh	Winter kW	Summer kW	GWh	Winter mW	Summer mW						
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction						
2005	1,071	3.100	2.400	0.000	0.000	0.000						
2006	1,071	3.100	2.400	0.000	0.000	0.000						
2007	1,071	3.100	2.400	0.214	0.620	0.480						
2008	1,071	3.100	2.400	1.017	2.945	2.280						
2009	1,071	3.100	2.400	2.088	6.045	4.680						
2010	1,071	3.100	2.400	3.427	9.920	7.680						
2011	1,071	3.100	2.400	4.873	14.105	10.920						
2012	1,071	3.100	2.400	6.426	18.600	14.400						
2013	1,071	3.100	2.400	8.033	23.250	18.000						
2014	1,071	3.100	2.400	9.639	27.900	21.600						

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT

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	AT THE GENERATOR											
	Per	Per	Per	Total	Total	Total						
	Customer	Customer	Customer	Annual	Annual	Annual						
	kWh	Winter kW	Summer kW	GWh	Winter mW	Summer mW						
Year	Reduction	Reduction	Reduction	Reduction	Reduction	Reduction						
2005	1,135	3.305	2.558	0.000	0.000	0.000						
2006	1,135	3.305	2.558	0.000	0.000	0.000						
2007	1,135	3.305	2.558	0.227	0.661	0.512						
2008	1,135	3.305	2.558	1.078	3.139	2.430						
2009	1,135	3.305	2.558	2.214	6.444	4.989						
2010	1,135	3.305	2.558	3.633	10.575	8.187						
2011	1,135	3.305	2.558	5.165	15.036	11.641						
2012	1,135	3.305	2.558	6.812	19.828	15.350						
2013	1,135	3.305	2.558	<u>8.514</u>	24.785	19.188						
2014	1,135	3.305	3.305	10.699	28.966	23.026						

PROGRAM NAME: RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT

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Appendix B

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	INPUT DATA - PART 1 PROGRAM TITLE: Price Respon	sive Load Management	PSC FORM CE 1.1 PAGE 1 OF 1		
			RUN DATE:	June 1, 2007	
PROGRAM DEMAND SAVINGS & LINE LOSSES (. (1) CUSTOMER KW REDUCTION AT THE METER (. (2) GENERATOR KW REDUCTION PER CUSTOMER	3.100 KW /CUST 2.738 KW GEN/CUST	AVOIDED GENERATOR, TRANS. & DIST COSTS V. (1) BASE YEAR V. (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2007 2010		
 (3) KW LINE LOSS PERCENTAGE (4) GENERATION KWH REDUCTION PER CUSTOMER (5) KWH LINE LOSS PERCENTAGE (6) GROUP LINE LOSS MULTIPLIER (7) CUSTOMER KWH PROGRAM INCREASE AT METER (8)* CUSTOMER KWH REDUCTION AT METER 	6.6 % 1139 KWH/CUST/YR 6.0 % 1 0 KWH/CUST/YR 1071 KWH/CUST/YR	 N. (3) IN-SERVICE YEAR FOR AVOIDED T & D N. (4) BASE YEAR AVOIDED GENERATING UNIT COST N. (5) BASE YEAR AVOIDED TRANSMISSION COST N. (6) BASE YEAR DISTRIBUTION COST N. (7) GEN, TRAN, & DIST COST ESCALATION RATE N. (8) GENERATOR FIXED O & M COST 	2010 674.13 \$ 0 \$ 0 \$ 2.3 %	RW RW	
ECONOMIC LIFE & K FACTORS (1) STUDY PERIOD FOR CONSERVATION PROGRAM (2) GENERATOR ECONOMIC LIFE (3) T & D ECONOMIC LIFE (4) K FACTOR FOR GENERATION (5) K FACTOR FOR T & D	26 YEARS 26 YEARS 26 YEARS 1,5983 1,5983	 Y. (9) GENERATOR FIXED O&M ESCALATION RATE Y. (10) TRANSMISSION FIXED O & M COST Y. (11) DISTRIBUTION FIXED O & M COST Y. (12) T&D FIXED O&M ESCALATION RATE Y. (12) T&D FIXED O&M ESCALATION RATE Y. (13) AVOIDED GEN UNIT VARIABLE O & M COSTS Y. (14) GENERATOR VARIABLE O&M COST ESCALATION RATE Y. (15) GENERATOR CAPACITY FACTOR 	0\$ 2.3 %	KW/YR /KW/YR ENTS/KWH	
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1) UTILITY & CUSTOMER COSTS III. (1) UTILITY NONRECURRING COST PER CUSTOMER III. (2) UTILITY RECURRING COST PER CUSTOMER	0 1281.00 \$/CUST 62.00 \$/CUST//R	V. (16) AVOIDED GENERATING UNIT FUEL COST V. (17) AVOIDED GEN UNIT FUEL ESCALATION RATE V. (18)* AVOIDED PURCHASE CAPACITY COST PER KW V. (19)* CAPACITY COST ESCALATION RATE	3.16 %	KW/YR	
 (a) UTILITY COST ESCALATION RATE (b) CUSTOMER EQUIPMENT COST (c) CUSTOMER EQUIPMENT ESCALATION RATE (c) CUSTOMER O & M COST (c) CUSTOMER O & M ESCALATION RATE (d) CUSTOMER TAX CREDIT PER INSTALLATION (e) CUSTOMER TAX CREDIT ESCALATION RATE (f) CUSTOMER TAX CREDIT ESCALATION RATE (f) NCREASED SUPPLY COSTS 	2.5 % 0.00 \$/CUST 2.5 % 0 \$/CUST//R 2.5 % 0 \$/CUST 0 % 0 \$/CUST//R	NON-FUEL ENERGY AND DEMAND CHARGES V. (1) NON-FUEL COST IN CUSTOMER BILL V. (2) NON-FUEL ESCALATION RATE V. (3) CUSTOMER DEMAND CHARGE PER KW V. (4) DEMAND CHARGE ESCALATION RATE V. (5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL	1 %	NW/MO	
III. (10) INCREASED SUPPLY COSTS III. (11)* SUPPLY COSTS ESCALATION RATE III. (12)* UTILITY DISCOUNT RATE III. (13)* UTILITY AFUDC RATE III. (13)* UTILITY NON RECURRING REBATE/INCENTIVE III. (15)* UTILITY RECURRING REBATE/INCENTIVE III. (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	0 % 0.0788 0.0779 0.00 \$/CUST 103.00 \$/CUST///R 0 %	CALCULATED BENEFITS AND COSTS (1)* TRC TEST - BENEFIT/COST RATIO (2)* PARTICIPANT NET BENEFITS (NPV) (3)* RIM TEST - BENEFIT/COST RATIO	2.48 4,069 1.40		

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
												CUMULATIVE
	INCREASED	UTILITY	PARTICIPANT	OTUER	TOTAL		AL KOURER	PROGRAM				DISCOUNTED
	SUPPLY COSTS	PROGRAM	PROGRAM	OTHER	TOTAL	AVOIDED GEN UNIT	AVOIDED	FUEL	OTHER	TOTAL	NET	NET
	CUSIS	COSTS	COSTS	COSTS	COSTS		BENEFITS	SAVINGS	BENEFITS	BENEFITS	BENEFITS	BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2007	0000	262		0	262	0	0			11	(251)	(251)
2008	ŏ	1,021	0 0	ŏ	1,021	ő	Ő		ŏ	66	(955)	(1,137)
2009	Ō	1,440	ō	Ō	1,440	Ō	Ū		0	172	(1,268)	(2,226)
2010	0	130	0	0	130	895	0	239	0	1,134	1,004	(1,426)
2011	0	133	0	0	133	872	0		0	1,119	985	(699)
2012	0	137	0	0	137	846	0		0	1,100	963	(39)
2013	0	140	0	0	140	821	0		0	1,084	943	559
2014	0	144	0	0	144	798	0		0	1,069	925	1,103
2015	0	147	0	0	147	777	0		0	1,056	909	1,599
2016	0	151	0	0	151	757	0		0	1,045	894	2,051
2017	0	155	0	0	155	737	0		0	1,035	880 860	2,463 2,839
2018	0	159	0 0	0 0	159 163	718 699	0		0 0	1,025 1,015	866 852	3,182
2019 2020	0	163 167	0	0	163	679	0		0	1,015	839	3,495
2020	0	171	0	ő	171	660	0		0	997	826	3,780
2021	0	175	Ő	ŏ	175	641	0		ũ	989	813	4,041
2022	ŏ	179	Ő	ŏ	179	622	ŏ		ō	981	801	4,279
2024	ů.	184	ŏ	ŏ	184	604	ō		0	973	789	4,497
2025	Ō	189	0	0	189	588	0	381	0	970	781	4,696
2026	0	193	0	0	193	579	0		0	972	779	4,880
2027	0	198	0	0	198	573	0		0	978	780	5,051
2028	0	203	0	0	203	566	0		Û	985	782	5,210
2029	0	208	0	0	208	560	0		0	992	784	5,358
2030	0	213	0	0	213		0		0	1,000	787	5,496
2031	0	219	0	0	219		0		0	1,009	790	5,624
2032	0	224	0	0	224	544	0	474	0	1,018	794	5,743
NOMINAL	0	6,706	0	0	6,706	15,642	٥	8,158	0	23,800	17,094	
NPV:	0	3,885	0	0	3,885	6,610	0	3,017	0	9,628	5,743	
Discount Ra	ate	0.0788	Benefit/Cost	Ratio - [col	(11)/col (6)]	i:	2.48	•				

TOTAL RESOURCE COST TESTS PROGRAM: Price Responsive Load Management .

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		(11)	(12)
	SAVINGS											
	IN					CUSTOMER	CUSTOMER					CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	O & M	OTHER	TOTAL		NET	DISCOUNTED
	BILL	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	COSTS	COSTS	COSTS	1	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)
2007	9	0		0				0		0	20	20
2008	53	0		0	112		0	0		0	112	124
2009	133	0		0	283		0	0		0	283	367
2010	181	0		0	382	-	0	0		Q	382	671
2011	183	0		0	383		0	0		0	383	954
2012	188	0		0	389		0	0		0	389	1,220
2013	176	0		0	377		0	0		0	377	1,459
2014	181	0		0	382		0	0		0	382	1,684
2015	185	0		0	386		0	0		0	386	1,894
2016	192	0		0	393		0	0		0	393	2,093
2017	196	0		0	397	0	0	0		0	397	2,279
2018	204	0		0	405		0	0		0	405	2,455
2019	212	0		0	413		0	0		0	413	2,621
2020	220	0		0	421		0	0		0	421	2,778
2021	226	0		0	427		0	0		0	427	2,925
2022	231	0		0	432		0	0		0	432	3,064
2023	239	0		0	440		0	0		0	440	3,194
2024	248	0		0	448		0	0		0	448	3,318
2025	253	0		0	454		0	0		0	454	3,434
2026	259	0		0	460		0	0		0	460	3,542
2027	266	0		0	467		0	0		Q	467	3,645
2028	271	0		0	471		0	0		0	471	3,741
2029	276	0	-	0	477		0	O		0	477	3,831
2030	284	0		0			0	0		0	484	3,915
2031	290	0		0			0	0		0	491	3,995
2032	296	0	201	0	497	0	0	0		0	497	4,069
NOMINAL	5,452	o	4,838	. 0	10,291	0	0	0		0	10,291	
NPV:	2,069	C	2,001	o	4,069	0	0	0		0	4,069	
	ear of gen unit:		2004									
Discount ra	ate:		0.0788									

PARTICIPANT COSTS AND BENEFITS PROGRAM: Price Responsive Load Management

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PSC FORM CE 2.4 Page 1 of 1 June 1, 2007

	RATE IMPACT TEST PROGRAM: Price Responsive Load Management											PSC FORM CE 2.5 Page 1 of 1 June 1, 2007	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
!	INCREASED SUPPLY COSTS	utility Program Costs	INCENTIVES	REVÊNUE LOSSES	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT UNIT & FUEL BENEFITS	AVOIDED T&D BENEFITS	REVENUE GAINS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS TO ALL CUSTOMERS	CUMULATIVE DISCOUNTED NET BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\${000}	\$(000)
2007	0	262		5	0	277	11	0	0	0	11	(266)	(266)
2008	0	1,021	59	27	0	1,108		0	-	0	66	(1,041)	(1231)
2009 2010	0	1,440		69	0	1,658		0		0	172	(1,486)	(2508)
2010	0	130 133		93 94	0	424 429	1,134 1,119	0 0	-	0 0	1,134 1,119	710 690	(1943) (1433)
2011	0	133	201	94 95	0	429	1,119	0		0	1,100	667	(1433) (977)
2013	Ő	140		96	ŭ	437	1,084	0		ŏ	1,084	646	(567)
2014	Ō	144	201	97	ō	442		Ō		õ	1,069	627	(198)
2015	0	147	201	98	0	446		0	0	0	1,056	610	135
2016	0	151	201	99	0	451	1,045	0		0	1,045	594	435
2017	0	155		100	0	456		0	-	0	1,035	579	706
2018	0	159		101	0	461	1,025	0		0	1,025	564	951
2019	0	163		102	0	466		0		0 0	1,015 1,006	549 535	1172 1372
2020 2021	0	167 171		103 104	0 0	471 476		0		0		535 521	1572
2021	0	175		104	0	481	989	0		ŭ		507	1714
2023	ο	179		106	ő	487		Ő		ō		494	1861
2024	0 0	184		107	Ō	492		0		0		481	1994
2025	0	189	201	108	0	498		0		0		472	2114
2026	Û	193		110	0	504		0				468	2225
2027	0	198		111	0	510		0				469	2328
2028	0	203		112	0	516		0		0		469	2423 2512
2029	0	208		113 114	0	522 528		0	-	0		470 472	2512
2030 2031	0	213 219		114	0	535		0	-		,	474	2671
2031	0	219		116	0	541	1,018	Ő				476	2743
2032	U	224	201	.10	U	.	1,010	-	-	-	.,		
NOMINAL	0	6,706	4,838	2,503	0	14,047	23,800	0	0	0	23,800	9,753	
NPV:	0	3,885	2,001	999	0	6,885	9,628	0	0	0	9,628	2,743	
Discount rat	te:		0.0788		Benefit/Cos	it Ratio - [c	ol (12)/col (7)]:		1.40				

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Appendix C

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Residential Service Variable Price (RSVP-1) Rates

							Base Rate
	Base					Total	Pius
Rate Tiers	Rate	<u>Fuel</u>	Capacity	<u>Environ.</u>	<u>Conserv.</u>	<u>Clauses</u>	<u>Clauses</u>
P4	4.342	5.922	0.325	(0.344)	41.782	47.685	52.027
P3	4.342	5.922	0.325	(0.344)	7.559	13.462	17.804
P2	4.342	5.922	0.325	(0.344)	(0.844)	5.059	9.401
P1	4.342	5.922	0.325	(0.344)	(3.441)	2.462	6.804

TAMPA ELECTRIC COMPANY DOCKET NO. 070056-EG APPENDIX C PAGE 1 OF 1 FILED: JUNE 4, 2007

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Appendix D



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ADDITIONAL BILLING CHARGES

<u>TOTAL FUEL AND PURCHASED POWER COST RECOVERY CLAUSE:</u> The total fuel and purchased power cost recovery factor shall be applied to each kilowatt-hour delivered, and shall be computed in accordance with the formula prescribed by the Florida Public Service Commission. The following fuel recovery factors by rate schedule have been approved by the Commission:

RECOVERY PERIOD						
(January 2007 through December 2007)						
		¢/KWH		¢/KWH Energy	¢/KWH	¢/KWH
		Fuel		Conservation	Capacity	Environmental
			Off-			
Rate Schedules	Standard	Peak	Peak			
RS	5.922	7.392	5.146	.073	.325	(.344)
RSVP-1 (P ₁)	5.922	-	-	(3.441)	.325	(.344)
(P ₂)	5.922	-	-	(0.844)	.325	(.344)
(P ₃)	5.922	-	-	7.559	.325	(.344)
(P ₄)	5.922	-	-	41.782	.325	(.344)
GS	5.922	7.392	5.146	.071	.311	(.340)
TS	5.922	7.392	5.146	.071	.311	(.340)
SL-2	5.483	-	-	.026	.042	(.340)
OL-1&3	5.483	-	-	.026	.042	(.340)
GSD Secondary	5.899	-	-	.063	.261	(.340)
GSD Primary	5.899	7.364	5.126	.062	.261	(.340)
GSLD Secondary	5.899	7.364	5.126	.056	.222	(.340)
GSLD-Primary	5.899	7.364	5.126	.056	.222	(.340)
GSLD Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
SBF-Secondary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Primary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
IS-1,IS-3	5.745	7.171	4.992	.061	.020	(.340)
SBI-1,SBI-3	5.745	7.171	4.992	.061	.020	(.340)
	0.7-0	7.171	4.002	.001	.020	(.0+0)



RESIDENTIAL SERVICE VARIABLE PRICING PROGRAM

SCHEDULE: RSVP-1

RATE CODE: 113

AVAILABLE: Available to customers eligible for Rate Schedule RS (Residential Service). Availability is limited to single-family detached houses only that meet certain equipment requirements described below.

<u>APPLICABLE</u>: As an alternative to Rate Schedule RS for service used for domestic purposes at an individually-metered private residences. All energy must be for domestic purposes and should not be shared with others and resale is not permitted.

EQUIPMENT REQUIREMENTS:

- 1. Touch-tone phone service. (Land line)
- 2. Service entrance panel or house power panel rated at 200 amps or less.
- 3. Central heating and air conditioning that is compatible with Company installed energy management equipment. Residences must have central heating and cooling systems to be eligible for participation. Window units are not eligible
- 4. Electric water heaters, pool pumps, or other devices controlled by equipment provided through the program must be no larger than 30 amps and 240 volts each and compatible with Company installed energy management equipment.
- 5. Electric wiring must be conducive to power line carrier messaging.
- 6. Residence must be located in an area capable of meeting a paging strength standard.
- Existing meter configuration must be capable of incorporating the energy management equipment.

INSTALLATION AND REMOVAL: Energy Management equipment will be installed at the Customer's residence upon the Customer's initial request for service under Rate Schedule RSVP at no charge to the Customer. If this same Customer requests service at the same residence under Rate Schedule RSVP-1 after returning to the Rate Schedule RS, the Customer will be billed \$234.00 for installation costs and, thereafter, billed under Rate Schedule RSVP-1.

If a Customer has taken service under Rate Schedule RSVP-1 two separate times at the same residence then request to be moved back to Rate Schedule RS, the Customer will be billed \$174.00 for removal costs and thereafter billed under Rate Schedule RS.

<u>CHARACTER OF SERVICE</u>: Available for single-phase service from local distribution lines of the Company's system at nominal secondary voltage of 120/240 volts. Service shall be metered through one metering device capable of measuring electrical energy consumption during the various times each energy demand charge is in effect.



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Continued from Sheet No. 6.560				
MONTHLY RATES: Customer Facilities Charge:	\$8.50			
Energy and Demand Charges	: \$4.342 ¢ pe	er KWH (for all pricing	periods)	
MINIMUM CHARGE: The customer facilities charge.				
FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.				
ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.				
CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.				
ENVIRONMENTAL COST RE	COVERY CHARGE:	See Sheet Nos. 6.020	and 6.021.	
FLORIDA GROSS RECEIPTS	STAX: See Sheet No	. 6.021.		
FRANCHISE FEE CHARGE:	See Sheet No. 6.021			
PAYMENT OF BILLS: See S	heet No. 6.022.			
DETERMINATION OF PRICING PERIODS: Pricing periods are established by season for weekdays and weekends. The pricing periods for price levels P_1 (Low Cost Hours), P_2 (Moderate Cost Hours) and P_3 (High Cost Hours) are as follows:				
May through October				
	P 1	P ₂	P ₃	
Weekdays	P ₁ 11 P.M. to 6 A.M.	P₂ 6 A.M. to 1 P.M. 6 P.M. to 11 P.M.	P 3 1 P.M. to 6 P.M.	
Weekdays			P ₃ 1 P.M. to 6 P.M.	
		6 P.M. to 11 P.M.	P ₃ 1 P.M. to 6 P.M. P ₃	
Weekends	11 P.M. to 6 A.M.	6 P.M. to 11 P.M. 6 A.M. to 11 P.M.		
Weekends November through April	11 P.M. to 6 A.M. P 1	6 P.M. to 11 P.M. 6 A.M. to 11 P.M. P ₂ 5 A.M. to 6 A.M.	 P ₃	
Weekends <u>November through April</u> Weekdays	11 P.M. to 6 A.M. P ₁ 11 P.M. to 5 A.M. 11 P.M. to 6 A.M. level P ₄ (Critical Cos	6 P.M. to 11 P.M. 6 A.M. to 11 P.M. P 2 5 A.M. to 6 A.M. 10 A.M. to 11 P.M. 6 A.M. to 11 P.M. st Hours) shall be det	 P ₃ 6 A.M. to 10 A.M. 	



Continued from Sheet No. 6.565

The pricing period for the following observed holidays will be the same as the weekend hour price levels for the month in which the holiday occurs: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

TERMS OF SERVICE: The initial term of service under this rate shall be for a period of one year to be continued thereafter unless terminated by the customer with thirty days written notice.



Continued From Sheet No. 7.780

Schedule RSVP-1. Customer understands and acknowledges that this rate schedule as well as the rates, terms, and conditions therein are subject to periodic change by the Florida Public Service Commission and such changes will be applicable to the Customer.

- 6. This agreement supersedes all previous agreements and representations, either written or oral, heretofore made between the Company and the Customer with respect to matters herein contained. Any modification(s) to this Agreement must be approved, in writing, by the Company and the Customer.
- 7. The programmable thermostat will be removed by the Company if the Customer returns to service under Rate Schedule RS. The Customer is responsible for providing a replacement thermostat.

IN WITNESS THEREOF, the Customer and the Company have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

Customer:	Tampa Electric Company Representative
By/Title:	By/Title:
Signature:	Signature:
Street Address:	
City, Street, Zip:	-
Property Owner:	
By/Title:	
Signature:	
Date:	

DATE EFFECTIVE:



ADDITIONAL BILLING CHARGES

TOTAL FUEL AND PURCHASED POWER COST RECOVERY CLAUSE: The total fuel and purchased power cost recovery factor shall be applied to each kilowatt-hour delivered, and shall be computed in accordance with the formula prescribed by the Florida Public Service Commission. The following fuel recovery factors by rate schedule have been approved by the Commission:

RECOVERY PERIOD

(January 2007 through December 2007)

	Q	¢/KWH		¢/KWH Energy	¢/KWH	¢/KWH
		Fuel		Conservation	Capacity	Environmental
			Off-			
Rate Schedules	Standard	Peak	Peak			
RS	5.922	7.392	5.146	.073	.325	(.344)
<u>RSVP-1 (P₁)</u>	<u>5.922</u>	<u>-</u>	<u>-</u>	<u>(3.441)</u>	<u>.325</u>	<u>(.344)</u>
<u> (P₂)</u>	<u>5.922</u>	Ξ	=	<u>(0.844)</u>	<u>.325</u>	<u>(.344)</u>
<u> (P₃)</u>	<u>5.922</u>	-	-	<u>7.559</u>	<u>.325</u>	<u>(.344)</u>
<u> (P</u> ₄)	<u>5.922</u>	-	-	<u>41.782</u>	<u>.325</u>	<u>(.344)</u>
GS	5.922	7.392	5.146	.071	.311	(.340)
TS	5.922	7.392	5.146	.071	.311	(.340)
SL-2	5.483	-	-	.026	.042	(.340)
OL-1&3	5.483	-	-	.026	.042	(.340)
GSD Secondary	5.899	-	-	.063	.261	(.340)
GSD Primary	5.899	7.364	5.126	.062	.261	(.340)
GSLD Secondary	5.899	7.364	5.126	.056	.222	(.340)
GSLD-Primary	5.899	7.364	5.126	.056	.222	(.340)
GSLD Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
SBF-Secondary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Primary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
IS-1,IS-3	5.745	7.171	4.992	.061	.020	(.340)
SBI-1,SBI-3	5.745	7.171	4.992	.061	.020	(.340)



RESIDENTIAL SERVICE VARIABLE PRICING PILOTPROGRAM

SCHEDULE: RSVP-1

RATE CODE: 113

AVAILABLE: Available to customers eligible for Rate Schedule RS (Residential Service). Availability is limited to single-family detached houses only that meet certain equipment requirements described below.

<u>APPLICABLE</u>: As an alternative to Rate Schedule RS for service used for domestic purposes at an individually-metered private residences. All energy must be for domestic purposes and should not be shared with others and resale is not permitted.

EQUIPMENT REQUIREMENTS:

- 1. Touch-tone phone service. (Land line)
- 2. Service entrance panel or house power panel rated at 200 amps or less.
- Central heating and air conditioning that is compatible with Company installed energy management equipment. <u>Residences must have central heating and cooling systems to</u> be eligible for participation. Window units are not <u>eligible</u>
- 4. Electric water heaters, pool pumps, or other devices controlled by equipment provided through the program must be no larger than 30 amps and 240 volts each and compatible with Company installed energy management equipment.
- 5. Electric wiring must be conducive to power line carrier messaging.
- 6. Residence must be located in an area capable of meeting a paging strength standard.
- 7. Existing meter configuration must be capable of incorporating the energy management equipment.

INSTALLATION AND REMOVAL: Energy Management equipment will be installed at the Customer's residence upon the Customer's initial request for service under Rate Schedule RSVP at no charge to the Customer. If this same Customer requests service at the same residence under Rate Schedule RSVP-1 after returning to the Rate Schedule RS, the Customer will be billed \$234.00 for installation costs and, thereafter, billed under Rate Schedule RSVP-1.

If a Customer has taken service under Rate Schedule RSVP-1 two separate times at the same residence then request to be moved back to Rate Schedule RS, the Customer will be billed \$174.00 for removal costs and thereafter billed under Rate Schedule RS.

<u>CHARACTER OF SERVICE</u>: Available for single-phase service from local distribution lines of the Company's system at nominal secondary voltage of 120/240 volts. Service shall be metered through one metering device capable of measuring electrical energy consumption during the various times each energy demand charge is in effect.



MONTHLY RATES:

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Customer Facilities Charge: \$8.50

Energy and Demand Charges:

Low Cost Hours (P1)	<u> 2.217 ¢ per KWH</u>
Medium Cost Hours (P2)	3.751 ¢ per KWH
High Cost Hours (P3)	9.436 ¢ per KWH
Critical Cost Hours (P4)	



Continued from Sheet No. 6.560

MONTHLY RATES:

Customer Facilities Charge: \$8.50

Energy and Demand Charges: \$4.342 ¢ per KWH (for all pricing periods)

MINIMUM CHARGE: The sum of the customer facilities charge and program participant charge.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. -6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

<u>DETERMINATION OF PRICING PERIODS:</u> Pricing periods are established by season for weekdays and weekends. The pricing periods for price levels P_1 (Low Cost Hours), P_2 (Moderate Cost Hours) Ns and P_3 (High Cost Hours) are as follows:

May through October	P 1	P ₂	P ₃
Weekdays	11 P.M. to 6 A.M.	6 A.M. to 1 P.M. 6 P.M. to 11 P.M.	1 P.M. to 6 P.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	
November through April	P ₁	P ₂	P3
Weekdays	11 P.M. to 5 A.M.	5 A.M. to 6 A.M. 10 A.M. to 11 P.M.	6 A.M. to 10 A.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	
The pricing periods for price level P_4 (Critical Cost Hours) shall be determined at the sole discretion of the Company. Level P_4 hours shall not exceed 134 hours per year.			

DATE EFFECTIVE:



FIRST REVISED SHEET NO. 6.565 ORIGINAL SHEET NO. 6.565

The pricing period for the following observed holidays will be the same as the weekend hour price levels for the month in which the holiday occurs: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

TERMS OF SERVICE: The initial term of service under this rate shall be for a period of one year to be continued thereafter unless terminated by the customer with thirty days written notice.



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Continued from Sheet No. 6.565

The pricing period for the following observed holidays will be the same as the weekend hour price levels for the month in which the holiday occurs: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

TERMS OF SERVICE: The initial term of service under this rate shall be for a period of one year to be continued thereafter unless terminated by the customer with thirty days written notice.



Continued From Sheet No. 7.780

Schedule RSVP-1. Customer understands and acknowledges that this rate schedule as well as the rates, terms, and conditions therein are subject to periodic change by the Florida Public Service Commission and such changes will be applicable to the Customer.

- 6. This agreement supersedes all previous agreements and representations, either written or oral, heretofore made between the Company and the Customer with respect to matters herein contained. Any modification(s) to this Agreement must be approved, in writing, by the Company and the Customer.
- 7. The programmable thermostat will be removed by the Company if the Customer returns to service under Rate Schedule RS. The Customer is responsible for providing a replacement thermostat.

IN WITNESS THEREOF, the Customer and the Company have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

Customer:	Tampa Electric Company Representative
By/Title:	By/Title:
Signature:	Signature:
Street Address:	
City, Street, Zip:	
Property Owner:	
By/Title:	
Signature:	
Date:	