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COMMISSION
CLERK

October 1, 2010

Ms. Ann Cole, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket 100160-EG
PEF's Petition for Approval of Demand-side Management Plan
Response to Staff's 6th Data Request (Nos. 1-13)

Dear Ms. Cole:

Enclosed for filing is the original and 5 copies of PEF's Response to Staff's 6th Data Request in the above-referenced docket. Please note that, pursuant to an agreement with Staff, PEF is providing responses to questions 1-11a today and will provide the remaining responses on Monday, October 4.

Thank you for your assistance in this matter and please let me know if you have any questions.

Sincerely,

Dianne M. Triplett

DMT/emc

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic and U.S. Mail this 1st day of October, 2010 to all parties of record as indicated below.



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PEF'S RESPONSE TO STAFF'S 6th DATA REQUEST

1. Please explain or describe why PEF's goals are comparatively higher than the other FEECA utilities since goals for all investor-owned utilities were set based upon Itron's analysis plus the savings estimated to be achievable from the residential portion of the top ten measures having a payback period of two years or less.

RESPONSE:

PEF does not have access to how other utilities calculate their respective goals or to Itron's detailed studies for the other utilities, and thus cannot speculate as to why PEF's goals are comparatively higher than the other FEECA utilities. It is unlikely that four utilities with contingent geographic territories and comparable customer characteristics would have this much dissimilarity in market potential. There are, however, key portions of PEF's Commission established goals that appear to be out-of-line in comparison with the other utilities, which leads PEF to some general conclusions.

The Commission goals were established as the sum of the following two components:

- (1) Net achievable potential from Itron's E-TRC high incentive scenario, and
- (2) The **technical potential** (emphasis added) of the residential portion of the top ten measures with less than a two-year payback.

E-TRC Portion of the GWh Energy Goal -- Residential

The following chart (and Table 1) compare the E-TRC portion of the residential GWh energy goal for each of the four Florida investor owned utilities (IOUs) relative to total residential class GWh energy. The results show that PEF's total residential GWh goal as a percent of residential sales is more than four times greater than FPL's and TECO's, and more than double Gulf Power's. Similar results are obtained by looking at the GWh goal relative to the number of residential customers served by each utility, which shows that PEF's residential customers are being asked to save more than four times the amount required by a customer of FPL, even though the annual kWh use-per-customer is very similar between the two utilities (13,459 for PEF in 2009 versus 13,540 for FPL in 2009 based on data from the 2010 Ten Year Site Plans).

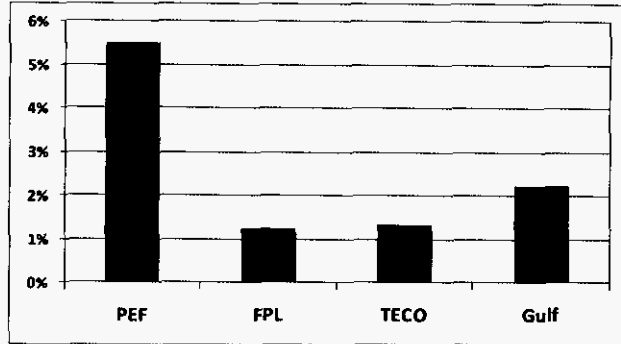
This analysis highlights a concern with the residential E-TRC portion of the goals. PEF cannot specifically identify what potential flaws or inconsistencies may exist since PEF does not have Itron's detailed studies for the other utilities.

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**Residential E-TRC Portion of the 2019 GWh Goal
 As a Percent of Residential GWh Sales**



**Table 1
 Comparison of Residential E-TRC Portion of the 2019 GWh Goal**

| Utility | 2010-2019 GWh Goal ¹ | 2019 Residential GWh ² | GWh Goal as a % of Residential GWh |
|---------|---------------------------------|-----------------------------------|------------------------------------|
| PEF | 1207.1 | 21,982 | 5.49% |
| FPL | 790.3 | 63,458 | 1.25% |
| TECO | 134.0 | 10,027 | 1.34% |
| Gulf | 153.9 | 6,869 | 2.24% |

¹Residential E-TRC High Case Net Achievable Potential total GWh in 2019

²GWh before new conservation. Source: (2010 Ten Year Site Plan, Schedules 2.1 and 3.3).

E-TRC Portion of the GWh Energy Goal – Commercial

As shown in the chart (and Table 2) below, the commercial market segment E-TRC goals are generally within a range of reasonableness, so any issues appear to be largely confined to the residential market segment.

**Commercial E-TRC Portion of the 2019 GWh Goal
 As a Percent of C/I/G GWh Sales**

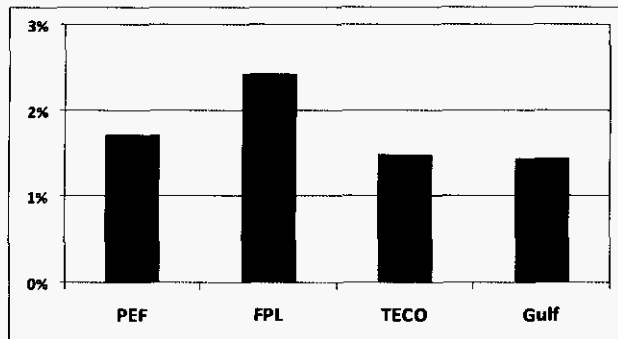


Table 2
Comparison of Commercial E-TRC Portion of the 2019 GWh Goal

| Utility | 2010-2019 GWh Goal ¹ | 2019 C/I/G GWh ² | GWh Goal as a % of C/I/G GWh |
|---------|---------------------------------|-----------------------------|------------------------------|
| PEF | 377.4 | 21,972 | 1.72% |
| FPL | 1,386.7 | 57,167 | 2.43% |
| TECO | 176.3 | 11,851 | 1.49% |
| Gulf | 97.9 | 6,768 | 1.45% |

¹Commercial E-TRC High Case Net Achievable Potential total GWh in 2019
²GWh before new conservation. Source: (2010 Ten Year Site Plan, Schedules 2.1, 2.2 and 3.3).

Residential Portion of Top Ten Measures < 2-year Payback GWh Energy Goal

The following chart (and Table 3) below compares the portion of the Commission goals tied to the residential portion of the top ten measures with less than a two-year payback. It should also be noted that these impacts are representative of the 'technical potential' rather than the 'achievable potential'. The results are similar to the Residential E-TRC results in that PEF has far and away the highest relative goal, FPL and TECO have by far the two lowest relative goals, and Gulf is in between. This comparison only serves to strengthen PEF's concerns referenced above that the residential market segment analysis contained potential flaws or inconsistencies that caused results amongst the utilities that appear inequitable.

FPSC Residential <2-year Payback Portion of the 2019 GWh Goals
As a Percent of Residential GWh Sales

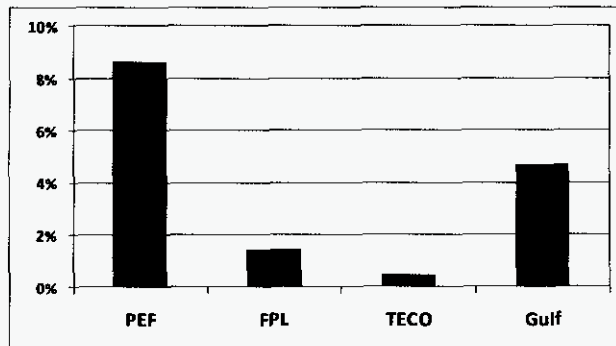


Table 3
Residential <2-year Payback Portion of the 2019 GWh Goal

| Utility | 2010-2019 GWh Goal ¹ | 2019 Residential GWh ² | GWh Goal as a % of Residential GWh |
|---------|---------------------------------|-----------------------------------|------------------------------------|
| PEF | 1,903.0 | 21,982 | 8.66% |
| FPL | 905.0 | 63,458 | 1.43% |
| TECO | 50.0 | 10,027 | 0.50% |
| Gulf | 322.0 | 6,869 | 4.69% |

¹Top ten Residential measures with < 2-year payback total GWh in 2019

²GWh before new conservation. Source: (2010 Ten Year Site Plan, Schedules 2.1 and 3.3).

Further information can be gleaned by a review of the technical potential of the individual measures that comprise the residential less than 2-year payback portion of the goals. Table 4 below shows each of the measures contained in this portfolio and their contribution to the GWh goals. Note the wide diversity of results. PEF had eight residential measures on the list, FPL had three, TECO had one, and Gulf had six.

Table 4
Comparison of Residential <2-year Payback Measures in the 2019 GWh Goal (Technical Potential)

| Measure | PEF | FPL | TECO | Gulf |
|---|--------------|------------|-----------|------------|
| CFL | 681 | --- | --- | 163 |
| Pool Pump (single speed) | 212 | --- | --- | 36 |
| Pool Pump (two speed) | 210 | --- | --- | 35 |
| Proper Refrigerant Charge | 202 | 486 | --- | 23 |
| ECM Motors on Air Handlers | 182 | 249 | 50 | 42 |
| Default Window with Sunscreen | 161 | 170 | --- | --- |
| WH Blanket | 133 | --- | --- | --- |
| AC Maintenance | 122 | --- | --- | 23 |
| Total Res. <2-yr Payback Goal | 1,903 | 905 | 50 | 322 |

This list originated with late filed exhibits requested during depositions of utility witness in each of the 2009 DSM Goals Dockets. For example, in John Masiello's deposition on August 4, 2009 in Docket No. 080408-EG, Staff requested a Late Filed Exhibit (Exhibit 2) listing the top ten measures, in terms of summer MW savings, winter MW savings and annual energy savings, that were eliminated based on the two-year payback criteria. It was further noted in the deposition that these less than two-year payback measures were included in the **technical potential** analysis, but were removed from the economic and achievable potential analysis. (J. Masiello Deposition Transcript pages 20-21). Thus, the GWh savings for these measures, as shown in Table 4, represent technical potential savings, not achievable potential.

PEF also notes that the Commission's decision to include just the residential measures from the top ten list of less than 2-year payback measures in the utility goals had greater impact to

PEF because of their much larger mix of residential versus commercial less than 2-year payback measures. For example, this portion of the goal for TECO amounts to 50 GWh in large part because they had one residential measure in the top ten whereas PEF's eight residential measures contributed 1,903 GWh to PEF's final goal. In addition, the fact that the GWh savings for these less than 2-year payback measures represent technical potential rather than achievable potential acts to exaggerate the differences between this portion of the utilities goals.

Given the information above, it's possible to estimate a "peer level" goal for PEF that provides parity with the other Florida investor owned utilities (i.e., FPL, TECO and Gulf). As shown in Table 5 below, this "peer-level" estimate based on customer segment energy is 1,126 GWh.

Table 5
PEF Peer Level Estimate of 2019 GWh Goal

| Plan Component | 2019 Customer Segment GWh | Peer GWh Goal as a % of Customer Segment GWh | PEF Peer Level Goal GWh |
|-----------------------------|---------------------------|--|-------------------------|
| Residential E-TRC | 21,982 | 1.34% | 295 |
| Residential <2-year payback | 21,982 | 1.59% | 349 |
| Commercial E-TRC | 21,972 | 2.19% | 482 |
| Total | | | 1,126 |

2. As noted at the September 14, 2010, Agenda Conference, PEF's savings estimates based on the residential portion of the top ten measures with a payback of two years or less appear to be disproportionately higher than those of FPL, TECO and Gulf. Please explain or describe why this may be the case. (9/14/2010, Agenda transcript, pgs 91-92)

RESPONSE:

Please see the response to Item 1 under the heading "Residential Portion of Top Ten Measures < 2-year Payback GWh Energy Goal." The primary drivers behind this inconsistency are:

- This portion of the goal was disproportionately higher, as it was based on the "Technical Potential" for the selected measures, rather than the cost-effective "Achievable Potential". (No such analysis was ever performed as these measures were originally screened from further consideration in the Itron achievable potential analysis)
- PEF had eight residential measures on the list, FPL had three, TECO had one, and Gulf had six.

3. Please provide the average monthly rate impact of meeting the Commission-set conservation goals as a percent of an average residential (1200 kWh) customer bill for the years 2011-2019.

RESPONSE:

**Estimated Average Rate Impact of Meeting Commission-Set Goals
As % of Average Residential Customer Bill (1,200 kWh)**

| | |
|------------------------|------------|
| 2011 | 7% |
| 2012 | 9% |
| 2013 | 10% |
| 2014 - 2017 | 11% |
| 2018 & 2019 | 9% |

4. Please explain or describe why PEF included all the Technical Potential program measures into one program.

RESPONSE:

The measures in PEF's Technical Potential program are identical to the residential measures contained in PEF's top ten less than 2-year payback measures as identified in Docket 080408-EG. As noted in John Masiello's deposition on August 4, 2009 in Docket No. 080408-EG, the savings for those measures represent technical potential, not achievable potential. All other programs in PEF's DSM Plan were based on achievable potential savings. Due to the substantial increase in participation and cost required to strive for the technical potential level of savings, PEF decided to keep all of those measures in one common program.

5. Please explain or describe whether it would be more cost-effective to include technical potential measures within other programs rather than in one stand-alone program as PEF proposed.

RESPONSE:

It would not be any more cost-effective to include the technical potential measures within other programs rather than in one stand-alone program. The cost-effectiveness of these measures is primarily driven by extremely aggressive marketing and incentive costs required to meet the technical potential level of participation and savings associated with these programs. Those costs would not change if the measures were in one program or several different programs. Also, PEF has accounted for any synergies that could be achieved through joint program delivery mechanisms. For example, the Technical Potential Program Description contained in PEF's DSM Plan notes on page 93 that "*since many of the measures in the Technical Potential program share the same general target audience as the Home Energy Improvement program, these measures will be marketed through the Home Energy Improvement Program and other programs as appropriate.*"(Emphasis added)

6. Please explain the basis of the escalation factor PEF used in the development of its energy efficiency programs. Please explain the impact of the escalation factor used on customer rates. (9/14/2010, Agenda transcript, pg 20)

RESPONSE:

In developing the E-TRC High case, PEF followed Itron's criteria for the level of incentives necessary to achieve required customer penetration. Itron estimated administrative and marketing costs for the adoption rate that became PEF's 1,585 GWH E-TRC High scenario.

What has been labeled as an "escalation factor" was simply a mathematical means of calibrating PEF's historical program and incentive costs to the level of cost in the Itron E-TRC High achievable study. Thus, the term "escalation factor" is essentially a misnomer.

7. Please identify and explain what, if any, best industry practices or peer utility programs PEF reviewed or considered prior to submitting its proposed DSM 2010 Plan. (9/14/2010, Agenda transcript, pg 20) If none, please explain the reason for not doing so.

RESPONSE:

PEF leveraged a data-driven, systematic, comprehensive portfolio and program planning process in an attempt to satisfy the specific goals established by the Commission. The approach, consistent with best industry practices, consisted of the following steps:

- Conducted a market assessment to determine the electric usage and characteristics across customer groups
- Reviewed a comprehensive list of energy efficiency technologies
- Considered the appropriateness of selected technologies for PEF's service territory
- Assessed the achievable market potential of selected, cost-effective measures
- Grouped the highest potential technologies into programs for marketing and implementation
- Designed program strategies that were consistent with PEF's historical experience and general industry best practices
- Attempted to maximize the cost effectiveness across the portfolio with the intent of meeting the Commission's goals

Despite utilizing the best practice approach described above, the single largest challenge that PEF encountered throughout the program planning process was the lack of a credible, market potential study that identified achievable energy efficiency reductions consistent with the Commission's goals of 3,205 GWH. While it was mentioned above that PEF conducted an achievable market potential study (Itron study), that study only revealed an achievable market potential for all measures at approximately 50% of the Commission's goals. Therefore, PEF had to employ certain assumptions and design strategies (including maximum incentives & program costs) as its best estimate for dealing with the uncertainties and risks associated with the technical market potential, particularly over a 10-year planning period. Such uncertainties and risks include:

- Consumer acceptance and participation
- Health of the regional economy, and the amount of new construction
- Federal, state, and local building codes and equipment efficiency standards
- Technology evolution and pricing
- Generation fuel costs and avoided capital costs
- Maturation of the local infrastructure for delivering programs
- Achieving penetration required to meet full technical potential of 2-year payback measures

8. Please identify and explain what, if any, alternative program design strategies PEF reviewed or considered prior to submitting its proposed DSM 2010 Plan. (9/14/2010, Agenda transcript, pg 21) If none, please explain the reason for not doing so.

RESPONSE:

PEF did consider a levelized design plan, but realized it would substantially increase customer rates (approximately 500%) right away spending high amount of dollars on un-tested programs. PEF's DSM 2010 Plan was the selected design strategy for achieving the 3,205 GWH goal established by the Commission, faced with the challenges, uncertainties, and risks described in Item 7. PEF's proposed plan represented the best balance to achieve the cumulative Commission goal while allowing ramp up time for prudent implementation of new technologies and minimizing near term rate impact to customers.

9. Please explain or describe what modifications, if any, PEF believes could be made to its Technical Potential program to make it more cost-effective and reduce the potential rate impact. For example, adding or removing certain measures, adjusting incentive/rebate levels or projected customer participation levels.

RESPONSE:

PEF believes there is nothing more that can be done to make the TPP more cost-effective in order to reach the Commission goal of 3,205 GWH. The incentive levels and customer participation levels necessary to reach the goal must be set as high as they were in PEF's proposed DSM plan. PEF chose the most cost-effective measures it could when developing its DSM plan, but its flexibility was limited by the level of the goal set by the Commission.

If the Commission were to reduce PEF's goal such that it was consistent with the Achievable Potential for cost-effective measures, including some of those measures with less than 2 year payback, PEF could make several adjustments to the Technical Potential Program that would result in improved cost-effectiveness and improved rate impacts. Such adjustments would include reduced costs (including incentives and customer acquisition costs), and removed measures. PEF will be prepared to identify such modifications within its revised plan to the Commission.

10. Please explain or describe whether PEF believes that the peer utilities SACE selected, in its comments filed August 3, 2010, are appropriate to use for making comparisons of effective program design and energy savings.
 - a. If the answer is no, please provide the names of at least five other utility companies that PEF believes are appropriate to use for making such comparisons. Please also explain why these utility companies would provide a more appropriate comparison than the companies selected by SACE.

RESPONSE:

Aside from the other Florida utilities, FP&L, Gulf, TECO, OUC and JEA, PEF does not believe that the peer utilities SACE selected are appropriate for comparative purposes. There are significant variances that impact the performance and costs of utility-administered energy efficiency programs, particularly when comparing utilities located in different states. These variances include but are not limited to: electricity price, regulatory policies, climate zones, fuel usage, customer demographics, appliance saturation, portfolio maturity, local energy policies, regulatory construct, avoided costs, utility EE goals, cost-effectiveness tests, building codes, other available tax incentives or rebates, etc.

Furthermore, the normalized comparative analysis as provided by SACE ("Cost per annual kWh saved"), is flawed due to several reasons. First, this value is not a representative economic analysis as it fails to take into account the important aspects of measure life, discount rate, and the true avoided cost savings (it completely dismisses the capacity value). Additionally, as EEI's Institute of Energy Efficiency (IEE) has pointed-out, in a March 2010 white paper titled *Implementing Energy Efficiency: Program Delivery Comparison Study*, utilities around the country report savings in an inconsistent manner (i.e. - Net Savings vs. Gross Savings) as well as they use widely varied savings estimates for the same installed measure. Another issue is the high proportion of demand response programs and their associated costs existing within the Florida utilities. Thus, a true apples-to-apples "cost per annual kWh saved" is likely very difficult to ever achieve outside the boundaries of a common regulatory authority.

11. Please refer to Attachment A, which is a list of certain programs and measures that staff has identified as having incentive/rebate levels that are greater than customer costs, based on PEF's Response to Staff's First Data Request, No. 9.
 - a. Please recalculate the "residential rate impact" when the incentive/rebate associated with each measure is capped at no greater than customer costs for the same measure and complete Table 1 on Attachment B.
 - b. Please recalculate the "percentage of total ECCR rate" of all programs when the incentive/rebate associated with each measure is capped at no greater than customer costs for the same measure and complete Table 2 on Attachment C.

RESPONSE:

a.

| Year | | ECCR Revenue Requirement | Rate Impact (\$/Mo.) | % Increase |
|---|------|--------------------------|----------------------|------------|
| Current | | \$86,501,449 | \$3.24 | - |
| Projected | 2010 | \$176,015,450 | 6.36 | 196 |
| | 2011 | \$192,237,981 | 7.04 | 11 |
| | 2012 | \$237,103,790 | 8.51 | 21 |
| | 2013 | \$307,753,467 | 10.91 | 28 |
| | 2014 | \$353,707,293 | 12.64 | 16 |
| | 2015 | \$495,396,293 | 17.65 | 40 |
| | 2016 | \$594,684,173 | 21.00 | 19 |
| | 2017 | \$715,076,132 | 24.96 | 19 |
| | 2018 | \$812,320,680 | 28.02 | 12 |
| | 2019 | \$876,948,768 | 30.15 | 8 |
| Current Rates refer to those established in Docket 090002 | | | | |
| Rate impact assumes a residential customer with 1,200 kWh/Mo. usage | | | | |

b. To be submitted October 4, 2010.

12. Please complete the tables (Attachment D) for each of the incentive level scenarios listed below, for each measure within the Technical Potential Program. Please also indicate any changes to participation rates as a result of changes to incentive levels.
 - a. Incentive levels are as proposed in PEF's filings.
 - b. Incentive levels are limited to 100% of Measure Cost.
 - c. Incentive levels are limited to 75% of Measure Cost.
 - d. Incentive levels are limited to 50% of Measure Cost.

RESPONSE: To be submitted October 4, 2010

13. Please complete the tables (Attachment D) for each of the participation rate scenarios listed below, for each measure within the Technical Potential Program. Please also indicate the level of incentive necessary to reach the indicated participation rate.
- a. Participation rates are as proposed in PEF's filings.
 - b. Participation rates are limited to 75% of eligible customers.
 - c. Participation rates are limited to 50% of eligible customers.
 - d. Participation rates are limited to 25% of eligible customers.

RESPONSE: To be submitted October 4, 2010

Attachment A

Incentive/Rebate Levels Greater than Customer Costs

| BETTER BUSINESS PROGRAM | Incentive / Rebate | Customer Equip Cost |
|--|-------------------------------|--------------------------------|
| Component Measure Name | (\$) | (\$) |
| Centrifugal Chiller, 0.63 to .60 KW/ton | \$173 | \$125 |
| Chiller--rotary/screw .72 to .67 kw/ton | \$175 | \$135 |
| DX Packaged System, EER=10.6 (20 tons) | \$291 | \$249 |
| Hybrid Desiccant-DX EER 10.6 (Trane CDQ) | \$1,333 | \$934 |
| Geothermal Heat Pump EER/COP 14.1/3.3 | \$2,134 | \$1,453 |
| SEER 13 AC to SEER 14 HP to 2014 | \$690 | \$380 |
| SEER 13 AC to SEER 15 HP | \$2,825 | \$1,818 |
| SEER 13 AC to SEER 17 HP | \$4,048 | \$2,595 |
| SEER 13 HP to SEER 14 HP to 2014 | \$512 | \$252 |
| SEER 13 HP to SEER 15HP | \$1,701 | \$924 |
| SEER 13 HP to SEER 17 HP | \$3,359 | \$2,076 |
| SPV HP EER/COP 8.6/2.7 - 9.46/2.97 | \$563 | \$415 |
| Demand Control Ventilation (DCV) | \$271 | \$208 |
| Energy Recovery Ventilation (ERV) | \$2,202 | \$1,310 |
| DX RTU Re-commissioning | \$282 | \$259 |
| Thermal Energy Storage (TES) (Positive) | \$2,074 | \$1,661 |
| Ceiling Insulation <R11 to R19 to 2014 | \$579 | \$311 |
| Ceiling insulation <R11 to R30 | \$3,783 | \$2,283 |
| Roof Insulation <R11 to R19 to 2014 | \$933 | \$466 |
| Cool Roof with Roof Insulation <R11 to R19 | \$4,528 | \$3,217 |
| Cool Roof - Chiller | \$2,747 | \$1,868 |
| Cool Roof - DX | \$2,186 | \$1,868 |
| Green Roof | \$9,721 | \$6,227 |
| High Efficiency Motors > 200 HP (225HP) p/HP | \$59 | \$42 |
| Induction Lighting /Cold Cathode | \$1,159 | \$882 |
| Hotel AC control sensors | \$720 | \$623 |
| EMS - Chiller Optimization | \$227 | \$208 |
| 13-14 SEER A/C | \$359 | \$234 |
| 15 SEER A/C | \$370 | \$275 |
| 16 SEER A/C | \$355 | \$298 |
| 19+ SEER A/C | \$1,351 | \$905 |
| Exhaust Hood opt. (Ventilation) | \$3,096 | \$2,646 |
| Multiplex Compressor system | \$5,371 | \$3,632 |

Incentive/Rebate Levels Greater than Customer Costs Attachment A

| COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION PROGRAM | | |
|---|-------------------------|--------------------------|
| Component Measure Name | Incentive / Rebate (\$) | Customer Equip Cost (\$) |
| Centrifugal Chiller 0.60 KW/ton, (500 tons) 2010 | 22.00 | 21.00 |
| DX Packaged System EER 10.4 - 11.1 (15 ton) 2013 | 137.00 | 128.00 |
| Hybrid Desiccant-DX EER 11.1 (Trane CDQ) 2013 | 411.00 | 399.00 |
| SEER 13 HP to SEER 14 HP 2010 | 149.00 | 125.00 |
| SEER 14.5 HP to SEER 16 HP 2013 | 403.00 | 350.00 |
| SEER 13 HP to SEER 15 HP 2010 | 278.00 | 231.00 |
| SEER 14.5 HP to SEER 17 HP 2013 | 649.00 | 556.00 |
| SEER 13 HP to SEER 17 HP 2010 | 406.00 | 342.00 |
| SEER 14.5 HP to SEER 18 HP 2013 | 978.00 | 824.00 |
| Energy Recovery Ventilation (ERV) 2010 | 347.00 | 291.00 |
| Roof Insulation R-11 to R-19 2010 | 280.00 | 232.00 |
| Roof Insulation R-13 to R-19 2013 | 499.00 | 453.00 |
| Cool Roof with Insulation R11 to R19 2010 | 550.00 | 513.00 |
| Cool Roof with Insulation R15 to R19 2013 | 1,395.00 | 1,236.00 |
| Cool Roof - Chiller .60 kw/ton 2010 | 336.00 | 308.00 |
| Cool Roof - Chiller .55 kw/ton 2013 | 772.00 | 742.00 |
| Green Roof | 4,104.00 | 3,497.00 |
| Building Commissioning | 1,101.00 | 645.00 |
| 15 SEER A/C | 597.00 | 525.00 |
| 16 SEER A/C | 615.00 | 569.00 |
| 19+ SEER A/C | 2,058.00 | 1,729.00 |
| Multiplex Compressor system | 2,146.00 | 2,040.00 |
| HOME ENERGY IMPROVEMENT PROGRAM | | |
| Component Measure Name | Incentive / Rebate (\$) | Customer Equip Cost (\$) |
| Duct Repair | 470.00 | 423.00 |
| Duct Repair | 353.00 | 211.00 |
| Duct Test | 71.00 | 70.00 |
| HVAC Proper Sizing | 176.00 | 70.00 |
| HVAC Proper Sizing | 176.00 | 70.00 |
| HVAC QI Commission Plem Seal & Sizing | 588.00 | 247.00 |
| HVAC QI Commission Plem Seal & Sizing | 588.00 | 247.00 |
| RESIDENTIAL NEW CONSTRUCTION PROGRAM | | |
| Component Measure Name | Incentive / Rebate (\$) | Customer Equip Cost (\$) |
| HVAC Commissioning | 16.00 | 11.00 |
| HVAC Commissioning | 16.00 | 11.00 |
| HVAC ACCA Quality Installation | 471.00 | 122.00 |
| HVAC ACCA Quality Installation | 471.00 | 122.00 |

Incentive/Rebate Levels Greater than Customer Costs Attachment A

| TECHNICAL POTENTIAL PROGRAM | Incentive / Rebate | Customer Equip Cost |
|---|-------------------------------|--------------------------------|
| Component Measure Name | (\$) | (\$) |
| Water heater blanket on old water heaters | 30.00 | 20.00 |
| Replace current HVAC system with high efficiency model with ECM (16+SEER) | 2,000.00 | 90.00 |
| Pool Pump (variable) | 2,000.00 | 1,927.00 |
| Freezer Recycling | 100.00 | 0.00 |
| Refrigerator Recycling | 100.00 | 0.00 |
| Air Filters | 60.00 | 40.00 |

Attachment B

Table 1 – Recalculated Residential Rate Impact

| Year | | ECCR Revenue Requirement | Rate Impact (\$/Mo.) | % Increase |
|---|------|--------------------------|----------------------|------------|
| Current | | \$86,501,449 | \$3.24 | - |
| Projected | 2010 | | | |
| | 2011 | | | |
| | 2012 | | | |
| | 2013 | | | |
| | 2014 | | | |
| | 2015 | | | |
| | 2016 | | | |
| | 2017 | | | |
| | 2018 | | | |
| | 2019 | | | |
| Current Rates refer to those established in Docket 090002 | | | | |
| Rate impact assumes a residential customer with 1,200 kWh/Mo. usage | | | | |

Attachment C

Table 2 – Recalculated Program Contributions

| Program Name | Type | % Total Goal | | | Net Benefits | | ECCR (%) |
|---------------------------------------|------|--------------|-----|-----|--------------|---------|-------------|
| | | Sum | Win | Ann | E-TRC | E-RIM | |
| | | (%) | (%) | (%) | (\$000) | (\$000) | |
| Energy Management | RES | | | | | | |
| Technical Potential | RES | | | | | | |
| Home Energy Improvement | RES | | | | | | |
| Interruptible Service | CI | | | | | | |
| Residential Education | RES | | | | | | |
| Business Energy Response | CI | | | | | | |
| Better Business | CI | | | | | | |
| C/I New Construction | CI | | | | | | |
| New Construction | RES | | | | | | |
| Neighborhood Energy Saver | RES | | | | | | |
| Commercial Education | CI | | | | | | |
| Standby Generation | CI | | | | | | |
| Solar WH with Energy Management | RES | | | | | | |
| Curtable Service | CI | | | | | | |
| Low Income Weatherization | RES | | | | | | |
| Commercial Green Building | CI | | | | | | |
| Commercial Solar Photovoltaic | CI | | | | | | |
| Residential Solar Photovoltaic | RES | | | | | | |
| Business Energy Saver | CI | | | | | | |
| Photovoltaics for Schools | CI | | | | | | |
| Solar WH for Low Income Res Customers | RES | | | | | | |
| Business Energy Check (Audit) | CI | | | | | | |
| Innovation Incentive | CI | | | | | | |
| Research and Demonstration | CI | | | | | | |
| Home Energy Check (Audit) | RES | | | | | | |
| Technology Development | ALL | | | | | | |
| Qualifying Facilities | ALL | | | | | | |
| Sum of All Programs | | | | | | | |

Attachment D

| Measure Name | | | | | | | | | | | | | |
|---|--------------------|--------------------|---------------|--|-----------------------|------------------------------|---------------------|---------------------|----------------------|-------------------------------|-----------------------------|-------------------------------|-------------------------------|
| Scenario | | | | | | | | | | | | | |
| Total Measure Savings by Year (@ Meter) | | | | Total Measure Expenses by Year | | | | | Participation Rates | | | | |
| Year | Summer Peak Demand | Winter Peak Demand | Annual Energy | Administrative | Education & Marketing | Equipment, Install, O&M | Incentives, Rebates | Total | Total # of Customers | Total # of Eligible Customers | Annual Participation Rate | Cumulative Participation Rate | Cumulative Participation Rate |
| | (MW) | (MW) | (GWh) | (\$000) | (\$000) | (\$000) | (\$000) | (\$000) | (-) | (-) | (-) | (-) | (%) |
| 2011 | | | | | | | | | | | | | |
| 2012 | | | | | | | | | | | | | |
| 2013 | | | | | | | | | | | | | |
| 2014 | | | | | | | | | | | | | |
| 2015 | | | | | | | | | | | | | |
| 2016 | | | | | | | | | | | | | |
| 2017 | | | | | | | | | | | | | |
| 2018 | | | | | | | | | | | | | |
| 2019 | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | |
| Savings Per Participant by Year (@ Meter) | | | | Measure Expenses Per Participant By Year | | | | | Measure Impacts | | | | |
| Year | Summer Peak Demand | Winter Peak Demand | Annual Energy | Administrative | Education & Marketing | Equipment, Installation, O&M | Incentives, Rebates | Total Utility Costs | Incentive Rate | PreRebate Customer's Costs | PostRebate Customer's Costs | Residential Rate Impact | Lost Revenues |
| | (kW) | (kW) | (kWh) | (\$/Customer) | (\$/Customer) | (\$/Customer) | (\$/Customer) | (\$/Customer) | \$/ (List Unit) | (\$) | (\$) | (\$/1200 kWh) | (\$000) |
| 2011 | | | | | | | | | | | | | |
| 2012 | | | | | | | | | | | | | |
| 2013 | | | | | | | | | | | | | |
| 2014 | | | | | | | | | | | | | |
| 2015 | | | | | | | | | | | | | |
| 2016 | | | | | | | | | | | | | |
| 2017 | | | | | | | | | | | | | |
| 2018 | | | | | | | | | | | | | |
| 2019 | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | |
| Cost Effectiveness Tests | | | | | | | | | | | | | |
| Test | Benefits | Costs | Ratio | Net Benefits | | | | | | | | | |
| | (\$000) | (\$000) | (-) | (\$000) | | | | | | | | | |
| E-TRC | | | | | | | | | | | | | |
| E-RIM | | | | | | | | | | | | | |