August 18, 2017

## VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850
Re: Conservation Cost Recovery Clause
FPSC Docket No. 20170002-EG
Dear Ms. Stauffer:
Attached for filing in the above docket on behalf of Tampa Electric Company are the original of each of the following:

1. Petition of Tampa Electric Company.
2. Prepared Direct Testimony and Exhibit (MRR-2) of Mark R. Roche.

Thank you for your assistance in connection with this matter.
Sincerely,


JDB/pp
Attachment
cc: All Parties of Record (w/attachment)

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Energy Conservation Cost )

DOCKET NO. 2017002-EG
Recovery Clause.
)
_)
FILED: August 18, 2017

## PETITION OF TAMPA ELECTRIC COMPANY

Tampa Electric Company ("Tampa Electric" or "the company"), hereby petitions the Commission for approval of the company's conservation cost recovery true-up and the cost recovery factors proposed for use during the period January through December 2018. In support thereof, the company says:

## Conservation Cost Recovery

1. During the period January through December 2016, Tampa Electric incurred actual net conservation costs of $\$ 37,312,065$ plus a beginning true-up over-recovery of $\$ 4,056,772$ for a total of $\$ 33,255,293$. The amount collected through the Conservation Cost Recovery Clause was $\$ 32,463,454$. The true-up amount for January through December 2016, corrected from an initially calculated under-recovery of $\$ 719,198$, is an under-recovery of $\$ 789,259$ including interest. (See Exhibit (MRR-1); Schedule CT-1, Page 1 of 1 and CT-2, Page 1 of 4, filed May 1, 2017).
2. During the period January through December 2017, the company anticipates incurring expenses of $\$ 39,821,436$. For the period, the total net true-up under-recovery is estimated to be $\$ 2,997,111$ including interest. (See Exhibit (MRR-2); Schedule C-3, page 9 of 9).
3. For the forthcoming cost recovery period January through December 2018, Tampa Electric projects its total incremental conservation costs to be $\$ 40,312,775$. Tampa Electric's total true-up and projected expenditures for the projection period are estimated to be $\$ 43,309,886$ including true-up estimates for January through December 2017. Utilizing the rate design and cost
allocation as put forth in Docket No. 130040-EI, the required conservation cost recovery factors are as follows:

| Rate Schedule | Cost Recovery Facto |
| :---: | :---: |
| RS | 0.246 |
| GS and CS | 0.232 |
| GSD Optional-Secondary | 0.201 |
| GSD Optional-Primary | 0.199 |
| GSD Optional-Subtransmission | 0.197 |
| LS-1 | 0.125 |
| Rate Schedule | Cost Recovery Facto |
| GSD-Secondary | 0.87 |
| GSD-Primary | 0.86 |
| GSD-Subtransmission | 0.85 |
| SBF-Secondary | 0.87 |
| SBF-Primary | 0.86 |
| SBF-Subtransmission | 0.85 |
| IS-Secondary | 0.67 |
| IS-Primary | 0.67 |
| IS--Subtransmission | 0.66 |

(See Exhibit (MRR-2); Schedule C-1, Page 1 of 1)
4. For the forthcoming cost recovery period, January through December 2018 the Contracted Credit Value by Voltage Level for the GSLM-2 and GSLM-3 rate riders will be:

## CCV dollars per kW by Voltage Level <br> Secondary <br> Primary <br> 9.46 <br> Subtransmission <br> 9.37

2018
(See Exhibit (MRR-2); Page 70).
5. For the forthcoming cost recovery period, January through December 2018, the residential Price Responsive Load Management ("RSVP-1") rates are as follows:

| Rate Tier | Cents perkWh |
| :--- | :---: |
| P4 | 40.450 |
| P3 | 6.879 |
| P2 | -1.055 |
| P1 | -2.988 |

(See Exhibit (MRR-2); page 75)
6. Tampa Electric is not aware of any disputed issues of material fact relating to the matters addressed or the relief requested in this petition.

WHEREFORE, Tampa Electric Company requests the Commission's approval of the company's prior period conservation cost recovery true-up calculations and projected conservation cost recovery charges to be collected during the period January 1, 2018 through December 31, 2018.

DATED this $18^{\text {th }}$ day of August, 2017.
Respectfully submitted,


ATTORNEYS FOR TAMPA ELECTRIC COMPANY

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this $18^{\text {th }}$ day of August 2017 to the following:

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TAMPA ELECTRIC AN EMERA CロMPANY

## BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 20170002-EG

IN RE: CONSERVATION COST RECOVERY CLAUSE TESTIMONY AND EXHIBIT OF

MARK R. ROCHE

FILED: AUGUST 18, 2017

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION PREPARED DIRECT TESTIMONY <br> OF 

## MARK R. ROCHE

Q. Please state your name, address, occupation and employer.
A. My name is Mark R. Roche. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "the company") as Manager, Regulatory Rates in the Regulatory Affairs Department.
Q. Please provide a brief outline of your educational background and business experience.
A. I graduated from Thomas Edison State College in 1994 with a Bachelor of Science degree in Nuclear Engineering Technology and from Colorado State University in 2009 with a Master's degree in Business Administration. My work experience includes twelve years with the US Navy in nuclear operations as well as twenty years of electric utility experience. My utility work has included various positions in Marketing and Sales, Customer Service, Distributed Resources, Load Management, Power Quality,

Distribution Control Center operations, Meter Department, Meter Field Operations, Service Delivery, Revenue Assurance, Commercial and Industrial Energy Management Services, Demand Side Management ("DSM") Planning and Forecasting. In my current position, I am responsible for the company's Energy Conservation Cost Recovery ("ECCR") Clause and Storm Hardening.
Q. Have you previously testified before the Florida Public Service Commission ("Commission")?
A. Yes. I have testified before this Commission on conservation and load management activities, DSM plan approval dockets and other ECCR dockets.
Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to support the company's actual conservation costs incurred during the period January through December 2016, the actual/projected period January to December 2017, and the projected period January through December 2018. The projected 2018 ECCR factors have been calculated based on the current approved allocation methodology. Also, I will support the appropriate Contracted Credit Value ("CCV") for
participants in the General Service Industrial Load Management Riders ("GSLM-2" and "GSLM-3") for the period January through December 2018. In addition, I will support the appropriate residential variable pricing rates ("RSVP-1") for participants in the Residential Price Responsive Load Management Program for the period January through December 2018.
Q. Did you prepare any exhibits in support of your testimony?
A. Yes. Exhibit No. MRR-2 was prepared under my direction and supervision. This document includes Schedules C-1 through C-5 and associated data which support the development of the conservation cost recovery factors for January through December 2018 using the current 12 Coincident Peak ("CP") and 1/13 Average Demand ("AD") Factor allocation methodology.
Q. Does the Exhibit No. MRR-2 meet the requirements of Florida Statute Rule 25-17.015(1)(b) which requires the projection filing to include the annual estimated/actual true-up filing showing eight months actual and four months projected commons costs, individual program costs and any revenues?
A. No, based upon the due date of August 18, 2017 for this filing in Docket No. 20170002-EG it would be impossible for Tampa Electric to comply with having eight months actual and four months projected commons costs, individual program costs and any revenues.
Q. Did Tampa Electric communicate this issue to the Commission?
A. Yes, last year Tampa Electric through the company's joint petition with the other investor owned utilities filed for a two-year waiver of Rule 25-17.015(1)(b) to file the annual estimated/actual true up filings of six months actual and six months of projected data which received Commission approval in Order No. PSC-16-0493-PAA-EG.
Q. Did Tampa Electric submit the 2017 annual estimated/actual true up filings of six months actual and six months of projected data based upon this rule waiver?
A. Yes.
Q. Please describe the conservation program costs projected by Tampa Electric during the period January through December 2016.
A. For the period January through December 2016, Tampa Electric projected conservation program costs to be \$38,194,329. The Commission authorized collections to recover these expenses in Docket No. 20150002-EG, Order No. PSC-2015-0542-FOF-EG, issued November 23, 2015.
Q. For the period January through December 2016, what were Tampa Electric's conservation costs and what was recovered through the ECCR Clause?
A. For the period January through December 2016, Tampa Electric incurred actual net conservation costs of $\$ 37,312,065$ plus a beginning true-up over-recovery of $\$ 4,056,772$ for a total of $\$ 33,255,293$. The amount collected in the ECCR Clause was $\$ 32,463,454$.
Q. What was the true-up amount?
A. The true-up amount for the period January through December 2016 was an under-recovery of $\$ 789,258$ including interest.
Q. This value is different than the calculation detailed in Exhibit No. MRR-1, Conservation Cost Recovery True Up, Pages 8 through 20, filed May 1, 2017 which had an under-
recovery of $\$ 719,198$ including interest as the value. Would you explain this difference?
A. Yes, in preparation of this projection filing the company found two errors that occurred in the reporting of expenses for 2016. The first error found that the Renewable Energy Program's revenue and expenses had inadvertently been included in the CT-3 Page 2 of 3 "Calculation of True-up and Interest Provisions". These program expenses and revenues should not be included in the deferred calculation because the Renewable Energy Program is a standalone program and is not funded out of the ECCR Clause. The second error was two charges associated with payroll and vehicles that were incorrectly charged to the Renewable Energy Program that were associated with other energy conservation programs.
Q. Have these errors been corrected?
A. Yes, the company will also submit a revised 2016 True-up file to the Commission.
Q. Did these errors affect any rates that have been charged for the ECCR Clause?
A. No, the projection for 2016 (prepared in 2015) did not contain this error nor did the projection for 2017 (prepared in 2016). The correction only impacted the reporting for true-up that was filed on May 1, 2017.
Q. On several of the "C" schedules within the Exhibit No. MRR-2, there are new line items that reduce the total conservation expenses by the Renewable Energy Program expenses. Would you explain why these new line items are inserted?
A. Yes, the decision was made to present the Renewable Energy Program in a more transparent way. Since the Renewable Energy Program expenses and revenues are part of a standalone program which is not funded out of the ECCR Clause. The programs expenses and revenues will now be shown as a reduction to the conservation expenses to arrive at the total conservation expenses. One other change made to improve transparency was to include the details regarding the deferred balance (credits). The deferred balance shows how much of the excess program revenues have been accumulated awaiting investment in a solar photovoltaic array. This deferred balance can be found on the C-5 schedule for the Renewable Energy Program.
Q. Please describe the conservation program costs projected to be incurred by Tampa Electric during the period January through December 2017?
A. The actual costs incurred by Tampa Electric through June 2017 and projected for July through December 2017 are $\$ 39,821,436$. For the period, Tampa Electric anticipates an under-recovery in the ECCR Clause of $\$ 2,997,111$ which includes the 2016 true-up and interest. A summary of these costs and estimates are fully detailed in Exhibit No. MRR-2, Conservation Costs Projected, pages 24 through 32.
Q. Has Tampa Electric proposed any new or modified DSM Programs for ECCR cost recovery for the period January through December 2018?
A. Yes, at this time Tampa Electric is seeking approval of a modification of the current Neighborhood Weatherization and Energy Education, Awareness and Agency Outreach programs by replacing the compact fluorescent lamps ("CFL") currently provided with a specific number of light emitting diode ("LED") lamps. This modification to these programs is being heard within Docket No. 20170149. If this modification is approved, the company would
transition to the new LED lamps once the supply of CFL lamps is exhausted and is projected to occur around the beginning of 2018 .
Q. Please summarize the proposed conservation costs for the period January through December 2018 and the annualized recovery factors based on $a 12 \mathrm{CP}$ and $1 / 13$ AD basis applicable for the period January through December 2018?
A. Tampa Electric has estimated that the total conservation costs (less program revenues) during the period will be $\$ 40,312,775$ plus true-up. Including true-up estimates, the January through December 2018 cost recovery factors allocated on a 12 CP and 1/13 AD basis for firm retail rate classes are as follows:

GSD Optional - Secondary

Rate Schedule
GSD - Secondary
GSD - Primary
GSD - Subtransmission
SBF - Secondary
SBF - Primary
0.86

SBF - Subtransmission
0.85

IS - Secondary
0.67

IS - Primary
0.67

IS - Subtransmission

Exhibit No. MRR-2, Conservation Costs Projected, pages 17 through 23 contain the Commission prescribed forms which detail these estimates.
Q. Has Tampa Electric complied with the ECCR cost allocation methodology stated in Docket No. 930759-EG, Order No. PSC-93-1845-EG?
A. Yes, it has.
Q. Please explain why the incentive for GSLM-2 and GSLM-3 rate riders is included in your testimony?
A. In Docket No. 990037-EI, Tampa Electric petitioned the Commission to close its non-cost-effective interruptible service rate schedules while initiating the provision of a cost-effective non-firm service through a new load management program. This program would be funded through the ECCR clause and the appropriate annual contracted credit value ("CCV") for customers would be submitted for Commission approval as part of the company's annual ECCR projection filing. Specifically, the level of the CCV would be determined by using the Rate Impact Measure ("RIM") Test contained in the Commission's costeffectiveness methodology found in Rule 25-17.008, F.A.C. By using a RIM Test benefit-to-cost ratio of 1.2 , the level of the CCV would be established on a per kilowatt ("kW") basis. This program and methodology for CCV determination was approved by the Commission in Docket No. 990037-EI, Order No. PSC-99-1778-FOF-EI, issued September 10, 1999.
Q. What is the appropriate CCV for customers who elect to take service under the GSLM-2 and GSLM-3 rate riders during the January through December 2018 period?
A. For the January through December 2018 period, the table below lists the CCV for 2018 by voltage level including
the past six years of CCV:

\left.|  | CCV dollars per kW by Voltage Level |  |
| :---: | :---: | :---: | :---: |$\right]$| Secondary |
| :---: |
| 2018 |

If the 2018 assessment for need determination indicates the availability of new non-firm load, the CCV will be applied to new subscriptions for service under those rate riders. The application of the cost-effectiveness methodology to establish the CCV is found in the attached analysis, Exhibit No. MRR-2, Conservation Costs Projected, beginning on page 70 through 74.
Q. Please explain why the RSVP-1 rates for Residential Price Responsive Load Management are in your testimony?
A. In Docket No. 070056-EG, Tampa Electric's petition to allow its pilot residential price responsive load
management initiative to become permanent was approved by the Commission on August 28, 2007. This program is to be funded through the ECCR clause and the appropriate annual RSVP-1 rates for customers are to be submitted for Commission approval as part of the company's annual ECCR projection filing.
Q. What are the appropriate Price Responsive Load Management rates ("RSVP-1") for customers who elect to take this service during the January through December 2018?
A. The appropriate RSVP-1 rates during the January through December 2018 period for Tampa Electric's Price Responsive Load Management program based upon the company's 2018 residential base rates and the 2018 projected clause amounts for ECCR, Fuel and Purchased Power Cost Recovery, Capacity Cost Recovery and the Environmental Cost Recovery are as follows:

## Rate Tier

P4
P3
P2
P1
(Cents per kWh)
40.450
6.879
(1.055)
(2.988)


Page 75 contains the projected RSVP-1 rates for 2018.
Q. Does this conclude your testimony?
A. Yes it does.

## CONSERVATION COSTS

PROJECTED

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## SCHEDULE

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CALCULATION OF ENERGY \& DEMAND ALLOCATION \% BY RATE CLASS JANUARY 2018 THROUGH DECEMBER 2018


$$
\begin{aligned}
& \text { (1) } \\
& \text { AVG 12CP } \\
& \text { Load Factor } \\
& \text { at Meter } \\
& \text { (\%) } \\
& \\
& 54.90 \% \\
& 60.53 \% \\
& 3.53 \% \\
& 74.34 \% \\
& 100.93 \% \\
& 291.75 \%
\end{aligned}
$$

(1) AVG 12 CP load factor based on projected 2016 calendar data.
(2) Projected MWH sales for the period Jan. 2017 thru Dec. 2017 ) Based on 2016 projected energy losses.
(6) $\mathrm{Col}(2)^{*} \mathrm{Col}(5)$.
8) $\mathrm{Col}(6) /$ total for $\mathrm{Col}(6)$.
(10) Col (8) * $0.0769+\mathrm{Col}(9)$ * 0.9231


* (ROUNDED TO NEAREST . 001 PER KWH or KW)

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12000353-121 Energy Audits (E) | 225,353 | 219,871 | 221,114 | 218,459 | 216,255 | 222,923 | 247,682 | 252,064 | 257,988 | 228,959 | 218,173 | 214,886 | 2,743,727 |
| 12000381 Residential Celiling Insulation | 25,533 | 26,185 | 26,060 | 28,987 | 29,102 | 27,282 | 27,292 | 50,250 | 25,022 | 23,978 | 25,160 | 24,181 | 339,032 |
| 1200399 Residential Duct Repair | 16,232 | 17,322 | 34,367 | 16,322 | 31,379 | 14,870 | 30,177 | 14,870 | 30,027 | 15,241 | 30,352 | 14,870 | 266,029 |
| 12000419 Residential Electronically Commutated Mo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 0 | 0 | 220 |
| 12000375 Energy Education, Awareness and Agency | 9,929 | 9,924 | 10,299 | 9,296 | 8,757 | 7,736 | 9,708 | 12,371 | 12,550 | 12,528 | 12,518 | 12,497 | 128,113 |
| 12004152 Energy Star Multi-Family | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 98,960 | 112 | 98,960 | 112 | 199,040 |
| 12000431 Energy Star for New Homes | 76,450 | 76,445 | 77,450 | 84,960 | 86,965 | 84,960 | 76,450 | 84,960 | 76,450 | 78,945 | 76,585 | 77,980 | 958,600 |
| 1200349 Residential Heating and Cooling | 63,448 | 50,943 | 53,589 | 53,509 | 49,808 | 57,018 | 62,988 | 62,988 | 48,732 | 48,727 | 49,748 | 49,678 | 651,176 |
| 12000425 Neighbothood Weatherization | 548,560 | 532,828 | 533,686 | 540,611 | 533,686 | 533,611 | 540,686 | 533,611 | 533,686 | 540,611 | 533,686 | 533,611 | 6,438,873 |
| 12000433 Energy Planner | 418,680 | 305,192 | 307,243 | 306,499 | 306,585 | 313,394 | 305,014 | 305,190 | 306,302 | 304,250 | 302,636 | 300,532 | 3,781,517 |
| 12000365 Residential Wall Insulation | 0 | 206 | 0 | 259 | 207 | 207 | 207 | 207 | 207 | 259 | 207 | 207 | 2,173 |
| 12000367 Residential Window Replacement | 40,179 | 40,099 | 49,028 | 49,033 | 49,103 | 57,415 | 57,420 | 39,558 | 39,558 | 39,638 | 39,828 | 39,828 | 540,687 |
| 12000351 Prime Time | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 2,411 | 28,932 |
| 12000397 Commercial Celiling Insulation | 1,410 | 118 | 1,410 | 118 | 1,410 | 118 | 1,410 | 118 | 1,410 | 118 | 118 | 118 | 7,876 |
| 12000411 Commercial Chiller | 3,820 | 25 | 3,819 | 3,819 | 3,819 | 3,819 | 25 | 3,819 | 3,819 | 3,819 | 25 | 25 | 30,653 |
| 12000371 Cogeneration | 4,064 | 3,534 | 3,887 | 3,711 | 4,064 | 3,711 | 3,887 | 4,064 | 3,534 | 4,064 | 3,887 | 3,711 | 46,118 |
| 12000389 Conservation Value | 837 | 81,851 | 837 | 837 | 837 | 837 | 837 | 837 | 837 | 837 | 837 | 51,851 | 142,072 |
| 12000443 Cool Roof | 23,391 | 11,721 | 35,062 | 35,062 | 23,391 | 11,721 | 11,721 | 11,721 | 11,721 | 23,391 | 23,391 | 11,721 | 234,014 |
| 12000429 Commercial Cooling | 374 | 93 | 93 | 374 | 93 | 93 | 374 | 374 | 93 | ${ }^{93}$ | ${ }^{93}$ | 374 | 2,521 |
| 12000409 Demand Response | 308,753 | 308,753 | 310,753 | 310,753 | 309,753 | 308,753 | 308,753 | 308,753 | 308,753 | 308,753 | 308,753 | 308,753 | 3,710,036 |
| 12000377 Commercial Duct Repair | 1,223 | 0 | 1,223 | 0 | 2,446 | 2,446 | 0 | 0 | 1,223 | 0 | 1,223 | 2,446 | 12,230 |
| 12000441 Commercial ECM | 1,669 | 585 | 585 | 585 | 585 | 1,625 | 585 | 585 | 1,625 | 585 | 585 | 1,669 | 11,268 |
| 12000379 Industrial Load Management (GLSM 223) | 1,220,785 | 1,265,331 | 1,263,089 | 1,263,067 | 1,263,044 | 1,263,022 | 1,262,999 | 1,262,976 | 1,262,954 | 1,262,931 | 1,262,909 | 1,262,886 | 15,115,993 |
| 12000385 Lighting Conditioned Space | 29,050 | 23,255 | 43,538 | 26,153 | 29,050 | 26,153 | ${ }^{31,948}$ | 43,538 | 23,255 | 29,050 | 29,050 | 29,050 | 363,090 |
| 12003201 Lighting Non-Conditioned Space | 12,809 | 4,805 | 3,203 | 9,609 | 4,805 | 6,406 | 8,008 | 9,609 | 8,008 | 6,406 | 4,805 | 4,805 | 83,278 |
| 12000413 Lighting Occupancy Sensors | 1,776 | 25 | 25 | 955 | 1,776 | 1,076 | 1,076 | 1,898 | 955 | 955 | 25 | 955 | 11,497 |
| 12000383 CILM (GLSM 1) | 1,081 | 1,992 | 1,890 | 4,845 | 2,137 | 2,132 | 2,128 | 2,123 | 2,119 | 2,114 | 1,110 | 1,106 | 24,777 |
| 12000415 Refrigeration Anti-condensate Control | 1,745 | 0 | 0 | 0 | 0 | 0 | 1,745 | 0 | 0 | 0 | 0 | 0 | 3,490 |
| 12000387 Standby Generator | 267,364 | 270,364 | 268,864 | 268,864 | 268,864 | 268,864 | 270,364 | 270,364 | 271,864 | 270,364 | 270,364 | 270,364 | 3,236,868 |
| 12003202 Thermal Energy Storage | 135 | 135 | 135 | 41,429 | 872 | 135 | 82,021 | 872 | 135 | 872 | 82,021 | 135 | 208,897 |
| 12000399 Commercial Wall Insulation | 0 | 0 | 0 | 0 | 0 | 2,219 | 0 | 0 | 0 | 0 | 0 | 0 | 2,219 |
| 12000417 Commercial Water Heating | 2,194 | 0 | 0 | 0 | 2,194 | 0 | 0 | 0 | 0 | 0 | 0 | 2,194 | 6,582 |
| 12000427 Conservation Research and Development | 10,338 | 60,338 | 5,338 | 55,338 | 338 | 10,338 | 338 | 27,338 | 338 | 20,338 | ${ }^{338}$ | ${ }^{338}$ | 191,056 |
| 12000393 Renewable Energy Program | 7,410 | 7,410 | 7.410 | 7,410 | 7,410 | 7,410 | 7,410 | 7,410 | 7,410 | 7,410 | 7,410 | 7,420 | 88,930 |
| 12003347 Common Expenses | 55,461 | 52,988 | 56,607 | 54,923 | 114,607 | 63,323 | 104,686 | 56,607 | 63,532 | 57,797 | 55,369 | 54,221 | 790,121 |
| Total All Programs | 3,382,576 | 3,374,861 | 3,323,127 | 3,398,310 | 3,355,865 | 3,306, 140 | 3,460,462 | 3,371,598 | 3,405,698 | 3,295,556 | 3,442,577 | 3,284,935 | 40,401,705 |
| Less: Included in Base Rates | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\underline{0}$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\underline{0}$ | $\underline{0}$ | $\bigcirc$ | $\bigcirc$ |
| Recoverable Consv. Expenses | 3,382,576 | 3,374,861 | 3,323,127 | 3,398,310 | 3.3555 .865 | 3,306, 140 | 3.460.462 | 3,371,598 | 3.405,698 | 3,295,556 | 3.442.577 | 3.284,935 | 40,401,705 |
| Less Renewable Energy Expenses | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.410 | 7.420 | 88,930 |
| Total Conservation Expenses | 3.3 | 3.367451 | 3315.717 | 3 3,390.900 | 3.348 .455 | $\underline{3.298730}$ | 3.453.052 | $\underline{3.364,188}$ | $\underline{3.398 .288}$ | 3. | 3435.167 | $\underline{3.277 .515}$ | $\underline{40.312 .775}$ |
| Summary of Demand \& Eneray |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy | 1,339,942 | 1,36,751 | 1,291,526 | 1,339,990 | 1,298,891 | 1,267,430 | 1,408,788 | 1,330,403 | 1,372,511 | 1,257,990 | 1,417,958 | 1,261,869 | 15,814,822 |
| Demand | $\underline{2.042,634}$ | $\underline{2.058,110}$ | 2.031,601 | $\underline{2.058,320}$ | $\underline{2.056,974}$ | $\underline{2.038,710}$ | $\underline{2.051,674}$ | 2.041, 195 | $\underline{\text { 2.033, } 187}$ | $\underline{2.037,766}$ | $\underline{2.024,719}$ | $\underline{2023,066}$ | 24,497,953 |
| Total Recoverable Consv. Expenses | 3 3822.576 | 3,374,861 | 3,323,127 | 3 3,398,310 | 3 3 355.865 | 33.306140 | 3,460.462 | 3.371 .598 | 3,405,698 | 3,295,556 | 3.442.577 | 3.284 .035 | 40.312.775 |

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| TAMPA ELECTRIC COMPANY <br> Schedule of Capital Investment, Depreciation and Return <br> Estimated For Months January 2018 through December 2018 PRICE RESPONSIVE LOAD MANAGEMENT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beginning | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| 1. Investment | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 85,000 | 1,020,000 |
| 2. Retirements | 10,220 | 8,662 | 12,241 | 124,686 | 185,690 | $(3,893)$ | 154,253 | (26,740) | 47,210 | 359,306 | 164,738 | 65,788 | 1,102,161 |
| 3. Depreciation Base | 6,071,628 | 6,147,966 | 6,220,725 | 6,181,039 | 6,080,349 | 6,169,242 | 6,099,989 | 6,211,729 | 6,249,519 | 5,975,213 | 5,895,475 | 5,914,687 |  |
| 4. Depreciaition Expense | 100.571 | 101.830 | 103.072 | 103348 | 102.178 | 102.080 | 102.244 | 102.598 | 103.844 | 101873 | $\underline{98.922}$ | $\underline{98.418}$ | 1.220 .978 |
| 5. Cumulative Investment $5,996,848$ | 6,071,628 | 6,147,966 | 6,220,725 | 6,181,039 | 6,080,349 | 6,169,242 | 6,099,989 | 6,211,729 | 6,249,519 | 5,975,213 | 5,895,475 | 5,914,687 | 5,914,687 |
| 6. Less: Accumulated Depreciaition 3,369,408 | 3.459,759 | 3.552,927 | 3,643,758 | 3,622,420 | 3,538,908 | 3.644,881 | 3,592,872 | 3,722,210 | 3,778,844 | 3.521,411 | 3.455,595 | 3.488,225 | 3,488,225 |
| 7. Net Investment $\quad \underline{\text { 2.627.440 }}$ | $\underline{2.611 .869}$ | $\underline{2.595,039}$ | 2.576.967 | $\underline{2.558 .619}$ | $\underline{2.541 .441}$ | $\underline{2.524 .361}$ | $\underline{2.507 .117}$ | $\underline{2.489 .519}$ | $\underline{2.470 .675}$ | $\underline{2.453 .802}$ | $\underline{2439.880}$ | $\underline{2.426 .462}$ | $\underline{2.426 .462}$ |
| 8. Average Investment | 2,619,655 | 2,603,454 | 2,586,003 | 2,567,993 | 2,550,030 | 2,532,901 | 2,515,739 | 2,498,318 | 2,480,997 | 2,462,239 | 2,446,841 | 2,433,171 |  |
| 9. Return on Average Investment-Equity Component | 15,290 | 15,195 | 15,994 | 14,987 | 14,884 | 14,784 | 14,684 | 14,582 | 14,475 | 14,371 | 14,281 | 14,202 | 176,829 |
| 10. Return on Average Investment - Debt Component | 3,921 | 3,896 | 3,870 | 3,843 | 3,816 | 3,791 | 3,765 | 3,739 | 3.712 | 3.685 | 3,662 | 3.641 | 45,341 |
| 11. Total Depreciation and Return | 119,782 | $\underline{120,921}$ | 122.036 | $\underline{122.178}$ | $\underline{120,878}$ | $\underline{120,655}$ | $\underline{120,693}$ | $\underline{120,919}$ | $\underline{122,031}$ | $\underline{119,929}$ | $\underline{16,865}$ | $\underline{116,261}$ | $\underline{1.443,148}$ |
| NOTES: <br> Note: Depreciation expense is calculated using a useful life of 60 months. <br> Line $9 \times 7.0040 \% \times 1 / 12$ (Jan-Dec). Based on ROE of $10.25 \%$ and weighted income tax rate of $38.575 \%$ (expansion factor of 1.632200 ). <br> Line $10 \times 1.7959 \% \times 1 / 12$ (Jan-Dec) |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |




NOTES:
Depreciation expense is calculated using a useful life of 60 months.
Line $9 \times 7.0040 \% \times 1 / 12$ (Jan-Dec). Based on ROE of $10.25 \%$ and weighted income tax rate of $38.575 \%$ (expansion factor of 1.632200 ).

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| Actual for Months January 2017 through June 2017 <br> Projected for Months July 2017 through December 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Name | Capital Investment | Payroll \& Benefits | Materials \& Supplies | Outside Services | Advertising | Incentives | Vehicle | Other | Program Revenues | Total |
| 12000353-1: Energy Audits (E) |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Actual | 0 | 648,544 | 16,541 | 16,755 | 290,961 | 0 | 39,020 | 18,809 | 0 | 1,030,630 |
| 3 | Projected | 0 | 961,820 | 6,315 | 179,108 | 550,047 | $\underline{0}$ | 65,858 | 17,370 | 0 | 1,780,518 |
| 4 | Total | 0 | 1,610,364 | 22,856 | 195,863 | 841,008 | 0 | 104,878 | 36,179 | 0 | 2,811,148 |
| 12000381 Residential Ceiling Insulation |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Actual | 0 | 42,338 | 67 | 0 | 0 | 126,924 | 1,383 | 1,098 | 0 | 171,810 |
| 7 | Projected | $\underline{0}$ | 28,336 | 250 | $\underline{0}$ | 0 | 99,840 | 2,500 | 40 | 0 | 130,966 |
| 8 | Total | 0 | 70,674 | 317 | 0 | 0 | 226,764 | 3,883 | 1,138 | 0 | 302,776 |
| 12000391 Residential Duct Repair |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Actual | 0 | 25,922 | 67 | 0 | 0 | 81,165 | 1,206 | 15 | 0 | 108,375 |
| 11 | Projected | 0 | 15,124 | $\underline{225}$ | 0 | $\underline{0}$ | 89,250 | 2,680 | 80 | 0 | 107,359 |
| 12 | Total | 0 | 41,046 | 292 | 0 | 0 | 170,415 | 3,886 | 95 | 0 | 215,734 |
| 12000419 Residential Electronically Commutated Motors |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Actual | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 15 | Projected | 0 | 0 | 0 | 105 | 0 | 115 | 0 | 0 | 0 | $\underline{220}$ |
| 16 | Total | 0 | 36 | 0 | 105 | 0 | 115 | 0 | 0 | 0 | 256 |
| 12000375 Energy Education, Awareness and Agency Outreach |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Actual | 0 | 16,384 | 14,127 | 4,620 | 0 | 0 | 637 | 8,741 | 0 | 44,509 |
| 19 | Projected | 4,554 | 32,008 | 650 | 9,534 | 0 | $\underline{0}$ | 22,400 | 5,320 | 0 | 74,466 |
| 20 | Total | 4,554 | 48,392 | 14,777 | 14,154 | 0 | 0 | 23,037 | 14,061 | 0 | 118,975 |
| 12004152 | Energy Star Multi-Family |  |  |  |  |  |  |  |  |  |  |
|  | Actual | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Projected | $\underline{0}$ | 406 | $\underline{0}$ | 0 | 0 | 97,500 | $\underline{25}$ | 200 | 0 | 98,131 |
|  | Total | 0 | 406 | 0 | 0 | 0 | 97,500 | 25 | 200 | 0 | 98,131 |
| 12000431 Energy Star for New Homes |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Actual | 0 | 14,979 | 0 | 0 | 0 | 242,250 | 298 | 2,190 | 0 | 259,717 |
| 23 | Projected | 0 | 14,502 | 0 | 369 | 0 | 255,000 | 450 | 3,300 | 0 | 273,621 |
| 24 | Total | 0 | 29,481 | 0 | 369 | 0 | 497,250 | 748 | 5,490 | 0 | 533,338 |
| 12000349 Residential Heating and Cooling |  |  |  |  |  |  |  |  |  |  |  |
| 26 | Actual | 0 | 42,013 | 2,458 | 0 | 0 | 222,750 | 335 | 137 | 0 | 267,693 |
| 27 | Projected | $\underline{0}$ | 30,411 | 0 | 5,358 | 0 | 236,250 | 350 | $\underline{0}$ | 0 | 272,369 |
| 28 | Total | 0 | 72,424 | 2,458 | 5,358 | 0 | 459,000 | 685 | 137 | 0 | 540,062 |
| 12000425 Neighborhood Weatherization |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Actual | 0 | 83,493 | 168,618 | 326,969 | 0 | 920,888 | 5,545 | 2,562 | 0 | 1,508,075 |
| 31 | Projected | $\underline{0}$ | 50,529 | 282,228 | 468,505 | 0 | 2,725,380 | 5,600 | 2,025 | 0 | 3,534,267 |
| 32 | Total | 0 | 134,022 | 450,846 | 795,474 | 0 | 3,646,268 | 11,145 | 4,587 | 0 | 5,042,342 |
| 12000433 Energy Planner |  |  |  |  |  |  |  |  |  |  |  |
| 34 | Actual | 711,255 | 412,386 | 5,847 | 764,928 | 113,971 | 0 | 30,490 | 149,023 | 0 | 2,187,900 |
| 35 | Projected | 704,644 | 599,508 | 12,000 | 482,948 | 132,000 | 0 | 30,246 | 230,790 | 0 | 2,192,136 |
| 36 | Total | 1,415,899 | 1,011,894 | 17,847 | 1,247,876 | 245,971 | 0 | 60,736 | 379,813 | 0 | 4,380,036 |
| 12000365 Residential Wall Insulation |  |  |  |  |  |  |  |  |  |  |  |
| 38 | Actual | 0 | 95 | 0 | 0 | 0 | 155 | 3 | 0 | 0 | 253 |
| 39 | Projected | $\underline{0}$ | 56 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | 528 | 30 | $\underline{0}$ | $\underline{0}$ | 614 |
| 40 | Total | 0 | 151 | 0 | 0 | 0 | 683 | 33 | 0 | 0 | 867 |
| 12000367 Residential Window Replacement |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Actual | 0 | 39,828 | 0 | 0 | 0 | 271,826 | 354 | 1,247 | 0 | 313,255 |
| 43 | Projected | 0 | 28,993 | 0 | 0 | 0 | 273,600 | 415 | $\underline{5}$ | $\underline{0}$ | 303,013 |
| 44 | Total | 0 | 68,821 | 0 | 0 | 0 | 545,426 | 769 | 1,252 | 0 | 616,268 |
| 12000421 Residential HVAC Re-Commissioning |  |  |  |  |  |  |  |  |  |  |  |
| 46 | Actual | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 47 | Projected | 0 | 0 | 0 | 0 | 0 | - | - | 0 | 0 | O |
| 48 | Total | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 |
| 12000373 Residential Window Film |  |  |  |  |  |  |  |  |  |  |  |
| 50 | Actual | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 51 | Projected | $\underline{0}$ | $\underline{0}$ | 0 | $\underline{0}$ | 0 | $\bigcirc$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |
| 52 | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12000351 Prime Time |  |  |  |  |  |  |  |  |  |  |  |
| 54 | Actual | 0 | 4,388 | 0 | 10,496 | 0 | 0 | 0 | 0 | 0 | 14,884 |
| 55 | Projected | 0 | 4,458 | 0 | 10,500 | 0 | 0 | $\underline{0}$ | 450 | $\underline{0}$ | 15,408 |
| 56 | Total | 0 | 8,846 | 0 | 20,996 | 0 | 0 | 0 | 450 |  | 30,292 |
| 12000397 Commercial Ceiling Insulation |  |  |  |  |  |  |  |  |  |  |  |
| 58 | Actual | 0 | 585 | 0 | 0 | 0 | 645 | 26 | 0 | 0 | 1,256 |
| 59 | Projected | 0 | 1,312 | 0 | 0 | 0 | $\underline{2.700}$ | 100 | 0 | 0 | 4.112 |
| 60 | Total | 0 | 1,897 | 0 | 0 | 0 | 3,345 | 126 | 0 | 0 | 5,368 |
| 12000411 Commercial Chiller |  |  |  |  |  |  |  |  |  |  |  |
| 62 | Actual | 0 | 2,036 | 0 | 0 | 0 | 20,479 | 11 | 0 | 0 | 22,526 |
| 63 | Projected | $\underline{0}$ | 784 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | 10,500 | 100 | $\underline{0}$ | $\underline{0}$ | 11,384 |
| 64 | Total | 0 | 2,820 | 0 | 0 | 0 | 30,979 | 111 | 0 | 0 | 33,910 |



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|  |  |
| :--- | :--- |
| C-3 |  |
| Program Name |  |
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| 12000417 Commercial Water Heating |  |
| :--- | :--- |
| 130 | Actual |
| 131 | Projected |
| 132 | Total |


| 12000427 Conservation Research and Development |  |
| :--- | :--- |
| 134 | Actual |
| 135 | Projected |
| 136 | Total |


| 12000393 |  |
| :--- | :--- |
| Renewable Energy Program |  |
| 138 | Actual |
| 139 | Projected |
| 140 | Total |

12000403-1ヶRenewable Enery Systems Initiative

| 142 | Actual |
| :--- | :--- |
| 143 | Projected |


| 12000437 |  |  | Commercial Exit Signs |
| :--- | :--- | :---: | :---: |
| 142 | Actual |  |  |
| 143 | Projected |  |  |
| 144 | Total |  |  |

12000439 Commercial HVAC Re-commisssioning
Actual

| 142 | Actual |
| :--- | :--- |
| 143 | Projected |
| 144 | Total |

12000401 Commercial Motors

| 142 | Actual |
| :--- | :--- |
| 143 | Projected |
| 144 | Total |


| 12000435 |  |
| :--- | :--- | Commercial Roof Insulation


| 12000395 |  |  | Commercial Window Film |
| :--- | :--- | :---: | :---: |
| 142 | Actual |  |  |
| 143 | Projected |  |  |
| 144 | Total |  |  |


| 12000347 | Common Expenses |
| :--- | :--- |
| 142 | Actual |
| 143 | Projected |
| 144 | Total |
| 137 | Total All Programs |
|  | Less Renewable Energy |
|  | Total Conservation Expense |

$\stackrel{\text { C-3 }}{\text { Page } 4 \text { of } 9}$

Lepreciation expense is calculated using a useful life of 60 months.
Line $9 \times 7.0040 \% \times 1 / 12$ (Jul-Dec). Based on ROE of $10.25 \%$ and weighted income tax rate of $38.575 \%$ (expansion factor of 1.632200 ).
Line $10 \times 1.7959 \% \times 1 / 12$ (Jul-Dec).
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INDUSTRIAL LOAD MANAGEMENT

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| TAMPA ELECTRIC COMPANY <br> Schedule of Capital Investment, Depreciation and Return Actual for Months January 2017 through June 2017 Projected for Months July 2017 through December 2017 <br> COMMERCIAL LOAD MANAGEMENT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beginning of Period | January <br> Actual | February Actual | March Actual | $\begin{gathered} \text { April } \\ \text { Actual } \\ \hline \end{gathered}$ | $\begin{gathered} \text { May } \\ \text { Actual } \end{gathered}$ | June <br> Actual | $\begin{gathered} \text { July } \\ \text { Projected } \end{gathered}$ | August <br> Projected | September Projected | October Projected | November Projected | December Projected | Total |
| 1. Investment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. Retirements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. Depreciation Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 4. Depreciation Expense | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{0}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ | $\underline{\underline{0}}$ |
| 5. Cumulative Investment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Less: Accumulated Depreciation | $\bigcirc$ | - | $\underline{0}$ | $\underline{0}$ | $\bigcirc$ | $\bigcirc$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |
| 7. Net Investment $\underline{\square}$ | $\underline{0}$ | $\underline{0}$ | $\bigcirc$ | $\underline{0}$ | $\underline{0}$ | 0 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |
| 8. Average Investment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 9. Return on Average Investment - Equity Component | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. Return on Average Investment - Debt Component | $\bigcirc$ | $\underline{0}$ | $\bigcirc$ | $\underline{0}$ | $\bigcirc$ | 0 | 0 |  | 0 | 0 | 0 | 0 | $\underline{0}$ |
| Total Depreciation and Return | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\bigcirc$ | 0 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\bigcirc$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |



|  | CONSERVATION REVENUES | $\begin{aligned} & \text { January } \\ & \text { Actual } \end{aligned}$ | $\begin{gathered} \text { February } \\ \text { Actual } \\ \hline \end{gathered}$ | March Actual | $\begin{aligned} & \text { April } \\ & \text { Actual } \end{aligned}$ | $\begin{gathered} \text { May } \\ \text { Actual } \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { June } \\ \text { Actual } \end{array} \\ \hline \end{gathered}$ | $\begin{gathered} \text { July } \\ \text { Projected } \end{gathered}$ | $\begin{gathered} \text { August } \\ \text { Projected } \end{gathered}$ | September Projected | $\begin{gathered} \text { October } \\ \text { Projected } \\ \hline \end{gathered}$ | November Projected | December Projected | $\begin{aligned} & \text { Grand } \\ & \text { Total } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Residential Conservation Audit Fees (A) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. | Conservation Adjustment Revenues * (C-4, page 1 of 1 ) | 2,810,991 | $2.575,105$ | 2.584,417 | 2.800,577 | 3,288,946 | 3,489,588 | 3,694,447 | 3,684,366 | 3,770,015 | 3,346,370 | 2,837,072 | 2,755,554 | 37,637,448 |
| 3. | Total Revenues | 2,810,991 | 2,575,105 | 2,584,417 | 2,800,577 | 3,288,946 | 3,489,588 | 3,694,447 | 3,684,366 | 3,770,015 | 3,346,370 | 2,837,072 | 2,755,554 | 37,637,448 |
| 4. | Prior Period True-up | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,245) | (133,250) | (1,598,945) |
| 5. | Conservation Revenue Applicable to Period | 2,677,746 | 2,441,860 | 2,451,172 | 2,667,332 | 3,155,701 | 3,356,343 | 3,561,202 | 3,551,121 | 3,636,770 | 3,213,125 | 2,703,827 | 2,622,304 | 36,038,503 |
| 6. | Conservation Expenses (C-3,Page 4, Line 14) | 3,417,952 | 2,757,271 | 3,488,019 | 2,935,228 | 3,260,350 | 2.836,428 | 3,609,953 | 3,544,409 | 3,425,737 | 3,477,727 | 3,425,070 | 3,643,291 | 39,821,436 |
| 7. | True-up This Period (Line 5-Line 6) | $(740,206)$ | (315,411) | $(1,036,847)$ | $(267,896)$ | $(104,649)$ | 519,915 | $(48,751)$ | 6,712 | 211,033 | $(264,602)$ | $(721,243)$ | $(1,020,987)$ | (3,782,933) |
| 8. | Interest Provision This Period (C-3, Page 6, Line 10) | (667) | (863) | $(1,341)$ | $(1,914)$ | $(1,955)$ | $(1,928)$ | $(2,206)$ | $(2,544)$ | $(2,203)$ | $(2,055)$ | $(2,569)$ | $(3,620)$ | (23,865) |
| 9. | True-up \& Interest Provision Beginning of Period | (789,258) | $(1,396,886)$ | $(1,579,915)$ | (2,484,858) | (2,621,423) | (2,594,782) | $(1,943,550)$ | $(1,861,262)$ | (1,723,849) | $(1,381,774)$ | $(1,515,186)$ | (2,105,753) | (789,258) |
| 10. | Prior Period True-up Collected/(Refunded) | 133,245 | 133,245 | 133,245 | $\underline{133,245}$ | 133,245 | $\underline{133,245}$ | 133,245 | 133,245 | $\underline{133,245}$ | 133,245 | $\underline{133,245}$ | 133,250 | 1,598,945 |
| 11. | End of Period Total - Over/(Under) Recovered | (1,396,886) | (1,579,915) | (2,484, 858) | (2,621,423) | (2,594,782) | (1,943,550) | (1,861,262) | (1,723,849) | (1,381,774) | (1,515,186) | (2,105,753) | (2,997, 110) | (2,997,111) |
|  | Previous EOP Change Net of Revenue Taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (A) Included in Line 6 |  |  |  |  |  |  |  |  | Summary of Allocation |  |  | Forecast | Ratio | True Up |
|  |  |  |  |  |  |  |  |  | Demand |  |  | 23,753,197 | 0.65 | (1,948,122) |
|  |  |  |  |  |  |  |  |  | Energy |  |  | 12,561,244 | 0.35 | (1,048,989) |
|  |  |  |  |  |  |  |  |  | Total |  |  | 36,314,441 | 1.00 | (2,997,111) |

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## TAMPA ELECTRIC COMPANY <br> Energy Conservation <br> Calculation of Conservation Revenues

Actual for Months January 2017 through June 2017
Projected for Months July 2017 through December 2017

| (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: |
| Months | $\begin{array}{r} \text { Firm MWH } \\ \text { Sales } \end{array}$ | Interruptible MWH Sales | Clause Revenue Net of Revenue Taxes |
| January | 1,478,242 | - | 2,810,991 |
| February | 1,295,325 | - | 2,575,105 |
| March | 1,311,129 | - | 2,584,417 |
| April | 1,432,554 | - | 2,800,577 |
| May | 1,667,779 | - | 3,288,946 |
| June | 1,750,258 | - | 3,489,588 |
| July | 1,899,862 | - | 3,694,447 |
| August | 1,883,474 | - | 3,684,366 |
| September | 1,974,571 | - | 3,770,015 |
| October | 1,723,692 | - | 3,346,370 |
| November | 1,416,894 | - | 2,837,072 |
| December | 1,389,836 | - | 2,755,554 |
| Total | $\underline{\underline{19.223 .616}}$ | $\underline{\underline{0}}$ | $\underline{\underline{37,637,447}}$ |

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# PROGRAM DESCRIPTION AND PROGRESS 

Program Title: RESIDENTIAL ENERGY AUDITS

Program Description: A "how to" information and analysis guide for customers. There are four types of residential energy audits available to Tampa Electric customers: Walk-through Free Energy Check, Customer Assisted, Computer Assisted Paid and Building Energy Ratings System ("BERS").

Program Projections: January 1, 2017 to December 31, 2017
During this period, the following energy audit participation is projected:

$$
\begin{array}{ll}
\text { Residential Walk-Through: } & 5,800 \\
\text { Residential Customer Assisted: } & 900 \\
\text { Residential Computer Assisted: } & 7 \\
\text { BERS: } & 1
\end{array}
$$

January 1, 2018 to December 31, 2018
During this period, the following energy audit participation is projected:

$$
\begin{array}{ll}
\text { Residential Walk-Through: } & 6,000 \\
\text { Residential Customer Assisted: } & 800 \\
\text { Residential Computer Assisted: } & 10 \\
\text { BERS: } & 1
\end{array}
$$

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 2,501,616$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 2,394,131$.

## Program Progress

Summary:
Through December 31, 2016 the following Residential Energy Audit totals are:
Residential Walk-Through: 314,629
Residential Customer Assisted ${ }^{(1)}$ : 122,555
Residential Computer Assisted: 3,904
BERS: 80
Total:
441,168

Note 1: Includes Mail-in and On-line audits. Residential Mail-in audit program was retired on December 31, 2004.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: RESIDENTIAL CEILING INSULATION

Program Description: A rebate program that encourages existing residential customers to install additional ceiling insulation in existing homes.

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

During this period, there are 1,200 customers projected to participate.
January 1, 2018 to December 31, 2018

During this period, there are 1,300 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 302,776$.

January 1, 2018 to December 31, 2018

Expenditures are estimated at $\$ 339,032$.

## Program Progress

Summary:
Through December 31, 2016 the following Residential Ceiling Insulation totals are:

Residential Ceiling Insulation: 121,823

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: RESIDENTIAL DUCT REPAIR

Program Description: A rebate program that encourages residential customers to repair leaky duct work of central air conditioning systems in existing homes

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 1,100 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 1,300 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 215,734$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 266,029$.

Program Progress
Summary:
Through December 31, 2016 the following Residential Duct Repair totals are: Residential Duct Repair: 99,222

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: <br> RESIDENTIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)

## Program Description: A rebate program that encourages residential customers to replace their existing

 HVAC air handler motor with an ECM.Program Projections: January 1, 2017 to December 31, 2017

During this period, there is one customer projected to participate.

January 1, 2018 to December 31, 2018

During this period, there is one customer projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 256$.

January 1, 2018 to December 31, 2018

Expenditures are estimated at $\$ 220$.

Program Progress Summary:

Through December 31, 2016 the following Residential Electronically Commutated Motors (ECM) totals are: Residential ECM: 5

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: <br> ENERGY EDUCATION, AWARENESS AND AGENCY OUTREACH

Program Description: A program that provides opportunities for engaging and educating groups of customers and students on energy-efficiency and conservation in an organized setting. Participants are provided with an energy savings kit which includes energy saving devices and supporting information appropriate for the audience.

Program Projections: January 1, 2017 to December 31, 2017.

During this period, there are 550 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 750 customers projected to participate.

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 118,975$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 128,113$.

## Program Progress

Summary:
Through 2016, Tampa Electric has partnered with 109 local schools to present Energy Education to 34,579 students. In addition, the company gave 137 presentations to civic organizations that generated 837 customer assisted audits and distributed 5,054 energy saving kits to participating customers.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: ENERGY STAR FOR NEW MULTI-FAMILY RESIDENCES

Program Description: A rebate program that encourages the construction of new multi-family residences to meet the requirements to achieve the ENERGY STAR certified apartments and condominium label.

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

During this period, there are 500 multi-family residences projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 600 multi-family residences projected to participate.

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 98,131$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 199,040$.

Program Progress
Summary:
On May 4, 2017 ENERGY STAR for New Multi-Family Residences was approved as a new residential DSM program.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: ENERGY STAR FOR NEW HOMES

Program Description: A rebate program that encourages residential customers to construct residential dwellings that qualify for the Energy Star Award by achieving efficiency levels greater than current Florida building code baseline practices.

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

During this period, there are 600 customers projected to participate.

January 1, 2018 to December 31, 2018
During this period, there are 1,000 customers projected to participate.

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 533,338$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 958,600$.

## Program Progress

Summary:
On November 3, 2015 ENERGY STAR for New Homes replaced the prior Residential New Construction Program. Through December 31, 2016 the following ENERGY STAR for New Homes totals are:

ENERGY STAR for New Homes: 12,171

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: RESIDENTIAL HEATING AND COOLING

Program Description: A rebate program that encourages residential customers to install high-efficiency residential heating and cooling equipment in existing homes.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 3,500 units projected to be installed and approved.
January 1, 2018 to December 31, 2018
During this period, there are 4,000 units projected to be installed and approved.

Program Fiscal Expenditures:

Program Progress Summary:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 540,062$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 651,176$.

Through December 31, 2016 the following Residential Heating and Cooling totals are:

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: NEIGHBORHOOD WEATHERIZATION

Program Description: A program that provides for the installation of energy efficient measures for qualified low-income customers.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 6,500 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 7,000 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 5,042,342$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 6,438,873$.

Program Progress Summary:

Through December 31, 2016 the following Neighborhood Weatherization totals are:

# PROGRAM DESCRIPTION AND PROGRESS 

## RESIDENTIAL PRICE RESPONSIVE LOAD MANAGEMENT (ENERGY PLANNER)

Program Description: A program that reduces weather-sensitive loads through an innovative price responsive rate used to encourage residential customers to make behavioral or equipment usages changes by pre-programming HVAC, water heating and pool pumps.

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

During this period, there are 5,231 projected customers for this program on a cumulative basis.

January 1, 2017 to December 31, 2017
During this period, there are 6,231 projected customers for this program on a cumulative basis.

## Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 4,380,036$.
January 1, 2019 to December 31, 2019

Expenditures are estimated to be $\$ 3,781,517$.

Program Progress
Summary:

Through December 31, 2016 the following Energy Planner totals are:
Energy Planner Participating Customers: 4,431

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title:

RESIDENTIAL WALL INSULATION

Program Description: A rebate program that encourages existing residential customers to install additional wall insulation in existing homes.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are six customers projected to participate.
January 1, 2018 to December 31, 2018
During this period, there are ten customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2016
Expenditures are estimated to be $\$ 867$.
January 1, 2018 to December 31, 2018
Expenditures are estimated at $\$ 2,173$.

Program Progress
Summary:
Through December 31, 2016 the following Residential Wall Insulation totals are: Residential Wall Insulation: 190

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: RESIDENTIAL WINDOW REPLACEMENT

Program Description: A rebate program that encourages existing residential customers to install window upgrades in existing homes.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 1,800 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 1,600 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 616,268$.

January 1, 2018 to December 31, 2018

Expenditures are estimated at \$540,687.

Program Progress Summary:

Through December 31, 2016 the following Residential Window Replacement totals are:

Residential Window Replacement: 11,724

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: PRIME TIME

Program Description: An incentive program that encourages residential customers to allow the control of weather-sensitive heating, cooling and water heating systems to reduce the associated weather sensitive peak.

Program Projections: January 1, 2017 to December 31, 2017
This program is retired
January 1, 2018 to December 31, 2018
This program is retired.

Program Fiscal
Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 30,292$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 28,932$.

Program Progress
Summary:
Program was retired on May 11, 2016

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL/INDUSTRIAL ENERGY AUDITS

Program Description: A "how to" information and analysis guide for customers. There are two types of commercial/industrial energy audits available to Tampa Electric customers: Commercial/Industrial (Free) and Comprehensive Commercial/Industrial (Paid).

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

During this period, the following energy audit participation is projected:

$$
\text { Commercial/Industrial (Free): } \quad 1,100
$$

Comprehensive Commercial/Industrial (Paid):
January 1, 2018 to December 31, 2018
During this period, the following energy audit participation is projected: Commercial/Industrial (Free): 1,200
Comprehensive Commercial/Industrial (Paid):
4

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 309,532$.
January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 349,596$.

## Program Progress

Summary:
Through December 31, 2016 the following Commercial Energy Audit totals are:
Commercial/Industrial (Free): 24,198
Comprehensive Commercial/Industrial (Paid): 237
Commercial Mail-in $\quad 1,477$
Commercial/Industrial Total $\quad 25,912$

Commercial Mail-in audit program was retired on December 31, 2004.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL CEILING INSULATION

Program Description: A rebate program that encourages commercial and industrial customers to install additional ceiling insulation in existing commercial structures.

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

During this period, there are five customers projected to participate.
January 1, 2018 to December 31, 2018
During this period, there are 8 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 5,368$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 7,876$.

## Program Progress

Summary:

Through December 31, 2016 the following Commercial Ceiling Insulation totals are:

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL CHILLER

Program Description: A rebate program that encourages commercial and industrial customers to install high efficiency chiller equipment.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are eight units projected to be installed and approved.

January 1, 2018 to December 31, 2018
During this period, there are eight units projected to be installed and approved.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 33,910$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 30,653$.

Program Progress
Summary:
Through December 31, 2016 the following Commercial Chiller totals are: Commercial Chiller: 61

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COGENERATION

Program Description: An incentive program whereby large industrial customers with waste heat or fuel resources may install electric generating equipment, meet their own electrical requirements and/or sell their surplus to the company.

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

The company continues communication and interaction with all existing participants and potential developers regarding current and future cogeneration customers. There are no new cogeneration facility additions projected.

January 1, 2018 to December 31, 2018
The company continues communication and interaction with all existing participants and potential developers regarding current and future cogeneration customers. Tampa Electric will continue working with customers to evaluate the economics of additional capacity in future years.

## Program Fiscal

 Expenditures:January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 64,443$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 46,118$.

## Program Progress

 Summary:At the end of 2016, there are eight cogeneration Qualifying Facilities ("QFs") that are on-line in Tampa Electric's service area. These facilities have a total combined nameplate generation capacity of 448.2 MW. This includes generation that is connected, but wheeled outside of Tampa Electric's service area.

The company continues interaction with existing participants and potential developers regarding current and future cogeneration activities.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: CONSERVATION VALUE

Program Description: A rebate program that encourages commercial and industrial customers to invest in energy efficiency and conservation measures that are not sanctioned by other commercial programs.

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

During this period, there is one customer projected to participate.
January 1, 2018 to December 31, 2018
During this period, there are two customers projected to participate.

## Program Fiscal <br> Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 70,027$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 142,072$.

Program Progress
Summary:
Through December 31, 2016 the following Conservation Value totals are:
Conservation Value: 53

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL COOL ROOF

Program Description: A rebate program that encourages commercial and industrial customers to install a cool roof system above conditioned spaces.

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

During this period, there are 35 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 20 customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 273,042$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 234,014$.

Program Progress
Summary:
Through December 31, 2016 the following Commercial Cool Roof totals are: Commercial Cool Roof: 219

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL COOLING

Program Description: A rebate program that encourages commercial and industrial customers to install high efficiency direct expansion commercial air conditioning cooling equipment.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are six units projected to be installed and approved.

January 1, 2018 to December 31, 2018
During this period, there are five units projected to be installed and approved.

## Program Fiscal

 Expenditures:January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 3,932$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 2,521$.

## Program Progress

Summary:
Through December 31, 2016 the following Commercial Cooling totals are: Commercial Cooling: 2,298

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: DEMAND RESPONSE

Program Description: A turn-key incentive program for commercial and industrial customers to reduce their demand for electricity in response to market signals.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 40 MW of demand response available for control.
January 1, 2018 to December 31, 2018
During this period, there are 40 MW of demand response projected to be available for control.

Program Fiscal
Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 3,395,357$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 3,710,036$.

Program Progress
Summary:
Through December 31, 2016, Tampa Electric was subscribed for 40 MW.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL DUCT REPAIR

Program Description: A rebate program that encourage existing commercial and industrial customers to repair leaky ductwork of central air-conditioning systems in existing commercial and industrial facilities.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are six repairs projected to be made.
January 1, 2018 to December 31, 2018
During this period, there are 25 repairs projected to be made.

## Program Fiscal <br> Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 3,833$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 12,230$.

Program Progress
Summary:
Through December 31, 2016 the following Commercial Duct Repair totals are:
Commercial Duct Repair: 11,030

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: <br> COMMERCIAL ELECTRONICALLY COMMUTATED MOTORS (ECM)

Program Description: A rebate program that encourages commercial and industrial customers to replace their existing air handler motors or refrigeration fan motors with an ECM.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 195 customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are 200 customers projected to participate.

## Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 11,027$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 11,268$.

Program Progress Summary:

Through December 31, 2016 the following Commercial Electronically Commutated Motors (ECM) totals are: Commercial ECM: 1,310

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: INDUSTRIAL LOAD MANAGEMENT (GSLM 2\&3)

Program Description: An incentive program whereby large industrial customers allow for the interruption of their facility or portions of their facility electrical load.

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

During this period, zero new customers are projected to participate.
January 1, 2018 to December 31, 2018
During this period, one new customer is projected to participate.

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 15,976,880$.

January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 15,115,993$.

Program Progress
Summary:
Through December 31, 2016, there are 34 customers participating.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: LIGHTING CONDITIONED SPACE

Program Description: A rebate program that encourages commercial and industrial customers to invest in more efficient lighting technologies in existing conditioned areas of commercial and industrial facilities.

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

During this period, there are 150 customers projected to participate.
January 1, 2018 to December 31, 2018
During this period, there are 110 customers projected to participate.

## Program Fiscal <br> Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 498,146$.

January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 363,090$.

## Program Progress

Summary:
Through December 31, 2016 the following Lighting Conditioned Space totals are: Lighting Conditioned Space: 1,944

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: LIGHTING NON-CONDITIONED SPACE

Program Description: A rebate program that encourages commercial and industrial customers to invest in more efficient lighting technologies in existing non-conditioned areas of commercial and industrial facilities.

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

During this period, there are 225 customers projected to participate.
January 1, 2018 to December 31, 2018
During this period, there are 50 customers projected to participate.

## Program Fiscal <br> Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 154,253$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 83,278$.

## Program Progress

Summary:
Through December 31, 2016 the following Lighting Non-Conditioned Space totals are:

Lighting Non-Conditioned Space: 213

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: LIGHTING OCCUPANCY SENSORS

Program Description: A rebate program that encourages commercial and industrial customers to install occupancy sensors to control commercial lighting systems.

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

During this period, there are 30 units projected to be installed and approved.

January 1, 2018 to December 31, 2018

During this period, there are 12 units projected to be installed and approved.

## Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 21,164$.

January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 11,497$.

Program Progress
Summary:
Through December 31, 2016 the following Lighting Occupancy Sensors totals are: Lighting Occupancy Sensors: 212

# PROGRAM DESCRIPTION AND PROGRESS 

## Program Title: COMMERCIAL LOAD MANAGEMENT

Program Description: An incentive program that encourages commercial and industrial customers to allow for the control of weather-sensitive heating, cooling and water heating systems to reduce the associated weather sensitive peak.

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

During this period, there are zero new installations projected.
January 1, 2018 to December 31, 2018
During this period, there are zero new installations projected.

## Program Fiscal

Expenditures:
January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 6,790$.

January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 24,777$.

## Program Progress

Summary:
Through December 31, 2016 the following Commercial Load Management totals are:

Commercial Load Management Participating Customers: 6

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: REFRIGERATION ANTI-CONDENSATE CONTROL

Program Description: A rebate program that encourages commercial and industrial customers to install anti-condensate equipment sensors and control within refrigerated door systems.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there is one customer projected to participate.

January 1, 2018 to December 31, 2018

During this period, there are two customers projected to participate.

Program Fiscal

## Expenditures:

Program Progress Summary:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 1,860$.

January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 3,490$.

Through December 31, 2016 the following Refrigeration Anti-Condensate totals are:

Refrigeration Anti-Condensate: 0

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: STANDBY GENERATOR

Program Description: An incentive program designed to utilize the emergency generation capacity of commercial/industrial facilities in order to reduce weather sensitive peak demand.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are two new installations projected.

January 1, 2018 to December 31, 2018

During this period, there is one new installation projected.

## Program Fiscal

 Expenditures:January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 3,450,037$.
January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 3,236,868$.

Program Progress
Summary:
Through December 31, 2016 the following Standby Generator totals are: Standby Generator Participating Customers: 91

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: THERMAL ENERGY STORAGE

Program Description: A rebate program that encourages commercial and industrial customers to install an off-peak air conditioning system.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are two customer projected to participate.

January 1, 2018 to December 31, 2018
During this period, there are three customers projected to participate.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 104,375$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 208,897$.

Program Progress
Summary:
Through December 31, 2016 the following Thermal Energy Storage totals are: Thermal Energy Storage: 0

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL WALL INSULATION

## Program Description: A rebate program that encourages commercial and industrial customers to install

 wall insulation in existing commercial and industrial structures.Program Projections: January 1, 2017 to December 31, 2017
During this period, there are zero customers projected to participate.

January 1, 2018 to December 31, 2018

During this period, there is one customer projected to participate.

## Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 0$.

January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 2,219$.

Program Progress
Summary:
Through December 31, 2016 the following Commercial Wall Insulation totals are: Commercial Wall Insulation: 2

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMERCIAL WATER HEATING

Program Description: A rebate program that encourages commercial and industrial customers to install high efficiency water heating systems.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there is one units projected to be installed and approved.

January 1, 2018 to December 31, 2018
During this period, there are three units projected to be installed and approved.

Program Fiscal Expenditures:

January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 2,342$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 6,582$.

Program Progress
Summary:
Through December 31, 2016 the following Commercial Water Heating totals are: Commercial Water Heating: 0

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: DSM RESEARCH AND DEVELOPMENT (R\&D)

Program Description: A program that allows for the exploration of DSM measures that have insufficient data on the cost-effectiveness of the measure and the potential impact to Tampa Electric and its ratepayers.

Program Projections: See Program Progress Summary.

## Program Fiscal <br> Expenditures:

January 1, 2017 to December 31, 2017

Expenditures are estimated to be $\$ 100,277$.
January 1, 2018 to December 31, 2018

Expenditures are estimated to be $\$ 191,056$.

Program Progress
Summary:
Currently, Tampa Electric continues to review possible programs to research and develop and has the following four active R\&D evaluations in progress:

1. Electric vehicle benefits and impacts
2. Battery storage for peak shifting.
3. Heat Pump Water Heater inclusion into the Energy Planner Program.
4. Commercial low-income weatherization.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: RENEWABLE ENERGY PROGRAM

Program Description: This program is designed to promote and deliver renewable energy options to the company's customers. This specific effort provides funding for program administration, generation, evaluation of potential new renewable sources and market research.

Program Projections: January 1, 2017 to December 31, 2017
During this period, there are 1,700 projected customers with 2,500 subscribed monthly blocks estimated on a cumulative basis.

During this period, there are 400 blocks estimated to be purchased on a one-time basis.

January 1, 2018 to December 31, 2018
During this period, there are 1,750 projected customers with 2,600 subscribed monthly blocks estimated on a cumulative basis.

During this period, there are 400 blocks estimated to be purchased on a one-time basis.

## Program Fiscal

 Expenditures:January 1, 2017 to December 31, 2017

During this period, the company anticipates excess revenues of approximately $\$ 154,949$ to be used for new renewable generation. At the end of this period, the company projects the deferred balance (credits) to be $\$ 298,119$.

January 1, 2018 to December 31, 2018

During this period, the company anticipates excess revenues of approximately $\$ 159,506$ to be used for new renewable generation. At the end of this period, the company projects the deferred balance (credits) to be $\$ 133,947$.

## Program Progress

Summary:

Through December 31, 2016, there were 1,749 customers with 2,600 blocks subscribed. In addition, there were 4,000 blocks of renewable energy purchased on a one-time basis. On a cumulative basis, 40,789 monthly and one-time blocks of renewable energy have been purchased.

## PROGRAM DESCRIPTION AND PROGRESS

## Program Title: COMMON EXPENSES

Program Description: These are expenses common to all programs.

Program Projections: N/A

## Program Fiscal

Expenditures: January 1, 2017 to December 31, 2017
Expenditures are estimated to be $\$ 954,149$.
January 1, 2018 to December 31, 2018
Expenditures are estimated to be $\$ 790,121$.

Program Progress
Summary: N/A

## 2018 GSLM Incentive Calculation

| Annual KW Reduction | 49,735 |
| :--- | ---: |
| Annual Incentive | $\$ 475,312$ |
| Dollar Per KW | $\$ 9.556835$ |


PSC FORM CE 1.1
PAGE 1 OF 1
RUN DATE: August 15, 2017

0.00


## AVOIDED GENERATOR, TRANS. \& DIST COSTS <br> (1) BASE YEAR YEAR FOR AVOIDED GENERATING UNIT


(2) NON-FUEL NON-FUEL ESCALATION RATE


122,946.00 \$/CUST
4,104.00 \$/CUST/YR

0.0646 \$/CUST
0.00 \$/CUST/YR
$475,311.96$ \$
0.00

PROGRAM DEMAND SAVINGS \& LINE LOSSES (1) CUSTOMER KW REDUCTION AT THE METER
(2) GENERATOR KW REDUCTION PER CUSTOMER (2) GENERA
(3) KW LINE LOSS PEREDUCTION PER CENTAGE (4) GENERATION KWH REDUCTION PER CUSTOMER
(5) KWH LINE LOSS PERCENTAGE (5) KWH LINE LOSS PERCENTAGE
(6) GROUP LINE LOSS MULTIPLIER
(7) CUSTOMER KWH PROGRAM INCREASE AT METER (8)* CUSTOMER KWH REDUCTION AT METER

ECONOMIC LIFE \& K FACTORS
(1) STUDY PERIOD FOR CONSERVATION PROGRAM (2) GENERATOR ECONOMIC LIFE (3) T \& D ECONOR LIFE
(5) K FACTOR FOR T \& D
$(6)^{*}$ SWITCH REV REQ(0) OR VAL-OF-DEF (1)

UTILITY \& CUSTOMER COSTS
 (2) UTILITY RECURRING COST PER CUSTOMER
(3) UTILITY COST ESCALATION RATE (4) CUSTOMER EQUIPMENT COST (5) CUSTOMER EQUIPMENT ESCALATION RATE
(7) CUSTOMER O \& M ESCALATION RATE (8)* ${ }^{*}$ CUSTOMER TAX CREDIT PER INSTALLATION
()$^{*}$ CUSTOMER TAX CREDIT ESCALATION RATE $(10)^{*}$ INCREASED SUPPLY COSTS
$(11)^{*}$ SUPPLY COSTS ESCALATION RATE (11)* UTILITY DISCOUNT RATE
(12)* UTILITY
(13)* UTILITY AFUDC RATE
$\begin{array}{ll}\text { III. } & (13)^{*} \text { UTILITY AFUDC RATE } \\ \text { III. } & (14)^{*} \text { UTILITY NON RECURRING REBATE/INCENTIVE } \\ \text { III. } & (15)^{*} \text { UTILITY RECURRING REBATE/INCENTIVE } \\ \text { III. } & (16)^{*} \text { UTILITY REBATE/INCENTIVE ESCAL RATE }\end{array}$

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | INCREASED SUPPLY COSTS | UTIIITY PROGRAM COSTS | PARTICIPANT PROGRAM COSTS | OTHER | TOTAL | AVOIDED GEN UNIT | $\begin{aligned} & \text { AVOIDED } \\ & \text { T\&D } \end{aligned}$ | PROGRAM FUEL SAVING | OTHER BENEFITS | TOTAL benefits | $\begin{gathered} \text { NET } \\ \text { BENEFITS } \end{gathered}$ | CUMULATIVE DISCOUNTED NET |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | benefits | benefits |  |  |  |  |  |
| YEAR | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) | \$(000) |
| 2017 | 0 | 125 | 42 | 0 | 167 | 0 | 0 | 13 | 0 | 13 | (154) | (154) |
| 2018 | 0 | 132 | 43 | 0 | 175 | 0 | 191 | 43 | 0 | 234 | 59 | (99) |
| 2019 | 0 | 140 | 44 | 0 | 184 | 0 | 196 | 85 | 0 | 280 | 97 | (14) |
| 2020 | 0 | 147 | 45 | 0 | 192 | 0 | 200 | 119 | 0 | 319 | 127 | 90 |
| 2021 | 0 | 18 | 0 | 0 | 18 | 2,619 | 493 | 171 | 0 | 3,283 | 3,265 | 2,583 |
| 2022 | 0 | 18 | 0 | 0 | 18 | 2,560 | 488 | 162 | 0 | 3,210 | 3,191 | 4,860 |
| 2023 | 0 | 19 | 0 | 0 | 19 | 2,471 | 482 | 196 | 0 | 3,149 | 3,130 | 6,949 |
| 2024 | 0 | 19 | 0 | 0 | 19 | 2,388 | 476 | 131 | 0 | 2,996 | 2,977 | 8,806 |
| 2025 | 0 | 20 | 0 | 0 | 20 | 2,328 | 472 | 137 | 0 | 2,937 | 2,917 | 10,507 |
| 2026 | 0 | 20 | 0 | 0 | 20 | 2,278 | 468 | 219 | 0 | 2,965 | 2,944 | 12,111 |
| 2027 | 0 | 21 | 0 | 0 | 21 | 2,214 | 464 | 209 | 0 | 2,887 | 2,866 | 13,571 |
| 2028 | 0 | 21 | 0 | 0 | 21 | 2,170 | 461 | 233 | 0 | 2,864 | 2,843 | 14,925 |
| 2029 | 0 | 22 | 0 | 0 | 22 | 2,090 | 458 | 185 | 0 | 2,733 | 2,711 | 16,132 |
| 2030 | 0 | 22 | 0 | 0 | 22 | 2,044 | 455 | 223 | 0 | 2,722 | 2,699 | 17,256 |
| 2031 | 0 | 23 | 0 | 0 | 23 | 1,986 | 452 | 244 | 0 | 2,682 | 2,659 | 18,290 |
| 2032 | 0 | 23 | 0 | 0 | 23 | 1,950 | 449 | 245 | 0 | 2,645 | 2,622 | 19,244 |
| 2033 | 0 | 24 | 0 | 0 | 24 | 1,889 | 447 | 304 | 0 | 2,640 | 2,616 | 20,133 |
| 2034 | 0 | 25 | 0 | 0 | 25 | 1,841 | 445 | 332 | 0 | 2,618 | 2,593 | 20,957 |
| 2035 | 0 | 25 | 0 | 0 | 25 | 1,822 | 442 | 301 | 0 | 2,565 | 2,540 | 21,712 |
| 2036 | 0 | 26 | 0 | 0 | 26 | 1,836 | 441 | 272 | 0 | 2,549 | 2,524 | 22,413 |
| 2037 |  | 26 | 0 | 0 | 26 | 1,851 | 443 | 295 | 0 | 2,589 | 2,563 | 23,078 |
| 2038 | 0 | 27 | 0 | 0 | 27 | 1,859 | 446 | 283 | 0 | 2,588 | 2,561 | 23,699 |
| 2039 | 0 | 28 | 0 | 0 | 28 | 1,866 | 449 | 257 | 0 | 2,573 | 2,546 | 24,277 |
| 2040 | 0 | 28 | 0 | 0 | 28 | 1,903 | 453 | 317 | 0 | 2,673 | 2,644 | 24,837 |
| 2041 | 0 | 29 | 0 | 0 | 29 | 1,898 | 456 | 390 | 0 | 2,744 | 2,715 | 25,376 |
| Nominal | 0 | 1,030 | 174 | 0 | 1,204 | 43,867 | 10,226 | 5,366 | 0 | 59,459 | 58,256 |  |
| NPV: | 0 | 685 | 157 | 0 | 842 | 19,403 | 4,633 | 2,181 | 0 | 26,218 | 25,376 |  |
| Discount Rate |  | 0.06976 | Benefit/Cost | atio - [col | 11)/col (6)]: |  | 31.14 |  |  |  |  |  |

PARTICIPANT COSTS AND BENEFITS

| (1) | (2) | (3) |  | (4) | (5) | (6) | (7) | (8) | (9) |  | (10) |  | (11) | (12) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR |  | TAX CREDITS $\$(000)$ |  | UTILITY REBATES $\$(000)$ | $\begin{gathered} \text { OTHER } \\ \text { BENEFITS } \\ \$(000) \\ \hline \end{gathered}$ | $\begin{gathered} \text { TOTAL } \\ \text { BENEFITS } \\ \$(000) \\ \hline \end{gathered}$ | $\begin{gathered} \text { CUSTOMER } \\ \text { EQUIPMENT } \\ \text { COSTS } \\ \$(000) \\ \hline \end{gathered}$ | CUSTOMER O \& M COSTS $\$(000)$ | OTHER COSTS $\$(000)$ |  | TOTAL COSTS \$(000) |  | $\begin{gathered} \text { NET } \\ \text { BENEFITS } \\ \$(000) \\ \hline \end{gathered}$ | CUMULATIVE DISCOUNTED NET BENEFITS $\$(000)$ |
| 2017 | 28 |  | 0 | 238 | 0 | 266 | 42 | 0 |  | 0 |  | 42 | 224 | 224 |
| 2018 | 81 |  | 0 | 713 | 0 | 794 | 43 | 0 |  | 0 |  | 43 | 751 | 926 |
| 2019 | 146 |  | 0 | 1,188 | 0 | 1,334 | 44 | 0 |  | 0 |  | 44 | 1,290 | 2,053 |
| 2020 | 211 |  | 0 | 1,664 | 0 | 1,875 | 45 | 0 |  | 0 |  | 45 | 1,830 | 3,548 |
| 2021 | 246 |  | 0 | 1,901 | 0 | 2,147 | 0 | 0 |  | 0 |  | 0 | 2,147 | 5,188 |
| 2022 | 252 |  | 0 | 1,901 | 0 | 2,153 | 0 | 0 |  | 0 |  | 0 | 2,153 | 6,724 |
| 2023 | 261 |  | 0 | 1,901 | 0 | 2,162 | 0 | 0 |  | 0 |  | 0 | 2,162 | 8,167 |
| 2024 | 271 |  | 0 | 1,901 | 0 | 2,172 | 0 | 0 |  | 0 |  | 0 | 2,172 | 9,522 |
| 2025 | 278 |  | 0 | 1,901 | 0 | 2,179 | 0 | 0 |  | 0 |  | 0 | 2,179 | 10,793 |
| 2026 | 284 |  | 0 | 1,901 | 0 | 2,185 | 0 | 0 |  | 0 |  | 0 | 2,185 | 11,984 |
| 2027 | 293 |  | 0 | 1,901 | 0 | 2,195 | 0 | 0 |  | 0 |  | 0 | 2,195 | 13,102 |
| 2028 | 300 |  | 0 | 1,901 | 0 | 2,201 | 0 | 0 |  | 0 |  | 0 | 2,201 | 14,150 |
| 2029 | 313 |  | 0 | 1,901 | 0 | 2,214 | 0 | 0 |  | 0 |  | 0 | 2,214 | 15,136 |
| 2030 | 321 |  | 0 | 1,901 | 0 | 2,222 | 0 | 0 |  | 0 |  | 0 | 2,222 | 16,061 |
| 2031 | 331 |  | 0 | 1,901 | 0 | 2,232 | 0 | 0 |  | 0 |  | 0 | 2,232 | 16,929 |
| 2032 | 337 |  | 0 | 1,901 | 0 | 2,238 | 0 | 0 |  | 0 |  | 0 | 2,238 | 17,743 |
| 2033 | 348 |  | 0 | 1,901 | 0 | 2,250 | 0 | 0 |  | 0 |  | 0 | 2,250 | 18,507 |
| 2034 | 358 |  | 0 | 1,901 | 0 | 2,259 | 0 | 0 |  | 0 |  | 0 | 2,259 | 19,225 |
| 2035 | 362 |  | 0 | 1,901 | 0 | 2,263 | 0 | 0 |  | 0 |  | 0 | 2,263 | 19,898 |
| 2036 | 362 |  | 0 | 1,901 | 0 | 2,264 | 0 | 0 |  | 0 |  | 0 | 2,264 | 20,526 |
| 2037 | 366 |  | 0 | 1,901 | 0 | 2,267 | 0 | 0 |  | 0 |  | 0 | 2,267 | 21,115 |
| 2038 | 373 |  | 0 | 1,901 | 0 | 2,275 | 0 | 0 |  | 0 |  | 0 | 2,275 | 21,667 |
| 2039 | 381 |  | 0 | 1,901 | 0 | 2,283 | 0 | 0 |  | 0 |  | 0 | 2,283 | 22,185 |
| 2040 | 384 |  | 0 | 1,901 | 0 | 2,286 | 0 | 0 |  | 0 |  | 0 | 2,286 | 22,669 |
| 2041 | 396 |  | 0 | 1,901 | 0 | 2,297 | 0 | 0 |  | 0 |  | 0 | 2,297 | 23,124 |
| NOMINAL | 7,284 |  | 0 | 43,729 | 0 | 51,012 | 174 | 0 |  | 0 |  | 174 | 50,838 |  |
| NPV: | 3,120 |  | 0 | 20,162 | 0 | 23,282 | 157 | 0 |  | 0 |  | 157 | 23,124 |  |
| In service y | ear of gen unit: |  |  | 2021 |  | 148.00644 |  |  |  |  |  |  |  |  |

RATE IMPACT TEST


| Rate Tiers | 2018 R | Residential Service Variable Pricing (RSVP-1) Rates (Cents per kWh) |  |  |  |  | Base Rate Plus Clauses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base Rate | Fuel | Capacity | Environmental | Conservation | Total Clauses |  |
| P4 | 5.549 | 3.088 | 0.066 | 0.343 | 40.450 | 43.947 | 49.496 |
| P3 | 5.549 | 3.088 | 0.066 | 0.343 | 6.879 | 10.376 | 15.925 |
| P2 | 5.549 | 3.088 | 0.066 | 0.343 | -1.055 | 2.442 | 7.991 |
| P1 | 5.549 | 3.088 | 0.066 | 0.343 | -2.988 | 0.509 | 6.058 |

