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March 16, 2015

**BY ELECTRONIC FILING**

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

Re: Docket No. \_\_\_\_\_  
DEF's Petition for Approval of Proposed Demand-Side Management Plan

Dear Ms. Stauffer:

Enclosed for filing is DEF's Petition for Approval of Proposed Demand-Side Management Plan with the following attachments:

- A. DEF's 2015-2024 DSM Program Plan;
- B. Summary of proposed program changes;
- C. Proposed tariff changes.

This filing is in compliance with page 61 of Commission Order No. PSC-14-0696-FOF-EU issued December 16, 2014. Staff has recommended that each utility file its plan as an undocketed matter, indicating that a new docket will be created for each utility's DSM Plan.

DEF has also provided to Phillip Ellis, five (5) hard copies and three (3) CDs of this filing that includes spreadsheets in Excel format.

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

Sincerely,

*/s/ Dianne M. Triplett*

Dianne M. Triplett

DMT/at  
Attachments

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for Approval of Modifications  
To Duke Energy Florida, Inc.'s  
Demand-Side Management Plan

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Docket No. \_\_\_\_\_

Filed: March 16, 2015

**DUKE ENERGY FLORIDA, INC.'S PETITION FOR APPROVAL OF  
PROPOSED DEMAND-SIDE MANAGEMENT PLAN**

Duke Energy Florida, Inc. ("DEF"), pursuant to Sections 366.82 and 366.06(1), Florida Statutes (2014), Rule 25-17.0021, Florida Administrative Code ("F.A.C."), and Order No. PSC-14-0696-FOF-EU, petitions the Florida Public Service Commission ("Commission") to approve DEF's Demand-Side Management ("DSM") Plan, which is being filed with this petition, and to authorize DEF to recover through the Energy Conservation Cost Recovery ("ECCR") clause reasonable and prudent expenditures associated with implementation of DEF's DSM Plan.

In support of this petition, DEF states:

1. DEF is a public utility subject to the jurisdiction of the Commission pursuant to Chapter 366 of the Florida Statutes. DEF's general offices are located at:

Duke Energy Florida, Inc.  
299 First Avenue North  
St. Petersburg, Florida 33701

2. Notices, orders, pleadings and correspondence to be served upon DEF in this proceeding should be directed to:

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3. DEF is an investor-owned electric utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. DEF is subject to FEECA, Sections 366.80-366.85 and 403.519, Florida Statutes ("F.S."). Pursuant to FEECA and Commission rules implementing FEECA, DEF is required to file a DSM Plan for Commission approval and is entitled to seek recovery of associated expenditures. DEF currently has a Commission-approved DSM plan, but the Commission recently approved new conservation goals for DEF. Under Commission rules implementing FEECA and Order No. PSC-14-0696-FOF-EU, DEF must file a plan designed to achieve these goals. DEF has a substantial interest in whether the Commission approves the proposed DSM Plan and authorizes cost recovery for plan implementation expenditures.

#### **DEF's Existing DSM Plan**

4. DEF's most recent DSM Plan was approved by the Commission in August 2011.<sup>1</sup> DEF's DSM Plan currently contains 21 programs incorporating over 100 measures. Through its conservation programs, DEF offers a wide array of conservation measures and audit services to its customers.

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<sup>1</sup> These previous filings were made under DEF's previous name, Progress Energy Florida, Inc. ("PEF"). PEF petitioned for plan approval on March 30, 2010. The Commission issued a PAA Order, Order No. PSC-10-0605-PAA-EG, on October 10, 2010, denying PEF's DSM Plan and ordering PEF to refile its DSM plan within 30 days. On November 29, 2010, PEF resubmitted a proposed 2010 revised goal DSM program plan and a proposed 2010 "original goal scenario" DSM program plan. On August 16, 2011, the Commission denied both of PEF's plans filed on November 29, 2010, and instead approved a Modified DSM Plan, consisting of existing Programs that are currently in effect.

## **DEF's Proposed DSM Plan**

5. DEF's proposed DSM Plan, which is described in detail in the Plan Document included as Attachment A to this Petition, includes 19 separate programs. Of these 19<sup>2</sup> conservation offerings, DEF is proposing to continue 4 of the programs or projects with no modifications.<sup>3</sup> DEF is requesting modifications to 15 of the existing programs. The currently existing Residential New Construction Program and the Commercial New Construction Program will no longer be standalone programs. New construction measures will now be part of the Residential Incentive Program, the Better Business Program, and the Florida Incentive Custom Program. The overview of DEF's DSM Plan may be found in Section I of the Plan Document. DEF proposes to initiate program modifications and new programs after the Commission has approved the modifications and related changes to Program Standards and there has been an opportunity to properly implement the program changes.

6. DEF's DSM Plan is designed to meet the conservation goals approved for DEF by the Commission in Order No. PSC-14-0696-FOF-EU to the best of DEF's ability.

7. In Section XI of the plan document, DEF has provided the cost-effectiveness test results for each of the proposed programs for which cost-effectiveness can be calculated.

8. DEF's monitoring efforts for each of its DSM programs and research projects are set forth in the program and project summaries in DEF's Plan Document.

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<sup>2</sup> The 19 existing conservation offerings includes 6 Demand-Side Renewable Programs which will end after 2015.

<sup>3</sup> The existing programs and projects that DEF proposes to continue with no modifications are: Qualifying Facilities, Technology Development, Interruptible Service, and Curtailable Service.

### **Comparison between existing programs and proposed programs**

9. DEF has provided a summary of the proposed changes to each Program in Attachment B. The summary provides a comparison between the existing programs and the proposed programs. The summary provides a list of all of the measures in each of the programs and shows which measures have been added, modified, or removed and provides an explanation to support each change. Except as noted in the summaries of proposed changes, the impacts for each measure are the same as those that supported the achievable potential in the goals proceeding (Docket No. 130200-EI).

### **Disputed Issues and Conclusion**

10. DEF is not aware of any disputed issues of material fact. DEF's proposed DSM Plan, which is contemporaneously filed with this Petition, should be approved and the Commission should authorize recovery of the reasonable and prudent expenditures associated with DEF's DSM Plan through DEF's ECCR clause. DEF's proposed programs, as reflected in the plan document attached, should be approved, including the Tariff revisions provided in Attachment C which are needed to implement the proposed plans. The statutes and rule which entitle DEF to relief are Sections 366.82(11), 366.06(1), F.S., and Rule 25-17.0021, F.A.C.

WHEREFORE, DEF respectfully requests that the Commission: (1) approve DEF's proposed DSM Plan, a copy of which is filed with this petition as Attachment A, as well as the tariff revisions contained in Attachment C to this petition; (2) authorize DEF to recover through the ECCR clause reasonable and prudent expenditures associated with the implementation of the modifications to DEF's DSM Plan; (3) direct DEF to file revisions to its Program Standards for administrative approval within 30 days of the Order approving DEF's DSM Plan in order to

implement the Commission's decision on this petition; and (4) grant such other relief as may be appropriate.

Respectfully submitted,

*/s/ Dianne M. Triplett*

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**2015 – 2024**

**DEMAND SIDE MANAGEMENT**

**PROGRAM PLAN**

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## **I. PROGRAM OVERVIEW**

In accordance with Rule 25-17.0021(4), Florida Administrative Code, Duke Energy Florida (DEF) is submitting this Demand Side Management (DSM) Plan to the Florida Public Service Commission (FPSC or Commission) for approval. DEF's proposed plan is designed to meet the demand side management goals for 2015-2024 established by the Commission in Order No. PSC-14-0696-FOF-EU. Through this collection of programs and measures, DEF will continue to offer meaningful energy saving opportunities to customers. The cost-effective programs presented in this plan are responsive to the Commission's directive to promote education and awareness of energy saving measures to all customer groups. DEF has also enhanced its programs for low income customers to add more saving opportunities and to increase awareness about energy saving opportunities, particularly for low cost/short payback measures.

This Plan provides DEF customers with a comprehensive portfolio of cost-effective DSM programs. It includes programs targeted at both the residential and commercial customer segments as well as programs designed specifically for low income customers. This attractive portfolio of programs is the result of thorough analysis of available energy efficiency measures that customers can implement to reduce demand and energy consumption, as well as an analysis of the most effective ways to deliver those measures to customers. DEF will continue to promote awareness of energy efficiency opportunities through its Home Energy Check, Business Energy Check, and programs targeted to low income customers. DEF's robust residential and commercial demand response programs will also continue to contribute significant savings toward achievement of the annual peak demand goals over this time period.

Over the next ten years, DEF expects to educate and empower over 260,000 residential customers to become more efficient through its Home Energy Check program. This program will inform customers of low cost and short payback measures as well as behavioral modifications that will help these customers save energy. DEF also plans to provide energy

saving information to over 11,000 commercial customers over the next ten year period through its Business Energy Check program.

DEF has enhanced both its Neighborhood Energy Saver Program and its Low Income Weatherization Assistance Program, which are designed to benefit low income customers. Through these programs, DEF will provide one-on-one customer education on energy efficiency techniques and energy conservation measures and will promote behavioral changes to assist customers in controlling their energy usage. DEF has increased the funding for these programs and expanded the list of measures included in these programs.

DEF plans to increase the participation in its Neighborhood Saver Program by 1,500 customers each year targeting a total of 4,500 customers annually. In efforts to make the program more attractive and achieve these elevated participation goals, DEF has added cost-effective measures to the program which provide significant increased saving opportunities for these customers. In addition to the measures already offered through this program, these customers will now be eligible to receive assistance for duct repair, insulation, and HVAC tune-ups. In an effort to continue to provide education about low cost measures and two-year payback measures to this segment of customers, DEF will provide a home energy report to customers who have participated in this program in prior years. In total, DEF expects that approximately 60,000 customers will benefit from this program over the ten year period.

DEF's plan also includes increased funding for the Low Income Weatherization Assistance Program. Through its partnership with agencies, DEF expects to provide funding for weatherization assistance to approximately 500 low income customers each year. These customers will be eligible to receive light bulbs, weather-stripping, faucet aerators, showerheads, water heater wraps, door sweeps, HVAC maintenance or replacements, duct repair, ceiling insulation, and refrigerators. DEF expects that approximately 5,000 customers will benefit from

this program over the next ten year period.

DEF is not proposing any new programs in this filing. All of the programs included in this Plan are the same or modified versions of existing programs. The measures included in these programs have been updated to reflect the impacts of changes to codes and standards. With the exception of new measures and measures in low income programs, the energy and demand savings are based on the achievable potential study that supported the goals docket (Docket No. 130200-EI).

The program modifications that have been included in this Plan include the following:

1. The Residential Incentive Program will now be all-inclusive and will include both home energy improvement measures as well as new construction measures. The standalone Residential New Construction Program will be eliminated.
2. The Commercial Better Business Program will also be all-inclusive and will include both retrofit measures as well as measures for new construction projects. The standalone Commercial New Construction Program will also be eliminated.
3. The name of the Innovation Incentive Program will be changed to the “Florida Custom Incentive Program” and the scope of the program will be expanded to include both residential and commercial cost-effective projects.

## **II. PROGRAM SUMMARY**

DEF has developed a comprehensive portfolio of DSM programs designed to achieve the goals established in Order No. PSC-14-0696-FOF-EU. DEF’s proposed plan includes a combination of demand response and energy efficiency programs designed to meet both the residential and commercial goals.

## A. Residential Programs

The following table shows the annual and cumulative MW and GWH savings DEF expects to achieve through the proposed portfolio of Residential Programs included in this Plan compared to the Commission approved residential goals:

**TABLE 1**

**Residential Market Sector Demand and Energy Data  
(At the Generator)**

| Year | Projected Summer Demand Savings (MW) |            | Commission Approved Summer MW Goal (Cumulative) | Projected Winter Demand Savings (MW) |            | Commission Approved Winter MW Goal (Cumulative) | Projected Annual Energy Savings (GWH) |            | Commission Approved Annual GWH Goal (Cumulative) |
|------|--------------------------------------|------------|---|--------------------------------------|------------|---|---------------------------------------|------------|--|
|      | Incremental                          | Cumulative |   | Incremental                          | Cumulative |   | Incremental                           | Cumulative |  |
| 2015 | 31.8                                 | 31.8       | 26.4  | 58.5                                 | 58.5       | 58.4  | 50.1                                  | 50.1       | 25.5   |
| 2016 | 29.4                                 | 61.2       | 50.4  | 53.4                                 | 111.9      | 111.5   | 45.8                                  | 95.9       | 49.3   |
| 2017 | 28.2                                 | 89.4       | 72.6  | 50.9                                 | 162.8      | 160.2   | 43.1                                  | 139.0      | 70.1   |
| 2018 | 25.1                                 | 114.5      | 92.6  | 45.3                                 | 208.1      | 203.4   | 32.5                                  | 171.5      | 87.1   |
| 2019 | 24.0                                 | 138.5      | 110.3   | 42.6                                 | 250.7      | 240.9   | 30.7                                  | 202.2      | 100.1  |
| 2020 | 22.3                                 | 160.8      | 125.8   | 39.4                                 | 290.1      | 273.1   | 26.4                                  | 228.6      | 109.4  |
| 2021 | 21.5                                 | 182.3      | 139.5   | 37.3                                 | 327.4      | 300.9   | 25.0                                  | 253.5      | 115.6  |
| 2022 | 20.8                                 | 203.1      | 151.7   | 35.8                                 | 363.1      | 325.4   | 23.9                                  | 277.4      | 119.4  |
| 2023 | 20.4                                 | 223.5      | 163.0   | 34.7                                 | 397.8      | 347.7   | 23.2                                  | 300.6      | 121.6  |
| 2024 | 20.1                                 | 243.6      | 173.7   | 34.0                                 | 431.8      | 368.6   | 22.7                                  | 323.3      | 122.8  |

**The following provides an overview of each Residential Program:**

**Home Energy Check** – This is DEF’s home energy audit program as required by Rule 25-17.003(3) (b). DEF will continue to offer a variety of options to customers for home energy audits including walk-through audits, phone assisted audits, and web enabled on-line audits. DEF plans to eliminate the mail-in and student options due to lack of participation. DEF plans to update the kits that are provided to customers after the completion of the audit. These kits provide energy saving measures that may be easily installed by the customer.

**Residential Incentive Program** – This program will provide incentives on a variety of cost-effective measures designed to provide energy savings. DEF is projecting to provide incentives for approximately 90,000 unique measures over the ten year period. These measures primarily include heating and cooling, duct repair, insulation, and energy efficient windows. The measures and incentive levels included in this program have been updated to reflect the impacts of new codes and standards.

**Neighborhood Energy Saver** – This program is designed to provide energy saving education and assistance to low income customers. This program targets neighborhoods that meet certain income eligibility requirements. DEF has expanded the eligibility requirement by increasing the census block requirements from 150% of federal poverty guidelines to 200% of federal poverty guidelines. DEF is planning to increase the targeted annual participation in this program from 3,000 to 4,500 participants. DEF also plans to provide home energy reports to approximately 15,000 customers who have participated in this program in prior years to provide energy saving tips and remind them about low cost energy saving measures. DEF has added insulation and duct repair to the list of measures included in this program. This program is cost-effective under the Rate Impact Measure (RIM) test and contributes significant savings toward achieving the established goals.

**Low Income Weatherization Assistance Program** – Through this program DEF will partner with local agencies to provide energy efficiency assistance to low income customers. DEF plans to increase the funding which will enable more customers to benefit from this program. DEF projects that approximately 5,000 customers will receive assistance through this program over the ten year period.

**EnergyWise** – This is the residential demand response program. DEF currently has 654 winter MWs and 358 summer MWs of direct load control through this program. DEF expects to add 10,000 new participants in 2015 and 8,700 annually for 2016 through 2024 which equates to an additional 209 winter MWs and an additional 110 summer MWs of load control. DEF has proposed modifications to the program plan and tariff to derive more value and add flexibility to adapt to new and emerging technologies.

## B. Commercial Programs

Table 2 shows the annual and cumulative MW and GWH savings DEF plans to achieve through the proposed portfolio of Commercial Programs included in this Plan compared to the Commission approved commercial goals:

**TABLE 2**  
Commercial/Industrial Market Sector Demand and Energy Data  
(At the Generator)

| Year | Projected Summer Demand Savings (MW) |            | Commission Approved Summer MW Goal (Cumulative) | Projected Winter Demand Savings (MW) |            | Commission Approved Winter MW Goal (Cumulative) | Projected Annual Energy Savings (GWH) |            | Commission Approved Annual GWH Goal (Cumulative) |
|------|--------------------------------------|------------|---|--------------------------------------|------------|---|---------------------------------------|------------|--|
|      | Incremental                          | Cumulative |   | Incremental                          | Cumulative |   | Incremental                           | Cumulative |  |
| 2015 | 12.6                                 | 12.6       | 12.0  | 7.7                                  | 7.7        | 5.4   | 15.9                                  | 15.9       | 14.5   |
| 2016 | 11.6                                 | 24.2       | 23.6  | 6.1                                  | 13.8       | 10.8  | 13.6                                  | 29.5       | 28.1   |
| 2017 | 11.1                                 | 35.3       | 34.6  | 6.2                                  | 20.0       | 16.4  | 12.0                                  | 41.5       | 40.1   |
| 2018 | 10.0                                 | 45.3       | 44.6  | 5.7                                  | 25.7       | 21.5  | 10.0                                  | 51.5       | 50.1   |
| 2019 | 9.1                                  | 54.4       | 53.7  | 5.6                                  | 31.2       | 26.5  | 8.0                                   | 59.5       | 58.1   |
| 2020 | 8.2                                  | 62.7       | 61.9  | 5.6                                  | 36.9       | 31.7  | 5.9                                   | 65.4       | 64.0   |
| 2021 | 6.9                                  | 69.6       | 68.8  | 5.1                                  | 42.0       | 36.5  | 3.9                                   | 69.3       | 67.9   |
| 2022 | 6.0                                  | 75.6       | 74.8  | 4.9                                  | 46.9       | 41.2  | 2.4                                   | 71.7       | 70.3   |
| 2023 | 5.6                                  | 81.2       | 80.4  | 5.1                                  | 51.9       | 46.2  | 1.4                                   | 73.1       | 71.7   |
| 2024 | 5.0                                  | 86.2       | 85.4  | 4.7                                  | 56.6       | 50.8  | 0.8                                   | 73.9       | 72.5   |

The following provides a list of the Commercial programs along with a brief overview of each program:

**Business Energy Check** – This program is offered to commercial customers to provide energy saving assistance and education on low cost and two-year payback measures.

**Better Business** – This program will provide incentives on a variety of cost-effective measures. These measures include chillers, cool roof, insulation, and DX systems. The list of measures and incentive levels included in this program have been updated to reflect the impacts of new codes and standards.

**Florida Custom Incentive (currently Innovation Incentive)** – The objective of this program is to encourage customers to make capital investments for the installation of energy efficiency measures which reduce energy and peak demand. This program offers customized incentives specifically designed for individual innovative projects which are not otherwise addressed by other DEF conservation programs.

**Interruptible Service** – This program is available to non-residential customers with a minimum billing demand of 500 KW or more who are willing to have their power interrupted. DEF has remote control access to the switch providing power to the customer's equipment. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit based on their billing demand and billing load factor.

**Curtable Service** - This program is an indirect load control program that will reduce DEF's energy demand at times of capacity shortage during peak or emergency conditions.

**Standby Generation** - This program is a demand control program that will reduce DEF's demand based upon the control of customer equipment. The program is a

voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to reduce their DEF demand when deemed necessary.

- C. Demand Side Renewable Programs** - DEF has included the renewable solar pilot programs that were authorized by the Commission in Docket No. 100160-EG, Order No. PSC-10-0605-PAA-EG. There are six five-year pilot programs that will end after 2015.
- D. Technology Development** – This program is used to fund the research and development of new energy efficiency and demand response opportunities. DEF will use this program to investigate new technologies and support the development of new energy efficiency and demand response programs.
- E. Qualifying Facilities** – This program is used to manage the purchase of as-available energy and firm energy and capacity from qualifying facilities pursuant to standard offer and negotiated contracts. Under this program DEF develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.

### **III. SUMMARY OF PORTFOLIO COSTS AND PROJECTED CUSTOMER BILL IMPACTS**

Table 3 depicts the projected total cost of the portfolio and the projected residential rate impact annually for the ten year period. The total costs of the portfolio over the ten year period are projected to be approximately \$934 million. Costs are expected to decline steadily over the ten year period consistent with the decline in the annual goals. Approximately 67% of the total cost over the ten year period is for incentives paid directly to customers and contractors and

approximately 5% of the total costs is for the Neighborhood Energy Saver and Low Income Weatherization programs which are designed for the benefit of low income customers.

**TABLE 3**

|   | Total  | 2015   | 2016   | 2017   | 2018   | 2019   | 2020  | 2021  | 2022  | 2023  | 2024  |
|---|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| <b>Projected Portfolio Cost</b>                 | \$ 934 | \$ 114 | \$ 110 | \$ 110 | \$ 108 | \$ 89  | \$ 83 | \$ 81 | \$ 79 | \$ 80 | \$ 80 |
| <b>Estimated Residential Rate (\$/1200 kwh)</b> |        | 4.23   | 4.08   | 3.99   | 3.88   | 3.15   | 2.88  | 2.80  | 2.70  | 2.67  | 2.66  |
| <b>Percent Change</b>                           |        |        | -3.7%  | -2.1%  | -2.9%  | -18.8% | -8.3% | -2.8% | -3.6% | -1.1% | -0.7% |

#### **IV. COST-EFFECTIVENESS TESTS**

Programs have been analyzed for cost-effectiveness using the Commission-approved tests described in Rule 25-17.008, Florida Administrative Code. A summary of the cost-effectiveness results for each of the programs included in this Plan are provided in Attachment B attached hereto and made a part hereof. These detailed results consist of one page each for the Rate Impact Measure (RIM), Total Resource Cost (TRC), and Participant Tests.

#### **V. COST-RECOVERY**

DEF submits the programs herein described for approval and for inclusion as cost recoverable Conservation and Energy Efficiency programs under current Commission-approved procedures pursuant to Rule 25-17.015, Florida Administrative Code.

Additionally, DEF seeks cost recovery for previously closed programs that have ongoing costs associated with grandfathered participants. These programs include Commercial Energy Management, Interruptible Service (IS-1) and (IST-1), and Curtailable Service (CS-1) and (CST-1).

**VI. RESIDENTIAL CONSERVATION PROGRAMS**

## **A. HOME ENERGY CHECK PROGRAM**

**Program Start Date:** 1995

### **Program Description**

The Home Energy Check is a residential energy audit program that provides residential customers with an analysis of their energy consumption as well as educational information on how to reduce energy usage and save money. The audit provides DEF the opportunity to promote and directly install cost-effective measures in customers' homes while also educating and encouraging customers to implement energy-saving practices. The Home Energy Check serves as the foundation for other residential Demand Side Management Programs. The Home Energy Check program offers the following types of energy audits:

- Type 1: Free Walk-Through (computer assisted).
- Type 2: Customer Online (Internet Option).
- Type 3: Customer Phone Assisted.
- Type 4: Home Energy Rating (or BERS/HERS) Audit.

Customers will be provided with energy efficiency tips and examples of easily installed energy efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable reductions in energy usage through the implementation of low cost energy efficiency measures and energy saving recommendations. Customers participating in the Home Energy Check Program may receive a residential Energy Efficiency Kit. The kit will contain energy saving measures that can easily be installed and utilized by the customer. The contents of this kit will be evaluated periodically and may change over time.

### **Policies and Procedures**

All eligible residential customers of DEF can receive any of the above energy audits conducted on residentially metered buildings, located in DEF's service territory. There is no charge for Type 1 through Type 3 home energy checks. The Type 4 - Home Energy Rating audit as outlined in DEF's "Florida BERS/HERS Audit" tariff is available to all eligible DEF customers

upon request.

### Program Participation

Annual participation estimates for the Home Energy Check program are shown in the following table:

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 1,520,916                                | 1,456,095   | 35,706   | 2.45%   |
| 2016 | 1,544,620                                | 1,475,736   | 34,516   | 4.76%   |
| 2017 | 1,568,452                                | 1,498,230   | 32,367   | 6.85%   |
| 2018 | 1,591,324                                | 1,524,441   | 29,651   | 8.67%   |
| 2019 | 1,612,908                                | 1,550,890   | 26,801   | 10.25%  |
| 2020 | 1,634,061                                | 1,577,609   | 24,184   | 11.61%  |
| 2021 | 1,654,509                                | 1,603,523   | 22,030   | 12.80%  |
| 2022 | 1,674,417                                | 1,628,202   | 20,420   | 13.86%  |
| 2023 | 1,693,168                                | 1,650,717   | 19,319   | 14.84%  |
| 2024 | 1,711,369                                | 1,671,630   | 18,627   | 15.77%  |

1. The total number of customers is the forecast of residential customers in DEF's 2014 Ten Year Site Plan.
2. The entire residential class is eligible for participation.
3. Number of participants represents the customers that DEF expects to participate through this program annually.
4. Cumulative penetration is the ratio of cumulative measure participating customers to the eligible customer pool.

### Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables:

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 668                        | 0.23                             | 0.18                             | 23,841,475                 | 8,324                            | 6,472                            |
| 2016         | 668                        | 0.23                             | 0.18                             | 23,066,437                 | 8,068                            | 6,283                            |
| 2017         | 669                        | 0.23                             | 0.18                             | 21,667,700                 | 7,606                            | 5,944                            |
| 2018         | 444                        | 0.16                             | 0.13                             | 13,178,770                 | 4,773                            | 3,941                            |
| 2019         | 483                        | 0.18                             | 0.14                             | 12,942,235                 | 4,702                            | 3,870                            |
| 2020         | 526                        | 0.19                             | 0.16                             | 12,725,034                 | 4,636                            | 3,805                            |
| 2021         | 569                        | 0.21                             | 0.17                             | 12,546,256                 | 4,582                            | 3,751                            |
| 2022         | 608                        | 0.22                             | 0.18                             | 12,412,616                 | 4,542                            | 3,711                            |
| 2023         | 638                        | 0.23                             | 0.19                             | 12,321,202                 | 4,514                            | 3,683                            |
| 2024         | 658                        | 0.23                             | 0.21                             | 12,263,735                 | 4,497                            | 3,666                            |
| <b>Total</b> |                            |                                  |                                  | 156,965,460                | 56,244                           | 45,125                           |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 707                        | 0.25                             | 0.19                             | 25,347,362                 | 8,850                            | 6,880                            |
| 2016         | 708                        | 0.25                             | 0.19                             | 24,523,371                 | 8,577                            | 6,680                            |
| 2017         | 709                        | 0.25                             | 0.19                             | 23,036,286                 | 8,086                            | 6,319                            |
| 2018         | 471                        | 0.17                             | 0.14                             | 14,011,174                 | 5,074                            | 4,190                            |
| 2019         | 512                        | 0.19                             | 0.15                             | 13,759,698                 | 4,998                            | 4,114                            |
| 2020         | 557                        | 0.20                             | 0.17                             | 13,528,779                 | 4,929                            | 4,045                            |
| 2021         | 603                        | 0.22                             | 0.18                             | 13,338,708                 | 4,872                            | 3,988                            |
| 2022         | 644                        | 0.24                             | 0.19                             | 13,196,627                 | 4,829                            | 3,945                            |
| 2023         | 676                        | 0.25                             | 0.20                             | 13,099,440                 | 4,800                            | 3,916                            |
| 2024         | 698                        | 0.24                             | 0.22                             | 13,038,343                 | 4,781                            | 3,897                            |
| <b>Total</b> |                            |                                  |                                  | 166,879,788                | 59,796                           | 47,975                           |

**Impact Evaluation Plan**

The range of possible recommendations resulting from the audit and the inclusion of both technological and behavioral recommendations suggests the need to survey Home Energy Check participants to determine what specific conservation actions have been implemented. Survey results combined with the participant-specific data gathered during the audit will be used to

determine the savings which can be attributed to the Home Energy Check program. The impact evaluation plan for this program may use engineering simulation and statistical billing analysis to estimate demand and energy impacts.

**B. RESIDENTIAL INCENTIVE PROGRAM****Program Start Date: 1995**

Program modified in 2000, 2006, 2007, 2012

**Program Description**

The Residential Incentive Program is designed to provide incentives to residential customers for energy efficiency improvements. This program includes measures for energy efficiency improvements for both existing homes and new homes. DEF offers energy efficiency measures for various types of homes through this program including single family, multi-family and manufactured homes. All residential customers are eligible to participate in one or more measures included in this program. The Residential Incentive Program builds on customer awareness through the Home Energy Check program, trade ally support and DEF's efforts to educate customers on cost-effective measures for their residences.

The program seeks to meet the following overall goals:

- Provide a cost-effective portfolio of measures across different housing types.
- Provide customer energy savings and demand reduction through the installation of energy efficient equipment and thermal envelope upgrades.
- Educate the residential market regarding best practices, innovative technologies and opportunities to participate in all applicable incentives for managing energy consumption.

**Policies and Procedures**

Program participation is influenced by DEF's educational opportunities. The program provides incentives for high efficiency HVAC equipment, duct repair, attic insulation upgrades, energy star and high performance windows for residentially metered customers in DEF's service territory.

DEF inspects the installation of measures and equipment as required by Rule 25-17.003(10)(b),

Florida Administrative Code, prior to issuing any incentive payments.

The Residential Incentive Program will include the following measures:

***High Efficiency HVAC Systems***

The High Efficiency HVAC System measure will provide customers an incentive to install a high efficiency HVAC system when replacing their existing system. The incentive will be awarded on a per unit basis according to efficiency rating.

***Duct Repair***

The Duct Repair measure is designed to promote energy efficiency through improved duct system by sealing and paying a portion of the cost.

***Attic Insulation Upgrade***

The Attic Insulation Upgrade measure encourages customers to upgrade their attic insulation over conditioned space by paying a portion of the installed cost.

***Replacement Windows***

The Window Replacement measure awards an incentive for installing high performance windows.

**Energy Efficiency Home**

DEF will offer builders an incentive for meeting or exceeding Energy Star requirements that include specific prescriptive measures.

**Program Participation**

Annual participation estimates for the Residential Incentive Program are shown in the following table.

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 1,520,916  | 19,806  | 1.30%  |
| <b>2016</b> | 1,544,620                                       | 1,544,620  | 18,021  | 2.45%  |
| <b>2017</b> | 1,568,452                                       | 1,568,452  | 15,702  | 3.41%  |
| <b>2018</b> | 1,591,324                                       | 1,591,324  | 12,771  | 4.17%  |
| <b>2019</b> | 1,612,908                                       | 1,612,908  | 9,694   | 4.71%  |
| <b>2020</b> | 1,634,061                                       | 1,634,061  | 6,870   | 5.07%  |
| <b>2021</b> | 1,654,509                                       | 1,654,509  | 4,545   | 5.28%  |
| <b>2022</b> | 1,674,417                                       | 1,674,417  | 2,807   | 5.39%  |
| <b>2023</b> | 1,693,168                                       | 1,693,168  | 1,618   | 5.42%  |
| <b>2024</b> | 1,711,369                                       | 1,711,369  | 871   | 5.42%  |

1. The total number of customers is the forecast of residential customers in DEF's 2014 Ten Year Site Plan.
2. The entire residential class is eligible for participation in at least one measure.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

### **Savings Estimates**

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables:

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 517                        | 0.85                             | 0.32                             | 10,238,025                 | 16,793                           | 6,369                            |
| 2016         | 492                        | 0.82                             | 0.32                             | 8,870,364                  | 14,701                           | 5,766                            |
| 2017         | 492                        | 0.82                             | 0.32                             | 7,728,900                  | 12,809                           | 5,024                            |
| 2018         | 492                        | 0.82                             | 0.32                             | 6,285,834                  | 10,418                           | 4,086                            |
| 2019         | 492                        | 0.82                             | 0.32                             | 4,771,719                  | 7,908                            | 3,102                            |
| 2020         | 492                        | 0.82                             | 0.32                             | 3,381,371                  | 5,604                            | 2,198                            |
| 2021         | 492                        | 0.82                             | 0.32                             | 2,236,972                  | 3,707                            | 1,454                            |
| 2022         | 492                        | 0.82                             | 0.32                             | 1,381,515                  | 2,290                            | 898                              |
| 2023         | 492                        | 0.82                             | 0.32                             | 796,359                    | 1,320                            | 518                              |
| 2024         | 492                        | 0.82                             | 0.32                             | 428,496                    | 710                              | 279                              |
| <b>Total</b> |                            |                                  |                                  | 46,119,555                 | 76,261                           | 29,694                           |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 550                        | 0.90                             | 0.34                             | 10,884,684                 | 17,854                           | 6,771                            |
| 2016         | 523                        | 0.87                             | 0.34                             | 9,430,638                  | 15,630                           | 6,131                            |
| 2017         | 523                        | 0.87                             | 0.34                             | 8,217,076                  | 13,618                           | 5,342                            |
| 2018         | 523                        | 0.87                             | 0.34                             | 6,682,863                  | 11,076                           | 4,344                            |
| 2019         | 523                        | 0.87                             | 0.34                             | 5,073,113                  | 8,408                            | 3,298                            |
| 2020         | 523                        | 0.87                             | 0.34                             | 3,594,947                  | 5,958                            | 2,337                            |
| 2021         | 523                        | 0.87                             | 0.34                             | 2,378,265                  | 3,942                            | 1,546                            |
| 2022         | 523                        | 0.87                             | 0.34                             | 1,468,775                  | 2,434                            | 955                              |
| 2023         | 523                        | 0.87                             | 0.34                             | 846,659                    | 1,403                            | 550                              |
| 2024         | 523                        | 0.87                             | 0.34                             | 455,561                    | 755                              | 296                              |
| <b>Total</b> |                            |                                  |                                  | 49,032,581                 | 81,077                           | 31,570                           |

**Impact Evaluation Plan**

The Residential Incentive Program includes the installation of various types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis

will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels.

### **Cost-Effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$102,155                       | \$95,270                     | \$6,885                             | 1.07             |
| <b>Participant</b>             | \$82,573                        | \$39,421                     | \$43,152                            | 2.09             |
| <b>Total Resource Cost</b>     | \$102,155                       | \$52,118                     | \$50,037                            | 1.96             |

## C. NEIGHBORHOOD ENERGY SAVER PROGRAM

**Program Start Date:** 2007

### **Program Description**

DEF's Neighborhood Energy Saver (NES) program is a custom energy conservation program designed to assist selected neighborhoods where approximately 50% of the households have incomes equal to or less than 200% of the poverty level established by the U.S. Government. Duke Energy or a third party contractor will directly install energy conservation measures (ECM) identified through an energy assessment into the customer's home to increase their energy efficiency. Additionally, customers will receive a comprehensive package of energy education materials which will educate them on ways to better manage their energy usage. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

The Neighborhood Energy Saver program seeks to achieve the following goals:

- Conduct a home energy assessment to identify energy efficiency opportunities within the customer's home.
- Implement a comprehensive package of electric conservation measures to increase the efficiency in the resident's home.
- Provide one on one customer education on energy efficiency techniques and energy conservation measures.
- Empower customers to make behavioral changes that will allow them to become more efficient and take control of their energy usage.

### **Policies and Procedures:**

DEF's Neighborhood Energy Saver program is based upon 50% of the households having incomes equal to or less than 200% of the poverty level established by the U.S. Government.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards.

DEF is proposing to include the following measures in this program:

- Energy Efficient Lighting
- Refrigerator Thermometer(s)
- Weatherization Measures
- Water Heater Insulation Wrap and Insulation for Water Pipes
- Water Conservation Shower Heads and Faucet Aerators
- Water Heater Temperature Check and Adjustment
- HVAC filters
- Indoor Wall Thermometer
- AC Winterization Kit
- Attic Insulation Upgrade
- HVAC Maintenance/ Tune up
- Duct Sealing
- Home Energy Report

### **Program Participation**

Annual participation estimates for the Neighborhood Energy Saver program are shown in the following table:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 416,016  | 19,500  | 4.69%  |
| <b>2016</b> | 1,544,620                                       | 419,836  | 19,500  | 5.72%  |
| <b>2017</b> | 1,568,452                                       | 428,323  | 19,500  | 6.65%  |
| <b>2018</b> | 1,591,324                                       | 436,980  | 19,500  | 7.55%  |
| <b>2019</b> | 1,612,908                                       | 445,809  | 19,500  | 8.41%  |
| <b>2020</b> | 1,634,061                                       | 454,815  | 4,500   | 5.94%  |
| <b>2021</b> | 1,654,509                                       | 464,002  | 4,500   | 6.79%  |
| <b>2022</b> | 1,674,417                                       | 473,372  | 4,500   | 7.61%  |
| <b>2023</b> | 1,693,168                                       | 482,929  | 4,500   | 8.39%  |
| <b>2024</b> | 1,711,369                                       | 492,678  | 4,500   | 9.13%  |

1. The total number of customers is the forecast of residential customers in DEF's 2014 Ten Year Site Plan.
2. Eligible customers represents the count of homes in DEF service territory that are at or below program qualifying income levels based on the 2010 US Census block data with a 2% growth rate per year.
3. Number of participants represents the customers that DEF expects to reach through direct offerings in each year.
4. Cumulative penetration is the ratio of cumulative participants to the remaining eligible customer pool.

### **Savings Estimates**

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total projected program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 524                        | 0.36                             | 0.25                             | 10,209,808                 | 7,072                            | 4,915                            |
| 2016         | 524                        | 0.36                             | 0.25                             | 10,209,808                 | 7,072                            | 4,915                            |
| 2017         | 524                        | 0.36                             | 0.25                             | 10,209,808                 | 7,072                            | 4,915                            |
| 2018         | 524                        | 0.36                             | 0.25                             | 10,209,808                 | 7,072                            | 4,915                            |
| 2019         | 524                        | 0.36                             | 0.25                             | 10,209,808                 | 7,072                            | 4,915                            |
| 2020         | 1,723                      | 1.42                             | 0.96                             | 7,754,608                  | 6,412                            | 4,300                            |
| 2021         | 1,723                      | 1.42                             | 0.96                             | 7,754,608                  | 6,412                            | 4,300                            |
| 2022         | 1,723                      | 1.42                             | 0.96                             | 7,754,608                  | 6,412                            | 4,300                            |
| 2023         | 1,723                      | 1.42                             | 0.96                             | 7,754,608                  | 6,412                            | 4,300                            |
| 2024         | 1,723                      | 1.42                             | 0.96                             | 7,754,608                  | 6,412                            | 4,300                            |
| <b>Total</b> |                            |                                  |                                  | 89,822,077                 | 67,417                           | 46,070                           |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 557                        | 0.39                             | 0.27                             | 10,854,684                 | 7,518                            | 5,225                            |
| 2016         | 557                        | 0.39                             | 0.27                             | 10,854,684                 | 7,518                            | 5,225                            |
| 2017         | 557                        | 0.39                             | 0.27                             | 10,854,684                 | 7,518                            | 5,225                            |
| 2018         | 557                        | 0.39                             | 0.27                             | 10,854,684                 | 7,518                            | 5,225                            |
| 2019         | 557                        | 0.39                             | 0.27                             | 10,854,684                 | 7,518                            | 5,225                            |
| 2020         | 1,832                      | 1.51                             | 1.02                             | 8,244,408                  | 6,817                            | 4,571                            |
| 2021         | 1,832                      | 1.51                             | 1.02                             | 8,244,408                  | 6,817                            | 4,571                            |
| 2022         | 1,832                      | 1.51                             | 1.02                             | 8,244,408                  | 6,817                            | 4,571                            |
| 2023         | 1,832                      | 1.51                             | 1.02                             | 8,244,408                  | 6,817                            | 4,571                            |
| 2024         | 1,832                      | 1.51                             | 1.02                             | 8,244,408                  | 6,817                            | 4,571                            |
| <b>Total</b> |                            |                                  |                                  | 95,495,462                 | 71,675                           | 48,980                           |

**Impact Evaluation Plan**

The Neighborhood Energy Saver program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific

participation levels.

### Cost Effectiveness

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$107,531                       | \$106,408                    | \$1,123                             | 1.01             |
| <b>Participant</b>             | \$97,902                        | \$19,993                     | \$77,909                            | 4.90             |
| <b>Total Resource Cost</b>     | \$107,531                       | \$28,499                     | \$79,032                            | 3.77             |

**D. LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM**

**Program Start Date:** 2000

Program modified in 2006

**Program Description**

The Low-Income Weatherization Assistance program is designed to leverage working relationships with weatherization providers to integrate Demand Side Management measures and offer energy efficiency with an education component. The Low-Income Weatherization Assistance program combines weatherization provider partnerships with energy education and energy efficiency improvements to benefit low-income families.

The program seeks to meet the following goals:

- Partner with the Department of Economic Opportunity and local home improvement providers to deliver energy-efficiency measures to low-income families through this program.
- Identify and educate contractors and low-income customers regarding energy saving opportunities to improve home energy efficiency.
- Promote low-income participation in DEF's Demand Side Management programs.
- Educate low-income families on achievable, sustainable strategies to reduce individual energy bills.

**Policies and Procedures**

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards.

DEF is proposing to include the following measures in this program:

- Attic Insulation Upgrade
- Duct Test and Repair

- Reduced Air Infiltration
- Water Heater Wrap
- High-Efficiency Electric Heat Pumps
- Heating and Air Conditioning Maintenance
- Low Flow Showerhead – Aerators
- Compact Fluorescent / LED Light
- Refrigerator Replacement
- Energy Education

### Program Participation

Annual participation estimates for the Low Income Weatherization Assistance program are shown in the following table:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 416,016  | 500   | 0.12%  |
| <b>2016</b> | 1,544,620                                       | 423,836  | 500   | 0.24%  |
| <b>2017</b> | 1,568,452                                       | 432,323  | 500   | 0.35%  |
| <b>2018</b> | 1,591,324                                       | 440,980  | 500   | 0.45%  |
| <b>2019</b> | 1,612,908                                       | 449,809  | 500   | 0.56%  |
| <b>2020</b> | 1,634,061                                       | 458,815  | 500   | 0.65%  |
| <b>2021</b> | 1,654,509                                       | 468,002  | 500   | 0.75%  |
| <b>2022</b> | 1,674,417                                       | 477,372  | 500   | 0.84%  |
| <b>2023</b> | 1,693,168                                       | 486,929  | 500   | 0.92%  |
| <b>2024</b> | 1,711,369                                       | 496,678  | 500   | 1.01%  |

1. The total number of customers is the forecast of residential customers in DEF's 2014 Ten Year Site Plan.
2. Eligible customers represents the count of homes in DEF service territory that are at or below program qualifying income levels based on the 2010 US Census block data with a 2% growth rate per year.
3. Number of participants represents the eligible customers that DEF expects to reach via partnership with State agencies
4. Cumulative penetration is the ratio of cumulative participants to the accumulated eligible customer pool.

### Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The

total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables:

**At the Meter:**

| <b>Year</b>  | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|--------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015         | 1,842                             | 1.79                                    | 0.82                                    | 920,885                           | 893                                     | 409                                     |
| 2016         | 1,842                             | 1.79                                    | 0.82                                    | 920,885                           | 893                                     | 409                                     |
| 2017         | 1,842                             | 1.79                                    | 0.82                                    | 920,885                           | 893                                     | 409                                     |
| 2018         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2019         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2020         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2021         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2022         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2023         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| 2024         | 1,862                             | 1.79                                    | 0.83                                    | 930,813                           | 896                                     | 413                                     |
| <b>Total</b> |                                   |   |   | 9,278,344                         | 8,948                                   | 4,115                                   |

**At the Generator:**

| <b>Year</b>  | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|--------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015         | 1,958                             | 1.90                                    | 0.87                                    | 979,050                           | 949                                     | 434                                     |
| 2016         | 1,958                             | 1.90                                    | 0.87                                    | 979,050                           | 949                                     | 434                                     |
| 2017         | 1,958                             | 1.90                                    | 0.87                                    | 979,050                           | 949                                     | 434                                     |
| 2018         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2019         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2020         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2021         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2022         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2023         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| 2024         | 1,979                             | 1.90                                    | 0.88                                    | 989,605                           | 952                                     | 439                                     |
| <b>Total</b> |                                   |   |   | 9,864,387                         | 9,513                                   | 4,375                                   |

### Impact Evaluation Plan

The Low Income Weatherization program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels.

### Cost-Effectiveness

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$15,049                        | \$14,638                     | \$410                               | 1.03             |
| <b>Participant</b>             | \$13,389                        | \$6,608                      | \$6,780                             | 2.03             |
| <b>Total Resource Cost</b>     | \$15,049                        | \$7,858                      | \$7,191                             | 1.92             |

**E. RESIDENTIAL ENERGY MANAGEMENT PROGRAM**

**Program Start Date:** 1981

Program Modified in 1995, 2000, 2007

**Program Description**

Residential Energy Management is a voluntary customer program that allows DEF to reduce demand and defer generation construction. Demand is reduced by controlling service to selected electrical equipment through various devices and communication options installed on the customers' premises.

**Policies and Procedures**

It continues to be cost-effective to add new participants to the Residential Year Round Energy Management (RSL-1) and Winter Only (RSL-2) Rate Schedules. Continuing the Residential Energy Management program will increase the summer and winter load control capabilities.

This program has grown to be one of the largest direct load control programs in the nation today. DEF will continue to offer this program to residential customers, while incorporating technology improvements and communication infrastructure options designed to increase load shed capabilities, manage sustainability, and provide flexible alternatives for customers. Additionally, the new control devices enable variable load control algorithms, which have the potential to deliver increased load shed capabilities, while strengthening equality of experience to all participants. Adaptive algorithms evaluate the previous hour's runtime and apply duty cycle control per the individual appliance. In this way, all appliances are controlled equally and achieve the maximum load shed; therefore, the maintenance program will gain additional incremental benefit from the replacement of older devices.

**Program Participation**

Annual program participation estimates beginning in the year 2015 are shown in the table

below. The estimates reflect continuing the year round program, maintaining a winter only option, 100% strip control, and adding new participants.

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 971,698  | 10,000  | 1.03%  |
| <b>2016</b> | 1,544,620                                       | 986,842  | 8,700   | 1.89%  |
| <b>2017</b> | 1,568,452                                       | 1,002,068  | 8,700   | 2.73%  |
| <b>2018</b> | 1,591,324                                       | 1,016,681  | 8,700   | 3.55%  |
| <b>2019</b> | 1,612,908                                       | 1,030,471  | 8,700   | 4.35%  |
| <b>2020</b> | 1,634,061                                       | 1,043,985  | 8,700   | 5.12%  |
| <b>2021</b> | 1,654,509                                       | 1,057,049  | 8,700   | 5.88%  |
| <b>2022</b> | 1,674,417                                       | 1,069,768  | 8,700   | 6.63%  |
| <b>2023</b> | 1,693,168                                       | 1,081,748  | 8,700   | 7.36%  |
| <b>2024</b> | 1,711,369                                       | 1,093,377  | 8,700   | 8.08%  |

1. The total number of customers is based on DEF's 2014 Ten Year Site Plan projections.
2. Estimate of the eligible customers are based on customers that are not presently on Energy Management and have electric heat.
3. New participants of winter only or year round Energy Management Schedule.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

### **Savings Estimates**

The total program savings shown in the following tables reflect the demand and energy savings associated with the new program participants projected for the Residential Energy Management Program.

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 2.13                             | 1.11                             | 0                          | 21,275                           | 11,125                           |
| 2016         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2017         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2018         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2019         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2020         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2021         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2022         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2023         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| 2024         | 0                          | 2.24                             | 1.18                             | 0                          | 19,488                           | 10,266                           |
| <b>Total</b> |                            |                                  |                                  | 0                          | 196,667                          | 103,519                          |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 2.26                             | 1.18                             | 0                          | 22,619                           | 11,828                           |
| 2016         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2017         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2018         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2019         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2020         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2021         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2022         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2023         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| 2024         | 0                          | 2.38                             | 1.25                             | 0                          | 20,719                           | 10,914                           |
| <b>Total</b> |                            |                                  |                                  | 0                          | 209,089                          | 110,058                          |

**Impact Evaluation Plan**

End-use metering data will be used to estimate the appliance level and duty-cycle impacts of residential load control.

**Cost-Effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$212,068                       | \$76,952                     | \$135,116                           | 2.76             |
| <b>Participant</b>             | \$51,449                        | \$0                          | \$51,449                            | 9999             |
| <b>Total Resource Cost</b>     | \$212,068                       | \$25,503                     | \$186,565                           | 8.32             |

**VII. COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS**

## **A. BUSINESS ENERGY CHECK PROGRAM**

**Program Start Date:** 1995

### **Program Description**

The Business Energy Check is a commercial energy audit program that provides commercial customers with an analysis of their energy use as well as recommendations on how they can save on their electricity bill. The audit focuses on educating and encouraging customers to implement minimal cost energy-saving practices and measures. The audit also provides DEF the opportunity to promote cost-effective measures in customers' facilities. The Business Energy Check program serves as the foundation for other commercial, industrial, and governmental Demand Side Management programs.

The Business Energy Check program offers the following types of energy audits:

- Type 1: Free Walk-Through.
- Type 2: Customer Phone-Assisted.

### **Policies and Procedures**

All commercial, industrial, and governmental customers of DEF are eligible to receive any of the above mentioned audit types conducted on commercial metered buildings located in DEF's service territory. When a customer requests a Business Energy Check, they will be given the option of either a Free Walk-Through or a Customer Phone-Assisted audit. DEF reserves the option to work with other agencies and/or companies as an extension of the Business Energy Check service. The specific details on the procedures for each type of audit will be presented in the Program Participation Standards.

Customers participating in these audits will be provided with sustainable educational and behavioral energy saving examples of easily installed energy conservation measures to reduce energy consumption. The program promotes continued customer involvement by

demonstrating sustainable and measureable energy reduction in energy consumption through the implementation of low-cost energy conservation measures.

The customer may receive a Commercial Energy Efficiency Kit after the completion of the Business Energy Check. The Commercial Energy Efficiency Kit will contain energy saving measures that can be easily installed and utilized by the customer. The contents of this kit will be periodically evaluated and may change over time.

### Program Participation

Annual participation estimates for the Business Energy Check program are shown in the following table:

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 171,935                                  | 167,335   | 2,500  | 1.49%   |
| 2016 | 174,479                                  | 169,449   | 1,847  | 2.57%   |
| 2017 | 177,027                                  | 172,680   | 1,680  | 3.49%   |
| 2018 | 179,468                                  | 175,940   | 1,480  | 4.27%   |
| 2019 | 181,752                                  | 178,592   | 1,315  | 4.94%   |
| 2020 | 183,977                                  | 181,182   | 1,041  | 5.44%   |
| 2021 | 186,117                                  | 183,761   | 687  | 5.74%   |
| 2022 | 188,190                                  | 186,462   | 420  | 5.88%   |
| 2023 | 190,125                                  | 189,018   | 250  | 5.94%   |
| 2024 | 191,987                                  | 191,317   | 156  | 5.95%   |

1. The total number of customers is the forecast of commercial/industrial (C/I) customers in DEF's 2014 Ten Year Site Plan.
2. The measure eligible customers are the total C/I customers less customers who have participated in the two prior years.
3. Number of program participants represents the participants projected.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

### Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and

are shown in the following tables:

#### At the Meter:

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 1,004                      | 0.15                             | 0.19                             | 836,667                    | 125                              | 155                              |
| 2016         | 1,004                      | 0.15                             | 0.19                             | 1,854,787                  | 277                              | 344                              |
| 2017         | 1,004                      | 0.15                             | 0.19                             | 1,686,943                  | 252                              | 313                              |
| 2018         | 1,004                      | 0.15                             | 0.19                             | 1,485,491                  | 222                              | 275                              |
| 2019         | 1,004                      | 0.15                             | 0.19                             | 1,320,595                  | 197                              | 245                              |
| 2020         | 1,004                      | 0.15                             | 0.19                             | 1,044,824                  | 156                              | 194                              |
| 2021         | 1,004                      | 0.15                             | 0.19                             | 689,705                    | 103                              | 128                              |
| 2022         | 1,004                      | 0.15                             | 0.19                             | 421,904                    | 63                               | 78                               |
| 2023         | 1,004                      | 0.15                             | 0.19                             | 251,012                    | 38                               | 47                               |
| 2024         | 1,004                      | 0.15                             | 0.19                             | 157,104                    | 23                               | 29                               |
| <b>Total</b> |                            |                                  |                                  | 9,749,032                  | 1,457                            | 1,806                            |

#### At the Generator:

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 1,067                      | 0.16                             | 0.20                             | 889,513                    | 133                              | 165                              |
| 2016         | 1,067                      | 0.16                             | 0.20                             | 1,971,940                  | 295                              | 365                              |
| 2017         | 1,067                      | 0.16                             | 0.20                             | 1,793,495                  | 268                              | 332                              |
| 2018         | 1,067                      | 0.16                             | 0.20                             | 1,579,319                  | 236                              | 293                              |
| 2019         | 1,067                      | 0.16                             | 0.20                             | 1,404,007                  | 210                              | 260                              |
| 2020         | 1,067                      | 0.16                             | 0.20                             | 1,110,818                  | 166                              | 206                              |
| 2021         | 1,067                      | 0.16                             | 0.20                             | 733,269                    | 110                              | 136                              |
| 2022         | 1,067                      | 0.16                             | 0.20                             | 448,553                    | 67                               | 83                               |
| 2023         | 1,067                      | 0.16                             | 0.20                             | 266,866                    | 40                               | 49                               |
| 2024         | 1,067                      | 0.16                             | 0.20                             | 167,027                    | 25                               | 31                               |
| <b>Total</b> |                            |                                  |                                  | 10,364,805                 | 1,549                            | 1,920                            |

#### Impact Evaluation Plan

The range of possible recommendations resulting from the audit, and the inclusion of both technological and behavioral recommendations suggests the need to carefully survey participants to determine what specific actions have been undertaken due to the completed audit. Initially, the use of site-specific engineering estimates is likely to be the most cost-effective

method of estimating program impacts, although the use of statistical analysis technique may also be considered, depending on the participation levels actually achieved.

## **B. BETTER BUSINESS PROGRAM**

**Program Start Date:** 1995

Program modified 2000, 2005, 2006, and 2007

### **Program Description**

The Better Business program is designed for Commercial, Industrial, and Governmental customers who want to consider incorporating high efficiency measures or equipment at their facility location. All business customers are eligible for this program. The Better Business program builds on customer awareness utilizing the various audit types, contractor participation, and materials to educate customers on cost-effective measures relevant to their businesses.

The program seeks to meet the following overall goals:

- Provide customers with a cost-effective portfolio of measures across all building types.
- Improve customer energy savings and demand reduction through the installation of energy efficient equipment and thermal envelope upgrades.
- Educate customers regarding best practices, innovative technologies, and opportunities to manage energy consumption.

### **Policies and Procedures**

The general eligibility requirements are as follows:

- The facility must be a commercially metered customer (includes both retrofit and new construction) in DEF's service territory, which may include commercially metered multi-family residential facilities.
- DEF inspects the installation of measures and equipment as required by Rule 25-17.003(10)(b), Florida Administrative Code, prior to issuing any incentive payments.
- Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards.

DEF is proposing to include the following measures with this program:

### ***HVAC Equipment***

The HVAC equipment component of Better Business provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners, thermal energy storage systems, package terminal heat pumps, package terminal air conditioners, water-cooled chillers and air-cooled chillers. The Better Business HVAC measures also provide DEF customers with a one-time incentive to maintain, re-commission, tune-up and/or repair their current HVAC equipment. A one-time incentive for Coil cleaning is also offered to encourage annual maintenance of customer's equipment.

### ***Energy Recovery Ventilation / Demand Control Ventilation***

The program promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating.

### ***Duct Leakage Test and Repair/Duct Seal***

This portion of the program is designed to promote energy efficiency through improved duct system sealing.

### ***Ceiling Insulation Upgrade***

This portion of the program encourages customers to add insulation to the conditioned ceiling area by paying for a portion of the installed cost.

### ***Cool Roof / Roof Insulation***

The cool roof measure will provide customers with an incentive to install an approved "cool roof" providing the facility has electric cooling. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

## Program Participation

Annual participation estimates for the Better Business program are shown in the following table.

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 171,935   | 171,935  | 2,089   | 1.21%  |
| <b>2016</b> | 174,479   | 174,479  | 1,789   | 2.22%  |
| <b>2017</b> | 177,027   | 177,027  | 1,559   | 3.07%  |
| <b>2018</b> | 179,468   | 179,468  | 1,268   | 3.74%  |
| <b>2019</b> | 181,752   | 181,752  | 963   | 4.22%  |
| <b>2020</b> | 183,977   | 183,977  | 682   | 4.54%  |
| <b>2021</b> | 186,117   | 186,117  | 451   | 4.73%  |
| <b>2022</b> | 188,190   | 188,190  | 279   | 4.83%  |
| <b>2023</b> | 190,125   | 190,125  | 161   | 4.86%  |
| <b>2024</b> | 191,987   | 191,987  | 86  | 4.86%  |

- 1) The total of customers in the forecast of Commercial/Industrial customers in DEF's 2014 Ten Year Site Plan.
- 2) All Commercial, Industrial and Governmental rate classes are eligible to participate.
- 3) Number of Program Measure Participants represents the participants projected.
- 4) Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

## Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 5,974                      | 1.32                             | 3.41                             | 12,479,695                 | 2,764                            | 7,122                            |
| 2016         | 5,083                      | 0.54                             | 3.08                             | 9,095,543                  | 959                              | 5,506                            |
| 2017         | 5,083                      | 0.54                             | 3.08                             | 7,925,102                  | 836                              | 4,797                            |
| 2018         | 5,083                      | 0.54                             | 3.08                             | 6,445,403                  | 680                              | 3,902                            |
| 2019         | 5,083                      | 0.54                             | 3.08                             | 4,892,852                  | 516                              | 2,962                            |
| 2020         | 5,083                      | 0.54                             | 3.08                             | 3,467,209                  | 366                              | 2,099                            |
| 2021         | 5,083                      | 0.54                             | 3.08                             | 2,293,759                  | 242                              | 1,389                            |
| 2022         | 5,083                      | 0.54                             | 3.08                             | 1,416,586                  | 149                              | 858                              |
| 2023         | 5,083                      | 0.54                             | 3.08                             | 816,575                    | 86                               | 494                              |
| 2024         | 5,083                      | 0.54                             | 3.08                             | 439,374                    | 46                               | 266                              |
| <b>Total</b> |                            |                                  |                                  | 49,272,098                 | 6,643                            | 29,394                           |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 6,351                      | 1.41                             | 3.62                             | 13,267,943                 | 2,938                            | 7,572                            |
| 2016         | 5,404                      | 0.57                             | 3.27                             | 9,670,040                  | 1,020                            | 5,854                            |
| 2017         | 5,404                      | 0.57                             | 3.27                             | 8,425,671                  | 888                              | 5,100                            |
| 2018         | 5,404                      | 0.57                             | 3.27                             | 6,852,511                  | 723                              | 4,148                            |
| 2019         | 5,404                      | 0.57                             | 3.27                             | 5,201,897                  | 548                              | 3,149                            |
| 2020         | 5,404                      | 0.57                             | 3.27                             | 3,686,206                  | 389                              | 2,231                            |
| 2021         | 5,404                      | 0.57                             | 3.27                             | 2,438,639                  | 257                              | 1,476                            |
| 2022         | 5,404                      | 0.57                             | 3.27                             | 1,506,061                  | 159                              | 912                              |
| 2023         | 5,404                      | 0.57                             | 3.27                             | 868,151                    | 92                               | 526                              |
| 2024         | 5,404                      | 0.57                             | 3.27                             | 467,126                    | 49                               | 283                              |
| <b>Total</b> |                            |                                  |                                  | 52,384,246                 | 7,063                            | 31,251                           |

**Impact Evaluation Plan**

The Better Business program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses

are supported by end-use metering data where feasible.

### **Cost-effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$80,691                        | \$77,803                     | \$2,888                             | 1.04             |
| <b>Participant</b>             | \$68,828                        | \$19,100                     | \$49,728                            | 3.60             |
| <b>Total Resource Cost</b>     | \$80,691                        | \$28,075                     | \$52,616                            | 2.87             |

## C. FLORIDA CUSTOM INCENTIVE PROGRAM

**Program Start Date:** 1992

Program modified in 1995

### **Program Description**

The objective of the Florida Custom Incentive Program (f/k/a Innovative Incentive) is to encourage customers to make capital investments for installation of energy efficiency measures which reduce peak KW and energy on the DEF electric grid. This program offers customized incentives specifically designed for individual custom projects which are not otherwise addressed by existing DEF Demand Side Management programs. The total incentives offered to customers through this Program will not exceed \$2.5 million annually.

Representative examples of energy efficient technologies that would be considered under this program include, but are not limited to, new construction whole building projects, more efficient compressed air systems with controls and new thermal energy storage systems.

### **Policies and Procedures**

The timeline for a project in the Florida Custom Incentive program can range from six months to one year depending on the project. The steps included are application, monitoring, data collection, analysis of data, inspection, and processing incentives to the customer.

Program eligibility requirements to qualify for participation are as follows:

- Participant must be located in the DEF service territory and be a commercially metered account.
- Participant must be willing to allow DEF to inspect the installations of all measures and equipment.

Specific eligibility requirements for each measure promoted in this program will be presented in

the Program Participation Standards.

DEF will perform a specific cost-effectiveness analysis for each project being considered under the Florida Custom Incentive program, using the Commission-approved cost-effectiveness tests described in Rule 25-17.008, Florida Administrative Code. Only projects that pass the Rate Impact Measure (RIM) test will be eligible for incentives, and incentives will not exceed 50% of the total project cost or reduce the payback to less than two years. The maximum incentive for a single project is \$500,000. For complex engineering projects, DEF will stage the total incentive amount when necessary to confirm the impacts of the project.

### Program Participation

Annual participation estimates for the Florida Custom Incentive program are shown in the following table.

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 171,935                                  | 171,935   | 10   | 0.01%   |
| 2016 | 174,479                                  | 174,479   | 37   | 0.03%   |
| 2017 | 177,027                                  | 177,027   | 35   | 0.05%   |
| 2018 | 179,468                                  | 179,468   | 33   | 0.06%   |
| 2019 | 181,752                                  | 181,752   | 31   | 0.08%   |
| 2020 | 183,977                                  | 183,977   | 28   | 0.09%   |
| 2021 | 186,117                                  | 186,117   | 25   | 0.11%   |
| 2022 | 188,190                                  | 188,190   | 30   | 0.12%   |
| 2023 | 190,125                                  | 190,125   | 25   | 0.13%   |
| 2024 | 191,987                                  | 191,987   | 20   | 0.14%   |

1. The total number of customers is the forecast of Commercial/Industrial customers in DEF's 2014 Ten Year Site Plan.
2. All commercial, industrial and governmental rate classes are eligible to participate.
3. The number of program participants represents the participants projected.
4. Cumulative penetration is the ratio of cumulative measure participating customers to the eligible customer pool.

### Savings Estimates

Any impacts obtained by this program will be calculated for each individual project and will be reported to the Commission to be counted toward achieving DEF's conservation goals.

Annual saving estimates for the Florida Custom Incentive program are shown in the following tables:

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 50,000                     | 3.88                             | 10.00                            | 500,000                    | 39                               | 100                              |
| 2016         | 50,129                     | 3.53                             | 20.24                            | 1,854,787                  | 130                              | 749                              |
| 2017         | 48,198                     | 3.93                             | 22.55                            | 1,686,943                  | 137                              | 789                              |
| 2018         | 45,015                     | 4.90                             | 28.15                            | 1,485,491                  | 162                              | 929                              |
| 2019         | 42,600                     | 5.93                             | 34.04                            | 1,320,595                  | 184                              | 1,055                            |
| 2020         | 37,315                     | 6.02                             | 34.54                            | 1,044,824                  | 168                              | 967                              |
| 2021         | 27,588                     | 4.68                             | 26.87                            | 689,705                    | 117                              | 672                              |
| 2022         | 14,063                     | 2.26                             | 12.97                            | 421,904                    | 68                               | 389                              |
| 2023         | 10,040                     | 1.66                             | 9.55                             | 251,012                    | 42                               | 239                              |
| 2024         | 7,855                      | 1.19                             | 6.86                             | 157,104                    | 24                               | 137                              |
| <b>Total</b> |                            |                                  |                                  | 9,412,365                  | 1,071                            | 6,026                            |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 53,158                     | 4.13                             | 10.63                            | 531,581                    | 41                               | 106                              |
| 2016         | 53,296                     | 3.75                             | 21.52                            | 1,971,940                  | 139                              | 796                              |
| 2017         | 51,243                     | 4.18                             | 23.97                            | 1,793,495                  | 146                              | 839                              |
| 2018         | 47,858                     | 5.21                             | 29.93                            | 1,579,319                  | 172                              | 988                              |
| 2019         | 45,291                     | 6.30                             | 36.18                            | 1,404,007                  | 195                              | 1,122                            |
| 2020         | 39,672                     | 6.40                             | 36.72                            | 1,110,818                  | 179                              | 1,028                            |
| 2021         | 29,331                     | 4.98                             | 28.57                            | 733,269                    | 124                              | 714                              |
| 2022         | 14,952                     | 2.40                             | 13.79                            | 448,553                    | 72                               | 414                              |
| 2023         | 10,675                     | 1.77                             | 10.15                            | 266,866                    | 44                               | 254                              |
| 2024         | 8,351                      | 1.27                             | 7.29                             | 167,027                    | 25                               | 146                              |
| <b>Total</b> |                            |                                  |                                  | 10,006,874                 | 1,139                            | 6,407                            |

**Impact Evaluation Plan**

To verify the estimated savings for each project, an engineering/billing analysis based on

customer-specific site and usage data will be performed. Monitoring will continue until DEF has reasonable assurance that the project will remain in place and produce cost-effective energy savings for its estimated life. An incentive will not be issued to the customer until DEF is reasonably sure of the projected savings.

**Cost-effectiveness**

Each individual project will be analyzed for cost-effectiveness at the time of project submittal to DEF, using the Commission-approved tests of cost-effectiveness. Therefore, total program cost-effectiveness results are not able to be shown, but the program structure will guarantee the program's overall cost effectiveness.

**D. STANDBY GENERATION PROGRAM**

**Program Start Date:** 1993

Program modified in 1995, 2007

**Program Description**

The Standby Generation program is a demand control program that will reduce DEF's demand based upon the control of customer equipment. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to reduce their DEF demand when deemed necessary. The program is offered through the General Service Load Management-2 (GSLM-2) rate schedule. In response to recent changes to EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60, subparts IIII and JJJJ, DEF is revising the GSML-2 Rate to include a new Schedule B Non-emergency Standby Generation Schedule. Customers have the option to select to participate under the original Schedule A – Emergency Standby Generation or Schedule B – Non-Emergency Standby Generation, based on EPA emissions certification of their generation equipment. Customers currently participating in the program who are on Schedule – A Emergency Standby Generation whose generation equipment is certified RICE NESHAP compliant can elect to convert to Schedule – B of the Standby Generation Program. Conversion will be effective on their next regular bill cycle.

DEF may have direct control of the customer equipment or will rely upon the customer to initiate the generation upon being notified by DEF and continue running it until DEF notifies the customer that the generation is no longer needed. DEF does not restrict other use of the equipment by the customer.

Standby Generation program participants receive a monthly credit on their energy bill according to the demonstrated ability of the customer to reduce demand at DEF's request. An additional credit will be based on the KWh's the customer provides. The credits are based upon the load served by the customer's generator, which would have been served by DEF if

the Standby Generation program were not in operation. By compensating the customer for the use of their on-site generation, DEF can impact the commercial and industrial market while minimizing rate impacts. The incentive will be based on a per KW credit per month plus an additional compensation per KWh to support customer O&M associated with run time requested by the company.

### **Policies and Procedures**

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the GS-1, GST-1, GSD-1 or GSDDT-1 Rate Schedules.
- Customer must have standby generation that will reduce utility system demand at the request of DEF.
- Customer's Standby Generation Capacity calculation must be at least 50 KW. Customer must be within the range of DEF's load management system.
- Customer's generation equipment must be certified EPA RICE NESHAP compliant to be eligible to participate in Schedule B – Non-Emergency Standby Generation Program.

### **Program Participation**

Annual participation estimates for the Standby Generation program are shown in the following table.

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 171,935                                  | 549   | 10   | 1.82%   |
| 2016 | 174,479                                  | 557   | 10   | 3.59%   |
| 2017 | 177,027                                  | 566   | 10   | 5.30%   |
| 2018 | 179,468                                  | 574   | 10   | 6.97%   |
| 2019 | 181,752                                  | 581   | 10   | 8.61%   |
| 2020 | 183,977                                  | 592   | 10   | 10.14%  |
| 2021 | 186,117                                  | 596   | 10   | 11.74%  |
| 2022 | 188,190                                  | 602   | 10   | 13.29%  |
| 2023 | 190,125                                  | 608   | 10   | 14.80%  |
| 2024 | 191,987                                  | 614   | 10   | 16.29%  |

1. Total Number of Customers is based on DEF's 2014 Ten Year Site Plan projections.
2. Eligible Customers is based upon tariff GSLM-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers.
4. Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

### Savings Estimates

The KW and KWh savings estimates for this program were determined from historical data and are presented below.

#### At the Meter:

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2016         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2017         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2018         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2019         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2020         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2021         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2022         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2023         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| 2024         | 0                          | 400.00                           | 400.00                           | 0                          | 4,000                            | 4,000                            |
| <b>Total</b> |                            |                                  |                                  | 0                          | 40,000                           | 40,000                           |

**At the Generator:**

| <b>Year</b>  | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|--------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2016         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2017         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2018         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2019         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2020         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2021         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2022         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2023         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| 2024         | 0                                 | 425.26                                  | 425.26                                  | 0                                 | 4,253                                   | 4,253                                   |
| <b>Total</b> |                                   |   |   | 0                                 | 42,526                                  | 42,526                                  |

**Impact Evaluation Plan**

DEF uses on-site metering to measure the generation capability of each Standby Generation program participant to reduce load at the time they join the program. The customer and a DEF representative will observe the metering tests to determine the load that the standby generator carries. This system testing will also determine the initial readings that will be recorded in order to determine the incentive that the customer will receive on their bill each month.

**Cost-effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits (\$000)</b> | <b>NPV Costs (\$000)</b> | <b>NPV Net Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|-----------------------------|--------------------------|---------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$64,386                    | \$43,797                 | \$20,589                        | 1.47             |
| <b>Participant</b>             | \$24,015                    | \$0                      | \$24,015                        | 9999             |
| <b>Total Resource Cost</b>     | \$64,386                    | \$19,782                 | \$44,604                        | 3.25             |

## **E. INTERRUPTIBLE SERVICE PROGRAM**

**Program Start Date:** 1996 for the IS-2 and IST-2 rate schedules.

### **Program Description**

The Interruptible Service program is a direct load control program that reduces DEF's demand at times of capacity shortage during peak or emergency conditions.

### **Policies and Procedures**

The program is available throughout the entire territory served by DEF to non-residential customers who are willing to have their power interrupted. The program is currently offered through the Interruptible General Service (IS-2) and Interruptible General Service Time of Use (IST-2) rate schedules. The IS-1 and IST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

DEF will have remote control of the circuit breaker or disconnect switch supplying the customer's equipment. If purchased power is available at the time of potential interruption, customers who choose not to have their load interrupted will be assessed at the price of that purchased power supplied. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit based on their billing demand and billing load factor.

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the IS-2 or IST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more.
- Available at primary, transmission and secondary service voltages.

## Program Participation

Annual participation estimates for the Interruptible Service program are shown in the following table.

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 171,935                                  | 464   | 1  | 0.22%   |
| 2016 | 174,479                                  | 472   | 1  | 0.42%   |
| 2017 | 177,027                                  | 479   | 1  | 0.63%   |
| 2018 | 179,468                                  | 485   | 1  | 0.82%   |
| 2019 | 181,752                                  | 491   | 1  | 1.02%   |
| 2020 | 183,977                                  | 497   | 1  | 1.21%   |
| 2021 | 186,117                                  | 503   | 1  | 1.39%   |
| 2022 | 188,190                                  | 509   | 1  | 1.57%   |
| 2023 | 190,125                                  | 514   | 1  | 1.75%   |
| 2024 | 191,987                                  | 519   | 1  | 1.93%   |

1. Total Number of Customers is based on DEF's 2014 ten Year Site Plan projections.
2. Eligible Customers is based upon tariff IS-2 and IST-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

## Savings Estimates

Savings estimate for the Interruptible Service program are shown in the following tables.

### At the Meter:

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2016         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2017         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2018         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2019         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2020         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2021         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2022         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2023         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| 2024         | 0                          | 326.00                           | 311.00                           | 0                          | 326                              | 311                              |
| <b>Total</b> |                            |                                  |                                  | 0                          | 3,260                            | 3,110                            |

**At the Generator:**

| <b>Year</b>  | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|--------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2016         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2017         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2018         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2019         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2020         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2021         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2022         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2023         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| 2024         | 0                                 | 346.59                                  | 330.64                                  | 0                                 | 347                                     | 331                                     |
| <b>Total</b> |                                   |   |   | 0                                 | 3,466                                   | 3,306                                   |

**Impact Evaluation Plan**

Program impacts are evaluated through on-site interval metering data of all Interruptible Service customers.

**Cost-Effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits (\$000)</b> | <b>NPV Costs (\$000)</b> | <b>NPV Net Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|-----------------------------|--------------------------|---------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$4,826                     | \$1,873                  | \$2,953                         | 2.58             |
| <b>Participant</b>             | \$1,636                     | \$0                      | \$1,636                         | 9999             |
| <b>Total Resource Cost</b>     | \$4,826                     | \$237                    | \$4,589                         | 20.35            |

**F. CURTAILABLE SERVICE PROGRAM**

**Program Start Date:** 1996 for the CS-2 and CST-2 rate schedules  
2004 for the CS-3 and CST-3 rate schedules.

**Program Description**

Curtable Service program is an indirect load control program that will reduce DEF's demand at times of capacity shortage during peak or emergency conditions.

**Policies and Procedures**

The program is available throughout DEF's entire service territory to non-residential customers who agree to curtail demand. The program is currently offered through the Curtable General Service (CS-2), Curtable General Service Time of Use (CST-2), and the Curtable General Service – Fixed Curtable Demand (CS-3) rate schedules. The CS-1 and CST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

DEF will notify customers when off-system power purchases may begin in support of their service. If purchased power is available, at the time of notification, customers who choose not to reduce their load will be assessed charges as set forth in the applicable tariff. Additionally, DEF will provide notification of curtailment requests. Upon curtailment request, customers choosing not to comply with their curtailment responsibility will be assessed penalties as described in the applicable tariff. Customers participating in the Curtable Service program receive a monthly curtable demand credit based on their curtable demand and billing load factor.

The general program eligibility requirements to qualify for participation are as follows:

CS-2 and CST-2

- Minimum billing demand must be 500 KW or more.
- Curtail 25% of average monthly billing demand.

CS-3 and CST-3

- Minimum of 2000 KW
- Curtail demand by a fixed contractual amount of not less than 2000 KW.

**Program Participation**

Annual participation estimates for the Curtailable Service program are shown in the following table.

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 171,935   | 910  | 0   | 0.00%  |
| <b>2016</b> | 174,479   | 925  | 0   | 0.00%  |
| <b>2017</b> | 177,027   | 938  | 1   | 0.11%  |
| <b>2018</b> | 179,468   | 951  | 0   | 0.11%  |
| <b>2019</b> | 181,752   | 963  | 0   | 0.10%  |
| <b>2020</b> | 183,977   | 975  | 1   | 0.21%  |
| <b>2021</b> | 186,117   | 986  | 0   | 0.20%  |
| <b>2022</b> | 188,190   | 997  | 0   | 0.20%  |
| <b>2023</b> | 190,125   | 1,008  | 1   | 0.30%  |
| <b>2024</b> | 191,987   | 1,018  | 0   | 0.29%  |

1. Total Number of Customers is based on DEF's 2014 Ten Year Site Plan projections.

2. Eligible Customers is based upon tariff CS-2, CST-2, CS-3 and CST-3 Rate Schedules.

3. Annual number of program participants represents the projected number of customers.

4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

**Savings Estimates**

Savings estimate for the Curtailable Service program are shown in the following tables.

**At the Meter:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2016         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2017         | 0                          | 282.00                           | 189.00                           | 0                          | 282                              | 189                              |
| 2018         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2019         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2020         | 0                          | 282.00                           | 189.00                           | 0                          | 282                              | 189                              |
| 2021         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2022         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| 2023         | 0                          | 282.00                           | 189.00                           | 0                          | 282                              | 189                              |
| 2024         | 0                          | 282.00                           | 189.00                           | 0                          | 0                                | 0                                |
| <b>Total</b> |                            |                                  |                                  | 0                          | 846                              | 567                              |

**At the Generator:**

| Year         | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|--------------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2016         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2017         | 0                          | 299.81                           | 200.94                           | 0                          | 300                              | 201                              |
| 2018         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2019         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2020         | 0                          | 299.81                           | 200.94                           | 0                          | 300                              | 201                              |
| 2021         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2022         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| 2023         | 0                          | 299.81                           | 200.94                           | 0                          | 300                              | 201                              |
| 2024         | 0                          | 299.81                           | 200.94                           | 0                          | 0                                | 0                                |
| <b>Total</b> |                            |                                  |                                  | 0                          | 899                              | 603                              |

**Impact Evaluation Plan**

Program impacts are evaluated through on-site interval metering data of all Curtailable Service customers.

**Cost-Effectiveness**

All cost-effectiveness tests are net of free ridership. The economic results of the program are as follows:

| <b>Cost-Effectiveness Test</b> | <b>NPV Benefits<br/>(\$000)</b> | <b>NPV Costs<br/>(\$000)</b> | <b>NPV Net<br/>Benefits (\$000)</b> | <b>B/C Ratio</b> |
|--------------------------------|---------------------------------|------------------------------|-------------------------------------|------------------|
| <b>Rate Impact Measure</b>     | \$1,136                         | \$313                        | \$823                               | 3.63             |
| <b>Participant</b>             | \$296                           | \$0                          | \$296                               | 9999             |
| <b>Total Resource Cost</b>     | \$1,136                         | \$17                         | \$1,119                             | 67.67            |

## **VIII. DEMAND-SIDE RENEWABLE PORTFOLIO**

The Demand Side Renewable Portfolio was designed to emphasize the benefits of solar photovoltaic technology and encourage the development of renewable programs, with an added focus placed on low income and education pilots. Additionally, DEF endeavored to collaborate with state initiatives and provide interested customers with the option to voluntarily support renewable efforts. This portfolio encourages education of energy efficiency by recommending an energy audit be performed on the home or business prior to participation.

The Demand-Side Renewable Energy Portfolio is comprised of the following pilot programs:

- Solar Water Heating for Low-income Residential
- Solar Water Heating with Energy Management
- Residential Solar Photovoltaic
- Commercial Solar Photovoltaic
- Photovoltaic for Schools
- Research & Demonstration

Incentive levels and specific eligibility requirements for the initial measures promoted in these pilot programs will be presented in the Program Participation Standards. Customer participation will be evaluated on an on-going basis; funds may be moved from one pilot program to another based upon actual participation. These pilot programs will continue through the calendar year 2015 pursuant to PSC Order No. 14-0632-FOF-EG.

## A. SOLAR WATER HEATING FOR LOW INCOME RESIDENTIAL CUSTOMERS PILOT

**Program Start Date:** 2011

### Program Description

The Solar Water Heating for the Low-income Residential Customers Pilot is a custom renewable energy measure designed to assist low-income families with energy costs by incorporating a solar thermal water heating system in their residence while it is under construction. DEF will collaborate with non-profit builders to provide low-income families with a residential solar thermal water heater. The solar thermal system will be provided at no cost to the non-profit builders or the residential participants.

### Policies and Procedures

The incentive for this program is the total cost of the solar thermal system plus the associated installation cost. The 2015 program will be limited to a targeted annual incentive cap of \$150,000.

### Program Participation

Annual participation estimates for the Solar Water Heating for Low Income Residential Customers Pilot program are shown in the table below:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 740  | 30  | 4.10%  |

1. Total Number of Customers is the forecast of all residential customers from the DEF 's 2014 Ten Year Site Plan.
2. Eligible customers based on projected agency new construction.
3. Annual number of program participants represents the projected number of low-income homes expected to participate in this pilot in 2015. This program will end after 2015.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

### Savings Estimates

Total pilot savings were developed by first estimating per customer savings and, annual projected participation. The total pilot savings were then computed as the product of those two variables for each year, and are shown in the following tables.

#### At the Meter:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 2,314                      | 0.40                             | 0.37                             | 69,420                     | 12                               | 11                               |

#### At the Generator:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 2,460                      | 0.43                             | 0.39                             | 73,805                     | 13                               | 12                               |

The tables above show the 2015 incremental savings for new participants in this program. This program will end at the end of 2015.

### Impact Evaluation Plan

Maintain record of capacity of systems installed.

## B. SOLAR WATER HEATING WITH ENERGY MANAGEMENT PROGRAM

**Program Start Date:** 2007  
Modified 2011

### Program Description

The Solar Water Heating with Energy Management Program encourages residential customers to install new solar thermal water heating systems on their residence. This program incorporates a long standing cost-effective Demand Side Management program with the requirement for customers to participate in our residential demand response program.

### Policies and Procedures

There are two incentives associated with this program. First, participants receive a one-time \$550 rebate designed to reduce the upfront cost of the renewable energy system. Second, participants receive a monthly bill credit associated with their participation in the residential demand response program.

This program was designed with the support and input of the solar industry. The program records participant occupancy levels to capture the most accurate energy savings. The 2015 program is limited to a targeted annual incentive cap of \$200,000.

### Program Participation

Annual participation estimates for the Solar Water Heating with Energy Management program are shown in the table below:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 1,520,916                                       | 1,257,901  | 300   | 0.02%  |

1. Total Number of Customers is the forecast of all residential customers from the DEF 's 2014 Ten Year Site Plan.
2. Eligible customers is the total customers who have electric heating, cooling and water heating less existing participation.
3. Annual number of program participants represents the projected number of homes to be involved in this pilot by year.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

### Savings Estimates

Total program savings were developed by first estimating per customer savings and, annual projected participation, multiplied by measure. The total program savings were then computed as the sum of the individual customer savings, and are shown in the following tables.

#### At the Meter:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 1,718                      | 2.14                             | 1.11                             | 515,430                    | 642                              | 332                              |

#### At the Generator:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 1,827                      | 2.28                             | 1.18                             | 547,986                    | 683                              | 353                              |

The tables above show the 2015 incremental savings for new participants in this program. This program will end after 2015.

### Impact Evaluation Plan

Maintain record of capacity of systems installed.

## C. RESIDENTIAL SOLAR PHOTOVOLTAIC PILOT

**Program Start Date:** 2011

### **Program Description**

The Solar PV pilot encourages residential customers to install new solar photovoltaic (PV) systems on their home. This pilot promotes the installation of renewable energy on energy efficient homes by requiring customers to participate in at least one residential energy efficiency measure. The program design includes an annual reservation process for pre-approval to ensure the incentive expenditure cap is not exceeded.

Goals of the program are:

- Provide residential customers with a higher return on investment in PV systems.
- Increase renewable energy generation on DEF's system.
- Increase participation in existing residential Demand Side Management measures.

### **Policies and Procedures**

This program provides participating residential customers a rebate of up to \$2.00 per Watt of the PV dc power rating up to a \$20,000 maximum for installing a new photovoltaic system. This rebate is designed to reduce the initial investment required to install a qualified renewable solar energy system. The 2015 program will be limited to a targeted annual incentive cap of \$2,750,000.

Participation in this program is intended to support and collaborate with state initiatives. As such, DEF anticipates these rebates would be used with state funds to limit Florida residents to a maximum incentive of \$4.00 per Watt total when all state, local, and utility incentives are combined. DEF will work with our customers to endeavor not to exceed this incentive cap.

## Program Participation

Annual participation estimates for the Residential Solar Photovoltaic Pilot program are shown in the table below:

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 1,520,916                                | 1,520,454   | 160  | 0.00%   |

1. Total Number of Customers is the forecast of all residential customers from the DEF's 2014 Ten Year Site Plan.
2. Eligible customers represent total residential customers less existing participants.
3. Annual number of program participants represents the projected number of homes to be involved in this pilot in 2015. This program will end after 2015.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

## Savings Estimates

Total pilot savings were developed by estimating per customer savings multiplied by the annual projected participation, as shown in the following tables.

### At the Meter:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 8,340                      | 0.00                             | 1.58                             | 1,334,336                  | 0                                | 253                              |

### At the Generator:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 8,866                      | 0.00                             | 1.68                             | 1,418,616                  | 0                                | 269                              |

The tables above show annual incremental savings for new participants in 2015. This program will end at the end of 2015. Annual incremental coincident winter KW reductions for this Pilot program are de minimis and round to zero.

## Impact Evaluation Plan

Maintain record of capacity of systems installed.

## **A. COMMERCIAL SOLAR PHOTOVOLTAIC PILOT**

**Program Start Date:** 2011

### **Program Description**

Commercial Solar PV pilot encourages customers to install new solar photovoltaic (PV) systems on their facilities. This pilot promotes the installation of renewable on energy efficient businesses by requiring customers to participate in at least one commercial energy efficiency measure. The program design includes an annual reservation process for pre-approval to ensure the incentive expenditure cap is not exceeded. The program design also provides commercial customers with a higher return on investment in PV systems designed to:

- Increase renewable energy generation on DEF's system
- Increase participation in existing Commercial Demand Side Management measures

### **Policies and Procedures**

This program will provide participating commercial customers who install a new photovoltaic system with a tiered rebate up to the following incentive levels, based on the PV dc power rating:

- \$2.00 per Watt for the first 10 KW
- \$1.50 per Watt for 11KW to 50 KW
- \$1.00 per Watt for 51KW to 100 KW

The rebate is designed to reduce the initial investment required to install a qualified renewable solar energy system. Total incentives per participant will be limited to \$130,000, based on a maximum installation of 100KW PV system. The program will be limited to a targeted annual incentive cap of \$1,400,000 per year.

Participation in this program is intended to support and collaborate with state initiatives. As such, DEF anticipates these rebates would be used with state funds to limit Florida business

owners to a maximum incentive of \$4.00 per Watt total when all state, local, and utility incentives are combined. DEF will work with our customers to endeavor to not to exceed this incentive cap.

### Program Participation

Participation estimates for the Commercial Solar Photovoltaic Pilot program are shown in the following table:

| Year | Total Number of Customers <sup>(1)</sup> | Total Number of Measure Eligible Customers <sup>(2)</sup> | Annual Number of Program Measure Participants <sup>(3)</sup> | Cumulative Penetration Level (%) <sup>(4)</sup> |
|------|--|---|--|---|
| 2015 | 171,935                                  | 42,984  | 19   | 0.04%   |

1. Total Number of Customers is the forecast of all Commercial/Industrial customers from the DEF's 2014 Ten Year Site Plan.
2. Total number of Eligible customers is an estimate of Commercial/Industrial sites that support PV installation.
3. Annual number of program participants represents the projected number of commercial participants in 2015.
4. Cumulative penetration is the ratio of participants to the eligible customer pool.

### Savings Estimates

Total pilot savings were developed by estimating per customer savings multiplied by the annual projected participation, as shown in the following tables.

#### At the Meter:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 41,698                     | 0.00                             | 7.87                             | 792,262                    | 0                                | 150                              |

#### At the Generator:

| Year | Per Customer KWh Reduction | Per Customer Winter KW Reduction | Per Customer Summer KW Reduction | Total Annual KWh Reduction | Total Annual Winter KW Reduction | Total Annual Summer KW Reduction |
|------|----------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2015 | 44,332                     | 0.00                             | 8.37                             | 842,303                    | 0                                | 159                              |

The tables above show the 2015 savings for new participants in this program. This program will end at the end of 2015. Incremental coincident winter kW reductions for this Pilot program are de minimis and round to zero.

**Impact Evaluation Plan**

Maintain record of capacity of systems installed.

## **E. PHOTOVOLTAIC FOR SCHOOLS PILOT**

**Program Start Date:** 2011

### **Program Description**

The PV for schools pilot is designed to assist schools with energy costs while promoting energy education. This program will provide participating public schools with new photovoltaic systems at no cost to the school.

Goals of the program are:

- Eliminate the initial investment required to install a renewable solar PV system.
- Increase renewable energy generation on DEF's system.
- Increase participation in existing residential Demand Side Management measures through energy education.
- Increase solar education and awareness in DEF communities and schools.

### **Policies and Procedures**

This program will fully fund the PV systems that are installed on the participating public schools. The schools shall assume ownership of the PV system. Customers will apply for participation in this program. The 2015 program will be limited to an annual target of one system with a rating up to 100 KW installed on a post-secondary public school and up to ten (10) 10 KW systems with battery backup option installed on public schools, preferably serving as emergency shelters.

Post-secondary school participation will be prioritized based on attendance and consumption associated with their main campus. Public schools will be selected using a competitive process that aligns with Florida's SunSmart E-Shelters Program Application with an emphasis placed on the schools commitment to energy efficiency and renewable energy education.

The incentive for this program is the total equipment cost of the solar PV system plus the associated installation cost. The solar PV system and installation will be considered a rebate that will eliminate the cost to the customer for providing new renewable energy system on their facilities.

This program places an emphasis on energy education and promotes environmental stewardship. As such, customers participating in the Winter-Only Energy Management or Year Round Energy Management residential demand response programs can elect to contribute their monthly credit toward a fund designed to support and promote energy education. The fund will accumulate associated participant credits for a period of two years, at which time the customer may elect to renew for an additional two years. All proceeds collected from participating customers and their associated monthly credits will be used to promote energy efficiency and renewable energy educational opportunities.

### **Program Participation**

Projected participation projections for K-12:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 171,935   | 65   | 9   | 13.85%   |

1. Total Number of Customers is the forecast of all Commercial customers from the DEF 2014 Ten Year Site Plan.
2. Eligible customer projections represent the projected number of K-12 schools in the DEF service area that also serve as an emergency shelter.
3. Annual number of program participants represents the projected number of K-12 school participants in this pilot in 2015. This program will end at the end of 2015.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

Projected participation projections for post-secondary:

| <b>Year</b> | <b>Total Number of Customers <sup>(1)</sup></b> | <b>Total Number of Measure Eligible Customers <sup>(2)</sup></b> | <b>Annual Number of Program Measure Participants <sup>(3)</sup></b> | <b>Cumulative Penetration Level (%) <sup>(4)</sup></b> |
|-------------|---|--|---|--|
| <b>2015</b> | 171,935   | 7  | 1   | 14.29%   |

1. Total Number of Customers is the forecast of all Commercial customers from the DEF's 2014 Ten Year Site Plan.
2. Eligible customer projections represent the projected number of post-secondary schools in the DEF service area that also serve as an emergency shelter.
3. Annual number of program participants represents the projected number of post-secondary schools participants in this pilot in 2015. This program will end at the end of 2015.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

### Savings Estimates

Total pilot savings were developed by estimating per customer savings multiplied by the annual projected participation, as shown in the following tables.

Projected savings estimates for K-12:

#### At the Meter:

| <b>Year</b> | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|-------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015        | 16,679                            | 0.00                                    | 3.20                                    | 150,113                           | 0                                       | 29                                      |

#### At the Generator:

| <b>Year</b> | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|-------------|-----------------------------------|---|---|-----------------------------------|---|---|
| <b>2015</b> | 17,733                            | 0.00                                    | 3.40                                    | 159,594                           | 0                                       | 31                                      |

The tables above show the 2015 incremental savings for new participants in this program. This program will end at the end of 2015. Annual incremental coincident winter kW reductions for this Pilot program are de minimis and round to zero.

Projected savings estimates for post-secondary:

**At the Meter:**

| <b>Year</b> | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|-------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015        | 166,792                           | 0.00                                    | 31.00                                   | 166,792                           | 0                                       | 31                                      |

**At the Generator:**

| <b>Year</b> | <b>Per Customer KWh Reduction</b> | <b>Per Customer Winter KW Reduction</b> | <b>Per Customer Summer KW Reduction</b> | <b>Total Annual KWh Reduction</b> | <b>Total Annual Winter KW Reduction</b> | <b>Total Annual Summer KW Reduction</b> |
|-------------|-----------------------------------|---|---|-----------------------------------|---|---|
| 2015        | 177,327                           | 0.00                                    | 32.96                                   | 177,327                           | 0                                       | 33                                      |

The tables above show the 2015 incremental savings for new participants in this program. This program will end at the end of 2015. Annual incremental coincident winter kW reductions for this Pilot program are de minimis and round to zero.

**Impact Evaluation Plan**

Maintain record of capacity of systems installed.

## **F. RESEARCH AND DEMONSTRATION PILOT**

**Program Start Date:** 2011

### **Program Description**

The purpose of this program component is to research technology and establish R&D initiatives to support the development of renewable energy pilot programs. Demonstration projects provide real-world field testing to assist in the development of these initiatives. The program will be limited to a targeted annual expenditure cap of 5% of the total Demand-Side Renewable Portfolio annual expenditures.

### **Policies and Procedures**

In general, each R&D project that is proposed and investigated will proceed as follows:

- Project concept or idea development.
- Project research and design, including estimated costs and benefits.
- Conduct field test, modeling, general research, and theoretical testing.
- Each project is designed to support the development of future solar and renewable energy pilot programs.

## **IX. TECHNOLOGY DEVELOPMENT PROGRAM**

**Program Start Date:** 1995

### **Program Description**

Technical and operational knowledge for the advances in the energy field may come from field demonstration projects, research partnerships, webinars, general education, etc. The Technology Development Program is designed to allow DEF to investigate technologies that may support the development of new demand response and energy efficiency programs. Projects undertaken in this program may include, but are not limited to, technological research, field demonstration projects, research on load behavior and demand-side management measures, and other market related research..”

DEF will undertake certain development and demonstration projects which have the potential to become cost-effective demand and energy efficiency programs. In general, each research and development project that is proposed and investigated will proceed as follows:

1. Concept or idea development.
2. Research and design, including estimated costs and benefits.
3. Conduct field test or pilot program.
4. Evaluate field test or pilot program results, including cost-effectiveness.
5. Acceptance or rejection of project for continuation as a program.
6. If accepted in Item #5 above, application to the FPSC for approval to implement as a separate program or as measure within an existing program.

Eligible customers will be determined during the project research and design phase and will be dependent on the type of project proposed. Each project that is proposed and investigated is expected to meet one or more of the goals identified in Section 366.82(2), Florida Statutes,

and Chapter 25-17, Florida Administrative Code.

### **Program Participation**

In most cases, each demand reduction and energy efficiency project that is proposed and investigated under this program will require field testing with actual customers. These projects will offer services or products to eligible customers, after being defined in the project research and design phase, on a voluntary basis.

Examples of potential projects that may be funded under this program include demand response and energy efficiency technologies, market transformation initiatives and other innovative technologies. All costs, including incentives and rebates, will be included as part of the pre-approved project expenditures under this program.

At the discretion of the Company, expenditures up to \$800,000 annually may be made and recovered through the conservation cost recovery clause for all energy efficiency and conservation projects that are proposed and investigated. If any single project's expenditures exceed \$100,000, a status report will be filed as a component of the Conservation Cost Recovery True-Up filing. The status report will identify each project under this program with annual costs in excess of \$100,000, the scope and purpose of the project, the project development schedule identifying both achieved and projected accomplishments, and the project's actual and proposed expenditures for FPSC staff review. If any project (or combination of projects) expenditures are projected to exceed the \$800,000 annual limit available under this program and are sufficiently worthy of special consideration, the Company will apply to the FPSC staff for approval to proceed.

Finally, the Company will account for and maintain records of all expenses for each project in accordance with Chapter 25-17.015, Florida Administrative Code.

### **Savings Estimates**

The savings impacts will be derived from actual data obtained from field tests which will

calibrate engineering analysis, model results and estimates. This data will provide estimates of the benefits and costs associated with these projects. The actual experience and knowledge gained on a small scale can be leveraged to facilitate the development of new measures.

Consequently, program savings have not been estimated and have not been included in this DSM Plan. Any impacts obtained by this program will be calculated for each individual project and will be reported to the FPSC to be counted toward achieving DEF's conservation goals.

### **Impact Evaluation Plan**

This program will normally include a field test or pilot where the impacts will be based on actual results. In the event a project does not involve a field test or pilot, the estimated or modeled savings will be fully documented with the methodology used.

### **Cost-Effectiveness**

The cost-effectiveness of each project submitted to the FPSC for approval to be implemented as a program shall be analyzed and reported using the Commission-approved cost-effectiveness tests.

## **X. QUALIFYING FACILITIES PROGRAM**

### **Program Description**

The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Chapter 25-17, Florida Administrative Code, regarding the purchase of as-available energy and firm energy and capacity from qualifying facilities including those that utilize renewable sources under Section 366.91, Florida Statutes pursuant to an as-available tariff, standard offer or negotiated contracts.

Under the Qualifying Facilities program, DEF facilitates, and administers the power purchases from qualifying facilities and state jurisdictional interconnections. This Program develops standard offer contracts, negotiates, enters into, amends and restructures non-firm energy, and firm energy and capacity contracts entered into with qualifying cogeneration, small power producers, and renewable facilities.

**XIII. BENEFITS & COST ANALYSIS – ALL PROGRAMS**

## A. RESIDENTIAL CONSERVATION PROGRAMS

| <b>PROGRAM: Residential Incentive - RIM</b> |                          |                        |                         |                |                       |                    |                |                    |                         |
|---|--------------------------|------------------------|-------------------------|----------------|-----------------------|--------------------|----------------|--------------------|-------------------------|
| YEAR  | <b>BENEFITS</b>          |                        |                         |                | UTILITY PROGRAM COSTS | INCENTIVE PAYMENTS | REVENUE LOSSES | <b>TOTAL COSTS</b> | <b>RIM NET BENEFITS</b> |
|   | (1)                      | (2)                    | (3)                     | (4)            |                       |                    |                |                    |                         |
|   | TOTAL FUEL & O&M SAVINGS | AVOIDED T&D CAP. COSTS | AVOIDED GEN. CAP. COSTS | TOTAL BENEFITS |                       |                    |                |                    |                         |
|   | \$(000)                  | \$(000)                | \$(000)                 | \$(000)        |                       |                    |                |                    |                         |
| 2015  | 608                      | 244                    | 0                       | 852            | 3,038                 | 4,486              | 1,221          | 8,745              | -7,892                  |
| 2016  | 1,126                    | 458                    | 0                       | 1,585          | 2,835                 | 3,913              | 2,261          | 9,010              | -7,426                  |
| 2017  | 1,705                    | 645                    | 0                       | 2,349          | 2,495                 | 3,410              | 3,392          | 9,297              | -6,948                  |
| 2018  | 3,655                    | 796                    | 1,952                   | 6,404          | 2,050                 | 2,773              | 4,345          | 9,168              | -2,764                  |
| 2019  | 5,523                    | 911                    | 2,354                   | 8,789          | 1,571                 | 2,105              | 5,365          | 9,041              | -252                    |
| 2020  | 6,160                    | 993                    | 2,580                   | 9,733          | 1,141                 | 1,492              | 5,949          | 8,582              | 1,151                   |
| 2021  | 4,593                    | 1,047                  | 6,843                   | 12,483         | 737                   | 987                | 6,435          | 8,159              | 4,324                   |
| 2022  | 5,899                    | 1,080                  | 7,190                   | 14,169         | 455                   | 610                | 7,116          | 8,181              | 5,988                   |
| 2023  | 5,755                    | 1,100                  | 7,463                   | 14,317         | 262                   | 352                | 7,442          | 8,056              | 6,261                   |
| 2024  | 5,461                    | 1,110                  | 5,158                   | 11,729         | 141                   | 189                | 7,526          | 7,856              | 3,873                   |
| 2025  | 5,951                    | 1,026                  | 4,880                   | 11,857         | 0                     | 0                  | 7,108          | 7,108              | 4,749                   |
| 2026  | 5,594                    | 948                    | 3,012                   | 9,553          | 0                     | 0                  | 6,691          | 6,691              | 2,862                   |
| 2027  | 4,940                    | 879                    | 6,902                   | 12,722         | 0                     | 0                  | 6,558          | 6,558              | 6,164                   |
| 2028  | 5,137                    | 824                    | 2,838                   | 8,799          | 0                     | 0                  | 6,450          | 6,450              | 2,349                   |
| 2029  | 5,938                    | 782                    | 2,771                   | 9,491          | 0                     | 0                  | 6,340          | 6,340              | 3,151                   |
| 2030  | 4,579                    | 727                    | 4,352                   | 9,658          | 0                     | 0                  | 6,091          | 6,091              | 3,567                   |
| 2031  | 4,895                    | 685                    | 4,227                   | 9,807          | 0                     | 0                  | 5,912          | 5,912              | 3,894                   |
| 2032  | 4,691                    | 653                    | 4,179                   | 9,524          | 0                     | 0                  | 5,751          | 5,751              | 3,772                   |
| 2033  | 4,289                    | 573                    | 3,776                   | 8,639          | 0                     | 0                  | 5,282          | 5,282              | 3,357                   |
| 2034  | 3,822                    | 513                    | 3,486                   | 7,820          | 0                     | 0                  | 4,942          | 4,942              | 2,878                   |
| 2035  | 2,971                    | 392                    | 2,763                   | 6,126          | 0                     | 0                  | 3,882          | 3,882              | 2,243                   |
| 2036  | 2,415                    | 286                    | 1,383                   | 4,085          | 0                     | 0                  | 2,917          | 2,917              | 1,167                   |
| 2037  | 1,898                    | 199                    | 834                     | 2,930          | 0                     | 0                  | 2,113          | 2,113              | 817                     |
| 2038  | 1,225                    | 131                    | 419                     | 1,774          | 0                     | 0                  | 1,445          | 1,445              | 330                     |
| 2039  | 802                      | 82                     | 284                     | 1,168          | 0                     | 0                  | 951            | 951                | 217                     |
| 2040  | 560                      | 49                     | 174                     | 783            | 0                     | 0                  | 607            | 607                | 176                     |
| 2041  | 285                      | 28                     | 252                     | 564            | 0                     | 0                  | 384            | 384                | 180                     |
| 2042  | 179                      | 15                     | 140                     | 334            | 0                     | 0                  | 243            | 243                | 92                      |
| <b>NOMINAL</b>                              | <b>100,653</b>           | <b>17,177</b>          | <b>80,214</b>           | <b>198,044</b> | <b>14,726</b>         | <b>20,316</b>      | <b>124,720</b> | <b>159,761</b>     | <b>38,283</b>           |
| <b>NPV</b>                                  | <b>52,025</b>            | <b>9,591</b>           | <b>40,539</b>           | <b>102,155</b> | <b>12,697</b>         | <b>17,588</b>      | <b>64,985</b>  | <b>95,270</b>      | <b>6,885</b>            |
| Utility Discount Rate = 6.46                |                          |                        |                         |                |                       |                    |                |                    |                         |
| <b>Benefit Cost Ratio = 1.072</b>           |                          |                        |                         |                |                       |                    |                |                    |                         |

| <b>PROGRAM: Residential Incentive - Participant</b> |  |                                       |   |                                   |                                       |                                |   |
|---|--|---------------------------------------|---|-----------------------------------|---------------------------------------|--------------------------------|---|
|   | <b>BENEFITS</b>                                      |                                       |   |                                   | <b>COSTS</b>                          |                                | <b>(7)<br/>NET BENEFITS<br/>TO<br/>PARTICIPANTS</b> |
|   | <b>(1)<br/>SAVINGS IN<br/>PARTICIPANT'S<br/>BILL</b> | <b>(2)<br/>INCENTIVE<br/>PAYMENTS</b> | <b>(3)<br/>OTHER<br/>PARTICIPANT'S<br/>BENEFITS</b> | <b>(4)<br/>TOTAL<br/>BENEFITS</b> | <b>(5)<br/>PARTICIPANT'S<br/>COST</b> | <b>(6)<br/>TOTAL<br/>COSTS</b> |   |
| <b>YEAR</b>   | <b>\$(000)</b>                                       | <b>\$(000)</b>                        | <b>\$(000)</b>                                      | <b>\$(000)</b>                    | <b>\$(000)</b>                        | <b>\$(000)</b>                 | <b>\$(000)</b>                                      |
| 2015  | 1,221  | 4,486                                 | 0   | 5,707                             | 10,064                                | 10,064                         | -4,357  |
| 2016  | 2,261  | 3,913                                 | 0   | 6,175                             | 8,768                                 | 8,768                          | -2,593  |
| 2017  | 3,392  | 3,410                                 | 0   | 6,802                             | 7,639                                 | 7,639                          | -837  |
| 2018  | 4,345  | 2,773                                 | 0   | 7,118                             | 6,213                                 | 6,213                          | 905   |
| 2019  | 5,365  | 2,105                                 | 0   | 7,469                             | 4,718                                 | 4,718                          | 2,751   |
| 2020  | 5,949  | 1,492                                 | 0   | 7,441                             | 3,343                                 | 3,343                          | 4,098   |
| 2021  | 6,435  | 987                                   | 0   | 7,422                             | 2,211                                 | 2,211                          | 5,211   |
| 2022  | 7,116  | 610                                   | 0   | 7,726                             | 1,364                                 | 1,364                          | 6,361   |
| 2023  | 7,442  | 352                                   | 0   | 7,794                             | 787                                   | 787                            | 7,007   |
| 2024  | 7,526  | 189                                   | 0   | 7,715                             | 423                                   | 423                            | 7,292   |
| 2025  | 7,108  | 0                                     | 0   | 7,108                             | 0                                     | 0                              | 7,108   |
| 2026  | 6,691  | 0                                     | 0   | 6,691                             | 0                                     | 0                              | 6,691   |
| 2027  | 6,558  | 0                                     | 0   | 6,558                             | 0                                     | 0                              | 6,558   |
| 2028  | 6,450  | 0                                     | 0   | 6,450                             | 0                                     | 0                              | 6,450   |
| 2029  | 6,340  | 0                                     | 0   | 6,340                             | 0                                     | 0                              | 6,340   |
| 2030  | 6,091  | 0                                     | 0   | 6,091                             | 0                                     | 0                              | 6,091   |
| 2031  | 5,912  | 0                                     | 0   | 5,912                             | 0                                     | 0                              | 5,912   |
| 2032  | 5,751  | 0                                     | 0   | 5,751                             | 0                                     | 0                              | 5,751   |
| 2033  | 5,282  | 0                                     | 0   | 5,282                             | 0                                     | 0                              | 5,282   |
| 2034  | 4,942  | 0                                     | 0   | 4,942                             | 0                                     | 0                              | 4,942   |
| 2035  | 3,882  | 0                                     | 0   | 3,882                             | 0                                     | 0                              | 3,882   |
| 2036  | 2,917  | 0                                     | 0   | 2,917                             | 0                                     | 0                              | 2,917   |
| 2037  | 2,113  | 0                                     | 0   | 2,113                             | 0                                     | 0                              | 2,113   |
| 2038  | 1,445  | 0                                     | 0   | 1,445                             | 0                                     | 0                              | 1,445   |
| 2039  | 951  | 0                                     | 0   | 951                               | 0                                     | 0                              | 951   |
| 2040  | 607  | 0                                     | 0   | 607                               | 0                                     | 0                              | 607   |
| 2041  | 384  | 0                                     | 0   | 384                               | 0                                     | 0                              | 384   |
| 2042  | 243  | 0                                     | 0   | 243                               | 0                                     | 0                              | 243   |
| <b>NOMINAL</b>                                      | <b>124,720</b>                                       | <b>20,316</b>                         | <b>0</b>  | <b>145,035</b>                    | <b>45,531</b>                         | <b>45,531</b>                  | <b>99,505</b>                                       |
| <b>NPV</b>  | <b>64,985</b>  | <b>17,588</b>                         | <b>0</b>  | <b>82,573</b>                     | <b>39,421</b>                         | <b>39,421</b>                  | <b>43,152</b>                                       |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 2.095**

| <b>PROGRAM: Residential Incentive - TRC</b> |                                |                              |                               |                                  |                   |                       |                             |                |                        |
|---|--------------------------------|------------------------------|-------------------------------|----------------------------------|-------------------|-----------------------|-----------------------------|----------------|------------------------|
|   | <b>BENEFITS</b>                |                              |                               |                                  |                   | <b>COSTS</b>          |                             |                | <b>(9)</b>             |
|   | <b>(1)</b>                     | <b>(2)</b>                   | <b>(3)</b>                    | <b>(4)</b>                       | <b>(5)</b>        | <b>(6)</b>            | <b>(7)</b>                  | <b>(8)</b>     |                        |
|   | TOTAL<br>FUEL & O&M<br>SAVINGS | AVOIDED<br>T&D CAP.<br>COSTS | AVOIDED<br>GEN. CAP.<br>COSTS | OTHER<br>PARTICIPANT<br>BENEFITS | TOTAL<br>BENEFITS | PARTICIPANT'S<br>COST | UTILITY<br>PROGRAM<br>COSTS | TOTAL<br>COSTS | TRC<br>NET<br>BENEFITS |
| YEAR  | \$(000)                        | \$(000)                      | \$(000)                       | \$(000)                          | \$(000)           | \$(000)               | \$(000)                     | \$(000)        | \$(000)                |
| 2015  | 608                            | 244                          | 0                             | 0                                | 852               | 10,064                | 3,038                       | 13,102         | -12,250                |
| 2016  | 1,126                          | 458                          | 0                             | 0                                | 1,585             | 8,768                 | 2,835                       | 11,604         | -10,019                |
| 2017  | 1,705                          | 645                          | 0                             | 0                                | 2,349             | 7,639                 | 2,495                       | 10,134         | -7,785                 |
| 2018  | 3,655                          | 796                          | 1,952                         | 0                                | 6,404             | 6,213                 | 2,050                       | 8,263          | -1,859                 |
| 2019  | 5,523                          | 911                          | 2,354                         | 0                                | 8,789             | 4,718                 | 1,571                       | 6,289          | 2,499                  |
| 2020  | 6,160                          | 993                          | 2,580                         | 0                                | 9,733             | 3,343                 | 1,141                       | 4,484          | 5,249                  |
| 2021  | 4,593                          | 1,047                        | 6,843                         | 0                                | 12,483            | 2,211                 | 737                         | 2,948          | 9,535                  |
| 2022  | 5,899                          | 1,080                        | 7,190                         | 0                                | 14,169            | 1,364                 | 455                         | 1,819          | 12,350                 |
| 2023  | 5,755                          | 1,100                        | 7,463                         | 0                                | 14,317            | 787                   | 262                         | 1,049          | 13,268                 |
| 2024  | 5,461                          | 1,110                        | 5,158                         | 0                                | 11,729            | 423                   | 141                         | 564            | 11,165                 |
| 2025  | 5,951                          | 1,026                        | 4,880                         | 0                                | 11,857            | 0                     | 0                           | 0              | 11,857                 |
| 2026  | 5,594                          | 948                          | 3,012                         | 0                                | 9,553             | 0                     | 0                           | 0              | 9,553                  |
| 2027  | 4,940                          | 879                          | 6,902                         | 0                                | 12,722            | 0                     | 0                           | 0              | 12,722                 |
| 2028  | 5,137                          | 824                          | 2,838                         | 0                                | 8,799             | 0                     | 0                           | 0              | 8,799                  |
| 2029  | 5,938                          | 782                          | 2,771                         | 0                                | 9,491             | 0                     | 0                           | 0              | 9,491                  |
| 2030  | 4,579                          | 727                          | 4,352                         | 0                                | 9,658             | 0                     | 0                           | 0              | 9,658                  |
| 2031  | 4,895                          | 685                          | 4,227                         | 0                                | 9,807             | 0                     | 0                           | 0              | 9,807                  |
| 2032  | 4,691                          | 653                          | 4,179                         | 0                                | 9,524             | 0                     | 0                           | 0              | 9,524                  |
| 2033  | 4,289                          | 573                          | 3,776                         | 0                                | 8,639             | 0                     | 0                           | 0              | 8,639                  |
| 2034  | 3,822                          | 513                          | 3,486                         | 0                                | 7,820             | 0                     | 0                           | 0              | 7,820                  |
| 2035  | 2,971                          | 392                          | 2,763                         | 0                                | 6,126             | 0                     | 0                           | 0              | 6,126                  |
| 2036  | 2,415                          | 286                          | 1,383                         | 0                                | 4,085             | 0                     | 0                           | 0              | 4,085                  |
| 2037  | 1,898                          | 199                          | 834                           | 0                                | 2,930             | 0                     | 0                           | 0              | 2,930                  |
| 2038  | 1,225                          | 131                          | 419                           | 0                                | 1,774             | 0                     | 0                           | 0              | 1,774                  |
| 2039  | 802                            | 82                           | 284                           | 0                                | 1,168             | 0                     | 0                           | 0              | 1,168                  |
| 2040  | 560                            | 49                           | 174                           | 0                                | 783               | 0                     | 0                           | 0              | 783                    |
| 2041  | 285                            | 28                           | 252                           | 0                                | 564               | 0                     | 0                           | 0              | 564                    |
| 2042  | 179                            | 15                           | 140                           | 0                                | 334               | 0                     | 0                           | 0              | 334                    |
| <b>NOMINAL</b>                              | <b>100,653</b>                 | <b>17,177</b>                | <b>80,214</b>                 | <b>0</b>                         | <b>198,044</b>    | <b>45,531</b>         | <b>14,726</b>               | <b>60,256</b>  | <b>137,787</b>         |
| <b>NPV</b>                                  | <b>52,025</b>                  | <b>9,591</b>                 | <b>40,539</b>                 | <b>0</b>                         | <b>102,155</b>    | <b>39,421</b>         | <b>12,697</b>               | <b>52,118</b>  | <b>50,037</b>          |
| Utility Discount Rate = 6.46                |                                |                              |                               |                                  |                   |                       |                             |                |                        |
| <b>Benefit Cost Ratio = 1.960</b>           |                                |                              |                               |                                  |                   |                       |                             |                |                        |

| PROGRAM: Neighborhood Energy Saver - RIM |  |  |   |                                     |   |   |                                     |                                  |                        |
|--|--|--|---|-------------------------------------|---|---|-------------------------------------|----------------------------------|------------------------|
|  | BENEFITS   |  |   |                                     | COSTS   |   |                                     |                                  | RIM<br>NET<br>BENEFITS |
|  | (1)<br>TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | (2)<br>AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | (3)<br>AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | (4)<br>TOTAL<br>BENEFITS<br>\$(000) | (5)<br>UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | (6)<br>INCENTIVE<br>PAYMENTS<br>\$(000) | (7)<br>REVENUE<br>LOSSES<br>\$(000) | (8)<br>TOTAL<br>COSTS<br>\$(000) |                        |
| 2015                                     | 570  | 147  | 0   | 717                                 | 1,213   | 2,645                                   | 1,220                               | 5,078                            | -4,360                 |
| 2016                                     | 984  | 275  | 0   | 1,259                               | 1,058   | 2,645                                   | 2,082                               | 5,785                            | -4,526                 |
| 2017                                     | 1,523  | 403  | 0   | 1,926                               | 1,061   | 2,645                                   | 3,154                               | 6,861                            | -4,935                 |
| 2018                                     | 3,065  | 530  | 1,325   | 4,920                               | 1,086   | 2,645                                   | 4,238                               | 7,968                            | -3,048                 |
| 2019                                     | 4,754  | 658  | 1,732   | 7,144                               | 1,089   | 2,719                                   | 5,610                               | 9,419                            | -2,275                 |
| 2020                                     | 5,639  | 772  | 2,043   | 8,454                               | 1,099   | 2,539                                   | 6,419                               | 10,056                           | -1,602                 |
| 2021                                     | 4,935  | 900  | 5,992   | 11,826                              | 1,108   | 2,539                                   | 7,679                               | 11,326                           | 500                    |
| 2022                                     | 6,741  | 1,016  | 6,885   | 14,641                              | 1,118   | 2,539                                   | 9,145                               | 12,802                           | 1,839                  |
| 2023                                     | 7,285  | 1,131  | 7,818   | 16,234                              | 1,128   | 2,539                                   | 10,335                              | 14,002                           | 2,232                  |
| 2024                                     | 7,604  | 1,246  | 5,898   | 14,748                              | 1,138   | 2,539                                   | 11,302                              | 14,979                           | -231                   |
| 2025                                     | 8,001  | 1,159  | 5,610   | 14,769                              | 0   | 0                                       | 10,430                              | 10,430                           | 4,339                  |
| 2026                                     | 7,466  | 1,077  | 3,482   | 12,026                              | 0   | 0                                       | 9,589                               | 9,589                            | 2,436                  |
| 2027                                     | 6,483  | 996  | 7,945   | 15,424                              | 0   | 0                                       | 9,060                               | 9,060                            | 6,364                  |
| 2028                                     | 6,411  | 915  | 3,200   | 10,526                              | 0   | 0                                       | 8,434                               | 8,434                            | 2,092                  |
| 2029                                     | 6,867  | 833  | 3,001   | 10,700                              | 0   | 0                                       | 7,671                               | 7,671                            | 3,029                  |
| 2030                                     | 6,207  | 750  | 2,884   | 9,841                               | 0   | 0                                       | 6,906                               | 6,906                            | 2,936                  |
| 2031                                     | 4,939  | 668  | 4,193   | 9,799                               | 0   | 0                                       | 6,006                               | 6,006                            | 3,793                  |
| 2032                                     | 4,373  | 597  | 3,892   | 8,862                               | 0   | 0                                       | 5,352                               | 5,352                            | 3,510                  |
| 2033                                     | 3,868  | 526  | 3,536   | 7,930                               | 0   | 0                                       | 4,677                               | 4,677                            | 3,253                  |
| 2034                                     | 3,174  | 456  | 3,165   | 6,795                               | 0   | 0                                       | 3,977                               | 3,977                            | 2,818                  |
| 2035                                     | 2,858  | 410  | 2,947   | 6,214                               | 0   | 0                                       | 3,617                               | 3,617                            | 2,597                  |
| 2036                                     | 2,801  | 363  | 1,792   | 4,956                               | 0   | 0                                       | 3,240                               | 3,240                            | 1,716                  |
| 2037                                     | 2,737  | 317  | 1,355   | 4,408                               | 0   | 0                                       | 2,878                               | 2,878                            | 1,530                  |
| 2038                                     | 2,201  | 271  | 878   | 3,350                               | 0   | 0                                       | 2,463                               | 2,463                            | 887                    |
| 2039                                     | 1,851  | 224  | 790   | 2,865                               | 0   | 0                                       | 2,054                               | 2,054                            | 812                    |
| 2040                                     | 1,702  | 180  | 647   | 2,528                               | 0   | 0                                       | 1,686                               | 1,686                            | 842                    |
| 2041                                     | 1,318  | 135  | 499   | 1,951                               | 0   | 0                                       | 1,322                               | 1,322                            | 629                    |
| 2042                                     | 718  | 90   | 850   | 1,658                               | 0   | 0                                       | 915                                 | 915                              | 743                    |
| NOMINAL                                  | 117,070  | 17,044   | 82,358  | 216,471                             | 11,097  | 25,996                                  | 151,462                             | 188,554                          | 27,917                 |
| NPV                                      | 58,360   | 8,868  | 40,303  | 107,531                             | 8,506   | 19,993                                  | 77,909                              | 106,408                          | 1,123                  |
| Utility Discount Rate = 6.46             |  |  |   |                                     |   |   |                                     |                                  |                        |
| Benefit Cost Ratio = 1.011               |  |  |   |                                     |   |   |                                     |                                  |                        |

| PROGRAM: Neighborhood Energy Saver - Participant |                                      |                           |                                     |                       |                           |                    |                              |
|--|--------------------------------------|---------------------------|-------------------------------------|-----------------------|---------------------------|--------------------|------------------------------|
| YEAR   | BENEFITS                             |                           |                                     |                       | COSTS                     |                    | NET BENEFITS TO PARTICIPANTS |
|  | (1)<br>SAVINGS IN PARTICIPANT'S BILL | (2)<br>INCENTIVE PAYMENTS | (3)<br>OTHER PARTICIPANT'S BENEFITS | (4)<br>TOTAL BENEFITS | (5)<br>PARTICIPANT'S COST | (6)<br>TOTAL COSTS |                              |
|  | \$(000)                              | \$(000)                   | \$(000)                             | \$(000)               | \$(000)                   | \$(000)            | \$(000)                      |
| 2015   | 1,220                                | 2,645                     | 0                                   | 3,865                 | 2,645                     | 2,645              | 1,220                        |
| 2016   | 2,082                                | 2,645                     | 0                                   | 4,727                 | 2,645                     | 2,645              | 2,082                        |
| 2017   | 3,154                                | 2,645                     | 0                                   | 5,799                 | 2,645                     | 2,645              | 3,154                        |
| 2018   | 4,238                                | 2,645                     | 0                                   | 6,883                 | 2,645                     | 2,645              | 4,238                        |
| 2019   | 5,610                                | 2,719                     | 0                                   | 8,330                 | 2,719                     | 2,719              | 5,610                        |
| 2020   | 6,419                                | 2,539                     | 0                                   | 8,958                 | 2,539                     | 2,539              | 6,419                        |
| 2021   | 7,679                                | 2,539                     | 0                                   | 10,218                | 2,539                     | 2,539              | 7,679                        |
| 2022   | 9,145                                | 2,539                     | 0                                   | 11,684                | 2,539                     | 2,539              | 9,145                        |
| 2023   | 10,335                               | 2,539                     | 0                                   | 12,874                | 2,539                     | 2,539              | 10,335                       |
| 2024   | 11,302                               | 2,539                     | 0                                   | 13,841                | 2,539                     | 2,539              | 11,302                       |
| 2025   | 10,430                               | 0                         | 0                                   | 10,430                | 0                         | 0                  | 10,430                       |
| 2026   | 9,589                                | 0                         | 0                                   | 9,589                 | 0                         | 0                  | 9,589                        |
| 2027   | 9,060                                | 0                         | 0                                   | 9,060                 | 0                         | 0                  | 9,060                        |
| 2028   | 8,434                                | 0                         | 0                                   | 8,434                 | 0                         | 0                  | 8,434                        |
| 2029   | 7,671                                | 0                         | 0                                   | 7,671                 | 0                         | 0                  | 7,671                        |
| 2030   | 6,906                                | 0                         | 0                                   | 6,906                 | 0                         | 0                  | 6,906                        |
| 2031   | 6,006                                | 0                         | 0                                   | 6,006                 | 0                         | 0                  | 6,006                        |
| 2032   | 5,352                                | 0                         | 0                                   | 5,352                 | 0                         | 0                  | 5,352                        |
| 2033   | 4,677                                | 0                         | 0                                   | 4,677                 | 0                         | 0                  | 4,677                        |
| 2034   | 3,977                                | 0                         | 0                                   | 3,977                 | 0                         | 0                  | 3,977                        |
| 2035   | 3,617                                | 0                         | 0                                   | 3,617                 | 0                         | 0                  | 3,617                        |
| 2036   | 3,240                                | 0                         | 0                                   | 3,240                 | 0                         | 0                  | 3,240                        |
| 2037   | 2,878                                | 0                         | 0                                   | 2,878                 | 0                         | 0                  | 2,878                        |
| 2038   | 2,463                                | 0                         | 0                                   | 2,463                 | 0                         | 0                  | 2,463                        |
| 2039   | 2,054                                | 0                         | 0                                   | 2,054                 | 0                         | 0                  | 2,054                        |
| 2040   | 1,686                                | 0                         | 0                                   | 1,686                 | 0                         | 0                  | 1,686                        |
| 2041   | 1,322                                | 0                         | 0                                   | 1,322                 | 0                         | 0                  | 1,322                        |
| 2042   | 915                                  | 0                         | 0                                   | 915                   | 0                         | 0                  | 915                          |
| NOMINAL  | 151,462                              | 25,996                    | 0                                   | 177,458               | 25,996                    | 25,996             | 151,462                      |
| NPV  | 77,909                               | 19,993                    | 0                                   | 97,902                | 19,993                    | 19,993             | 77,909                       |
| Utility Discount Rate = 6.46                     |                                      |                           |                                     |                       |                           |                    |                              |
| Benefit Cost Ratio = 4.897                       |                                      |                           |                                     |                       |                           |                    |                              |

| PROGRAM: Neighborhood Energy Saver - TRC |                                |                              |                               |                                  |                              |                                 |  |                           |                                   |
|--|--------------------------------|------------------------------|-------------------------------|----------------------------------|------------------------------|---------------------------------|--|---------------------------|-----------------------------------|
| YEAR                                     | BENEFITS                       |                              |                               |                                  |                              | COSTS                           |  |                           | TRC<br>NET<br>BENEFITS<br>\$(000) |
|  | (1)                            | (2)                          | (3)                           | (4)                              | (5)                          | (6)                             | (7)                                    | (8)                       |                                   |
|  | TOTAL<br>FUEL & O&M<br>SAVINGS | AVOIDED<br>T&D CAP.<br>COSTS | AVOIDED<br>GEN. CAP.<br>COSTS | OTHER<br>PARTICIPANT<br>BENEFITS | TOTAL<br>BENEFITS<br>\$(000) | PARTICIPANTS<br>COST<br>\$(000) | UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | TOTAL<br>COSTS<br>\$(000) |                                   |
|  | \$(000)                        | \$(000)                      | \$(000)                       | \$(000)                          | \$(000)                      | \$(000)                         | \$(000)                                | \$(000)                   |                                   |
| 2015                                     | 570                            | 147                          | 0                             | 0                                | 717                          | 2,645                           | 1,213                                  | 3,858                     | -3,141                            |
| 2016                                     | 984                            | 275                          | 0                             | 0                                | 1,259                        | 2,645                           | 1,058                                  | 3,703                     | -2,444                            |
| 2017                                     | 1,523                          | 403                          | 0                             | 0                                | 1,926                        | 2,645                           | 1,061                                  | 3,706                     | -1,780                            |
| 2018                                     | 3,065                          | 530                          | 1,325                         | 0                                | 4,920                        | 2,645                           | 1,086                                  | 3,731                     | 1,189                             |
| 2019                                     | 4,754                          | 658                          | 1,732                         | 0                                | 7,144                        | 2,719                           | 1,089                                  | 3,808                     | 3,335                             |
| 2020                                     | 5,639                          | 772                          | 2,043                         | 0                                | 8,454                        | 2,539                           | 1,099                                  | 3,638                     | 4,816                             |
| 2021                                     | 4,935                          | 900                          | 5,992                         | 0                                | 11,826                       | 2,539                           | 1,108                                  | 3,647                     | 8,179                             |
| 2022                                     | 6,741                          | 1,016                        | 6,885                         | 0                                | 14,641                       | 2,539                           | 1,118                                  | 3,657                     | 10,984                            |
| 2023                                     | 7,285                          | 1,131                        | 7,818                         | 0                                | 16,234                       | 2,539                           | 1,128                                  | 3,667                     | 12,567                            |
| 2024                                     | 7,604                          | 1,246                        | 5,898                         | 0                                | 14,748                       | 2,539                           | 1,138                                  | 3,677                     | 11,071                            |
| 2025                                     | 8,001                          | 1,159                        | 5,610                         | 0                                | 14,769                       | 0                               | 0                                      | 0                         | 14,769                            |
| 2026                                     | 7,466                          | 1,077                        | 3,482                         | 0                                | 12,026                       | 0                               | 0                                      | 0                         | 12,026                            |
| 2027                                     | 6,483                          | 996                          | 7,945                         | 0                                | 15,424                       | 0                               | 0                                      | 0                         | 15,424                            |
| 2028                                     | 6,411                          | 915                          | 3,200                         | 0                                | 10,526                       | 0                               | 0                                      | 0                         | 10,526                            |
| 2029                                     | 6,867                          | 833                          | 3,001                         | 0                                | 10,700                       | 0                               | 0                                      | 0                         | 10,700                            |
| 2030                                     | 6,207                          | 750                          | 2,884                         | 0                                | 9,841                        | 0                               | 0                                      | 0                         | 9,841                             |
| 2031                                     | 4,939                          | 668                          | 4,193                         | 0                                | 9,799                        | 0                               | 0                                      | 0                         | 9,799                             |
| 2032                                     | 4,373                          | 597                          | 3,892                         | 0                                | 8,862                        | 0                               | 0                                      | 0                         | 8,862                             |
| 2033                                     | 3,868                          | 526                          | 3,536                         | 0                                | 7,930                        | 0                               | 0                                      | 0                         | 7,930                             |
| 2034                                     | 3,174                          | 456                          | 3,165                         | 0                                | 6,795                        | 0                               | 0                                      | 0                         | 6,795                             |
| 2035                                     | 2,858                          | 410                          | 2,947                         | 0                                | 6,214                        | 0                               | 0                                      | 0                         | 6,214                             |
| 2036                                     | 2,801                          | 363                          | 1,792                         | 0                                | 4,956                        | 0                               | 0                                      | 0                         | 4,956                             |
| 2037                                     | 2,737                          | 317                          | 1,355                         | 0                                | 4,408                        | 0                               | 0                                      | 0                         | 4,408                             |
| 2038                                     | 2,201                          | 271                          | 878                           | 0                                | 3,350                        | 0                               | 0                                      | 0                         | 3,350                             |
| 2039                                     | 1,851                          | 224                          | 790                           | 0                                | 2,865                        | 0                               | 0                                      | 0                         | 2,865                             |
| 2040                                     | 1,702                          | 180                          | 647                           | 0                                | 2,528                        | 0                               | 0                                      | 0                         | 2,528                             |
| 2041                                     | 1,318                          | 135                          | 499                           | 0                                | 1,951                        | 0                               | 0                                      | 0                         | 1,951                             |
| 2042                                     | 718                            | 90                           | 850                           | 0                                | 1,658                        | 0                               | 0                                      | 0                         | 1,658                             |
| NOMINAL                                  | 117,070                        | 17,044                       | 82,358                        | 0                                | 216,471                      | 25,996                          | 11,097                                 | 37,092                    | 179,379                           |
| NPV                                      | 58,360                         | 8,868                        | 40,303                        | 0                                | 107,531                      | 19,993                          | 8,506                                  | 28,499                    | 79,032                            |
| Utility Discount Rate = 6.46             |                                |                              |                               |                                  |                              |                                 |  |                           |                                   |
| Benefit Cost Ratio = 3.773               |                                |                              |                               |                                  |                              |                                 |  |                           |                                   |

| <b>PROGRAM: Low Income Weatherization Assistance - RIM</b> |                 |              |               |                 |              |              |               |               |                 |
|--|-----------------|--------------|---------------|-----------------|--------------|--------------|---------------|---------------|-----------------|
|  | <b>BENEFITS</b> |              |               |                 | <b>COSTS</b> |              |               |               |                 |
|  | (1)             | (2)          | (3)           | (4)             | (5)          | (6)          | (7)           | (8)           | (9)             |
|  | TOTAL           | AVOIDED      | AVOIDED       |                 | UTILITY      |              |               |               | <b>RIM</b>      |
|  | FUEL & O&M      | T&D CAP.     | GEN. CAP.     | <b>TOTAL</b>    | PROGRAM      | INCENTIVE    | REVENUE       | <b>TOTAL</b>  | <b>NET</b>      |
|  | SAVINGS         | COSTS        | COSTS         | <b>BENEFITS</b> | COSTS        | PAYMENTS     | LOSSES        | <b>COSTS</b>  | <b>BENEFITS</b> |
| YEAR   | \$(000)         | \$(000)      | \$(000)       | \$(000)         | \$(000)      | \$(000)      | \$(000)       | \$(000)       | \$(000)         |
| 2015   | 52              | 16           | 0             | 68              | 155          | 393          | 110           | 658           | -590            |
| 2016   | 104             | 32           | 0             | 135             | 155          | 393          | 218           | 766           | -631            |
| 2017   | 169             | 48           | 0             | 217             | 157          | 394          | 351           | 901           | -685            |
| 2018   | 355             | 64           | 158           | 577             | 158          | 394          | 486           | 1,038         | -461            |
| 2019   | 563             | 80           | 209           | 851             | 160          | 394          | 656           | 1,210         | -359            |
| 2020   | 697             | 96           | 252           | 1,045           | 164          | 394          | 803           | 1,360         | -315            |
| 2021   | 613             | 112          | 740           | 1,465           | 168          | 394          | 962           | 1,523         | -59             |
| 2022   | 834             | 126          | 849           | 1,808           | 172          | 394          | 1,144         | 1,709         | 99              |
| 2023   | 917             | 140          | 963           | 2,020           | 176          | 394          | 1,291         | 1,861         | 159             |
| 2024   | 939             | 155          | 726           | 1,820           | 181          | 394          | 1,410         | 1,985         | -165            |
| 2025   | 1,028           | 152          | 728           | 1,908           | 0            | 0            | 1,341         | 1,341         | 567             |
| 2026   | 994             | 149          | 476           | 1,619           | 0            | 0            | 1,268         | 1,268         | 351             |
| 2027   | 898             | 146          | 1,152         | 2,195           | 0            | 0            | 1,237         | 1,237         | 958             |
| 2028   | 931             | 143          | 495           | 1,569           | 0            | 0            | 1,196         | 1,196         | 372             |
| 2029   | 1,067           | 140          | 498           | 1,705           | 0            | 0            | 1,139         | 1,139         | 566             |
| 2030   | 1,025           | 134          | 523           | 1,682           | 0            | 0            | 1,070         | 1,070         | 611             |
| 2031   | 849             | 127          | 787           | 1,763           | 0            | 0            | 983           | 983           | 781             |
| 2032   | 798             | 123          | 786           | 1,707           | 0            | 0            | 931           | 931           | 775             |
| 2033   | 731             | 113          | 741           | 1,584           | 0            | 0            | 839           | 839           | 746             |
| 2034   | 623             | 102          | 695           | 1,420           | 0            | 0            | 743           | 743           | 676             |
| 2035   | 547             | 89           | 628           | 1,264           | 0            | 0            | 663           | 663           | 602             |
| 2036   | 522             | 76           | 368           | 966             | 0            | 0            | 578           | 578           | 388             |
| 2037   | 493             | 63           | 264           | 820             | 0            | 0            | 494           | 494           | 326             |
| 2038   | 370             | 50           | 159           | 579             | 0            | 0            | 399           | 399           | 180             |
| 2039   | 282             | 37           | 127           | 446             | 0            | 0            | 304           | 304           | 142             |
| 2040   | 241             | 27           | 97            | 364             | 0            | 0            | 232           | 232           | 133             |
| 2041   | 166             | 18           | 66            | 249             | 0            | 0            | 158           | 158           | 91              |
| 2042   | 62              | 8            | 76            | 146             | 0            | 0            | 77            | 77            | 69              |
| <b>NOMINAL</b>   | <b>16,864</b>   | <b>2,567</b> | <b>12,563</b> | <b>31,993</b>   | <b>1,645</b> | <b>3,935</b> | <b>21,084</b> | <b>26,664</b> | <b>5,329</b>    |
| <b>NPV</b>   | <b>7,994</b>    | <b>1,253</b> | <b>5,801</b>  | <b>15,049</b>   | <b>1,249</b> | <b>3,017</b> | <b>10,372</b> | <b>14,638</b> | <b>410</b>      |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 1.028**

| <b>PROGRAM: Low Income Weatherization Assistance - Participant</b> |                               |                    |                              |                |                    |             |                                     |
|--|-------------------------------|--------------------|------------------------------|----------------|--------------------|-------------|-------------------------------------|
|  | <b>BENEFITS</b>               |                    |                              |                | <b>COSTS</b>       |             | <b>(7)</b>                          |
|  | (1)                           | (2)                | (3)                          | (4)            | (5)                | (6)         |                                     |
|  | SAVINGS IN PARTICIPANT'S BILL | INCENTIVE PAYMENTS | OTHER PARTICIPANT'S BENEFITS | TOTAL BENEFITS | PARTICIPANT'S COST | TOTAL COSTS | <b>NET BENEFITS TO PARTICIPANTS</b> |
| YEAR   | \$(000)                       | \$(000)            | \$(000)                      | \$(000)        | \$(000)            | \$(000)     | \$(000)                             |
| 2015   | 110                           | 393                | 0                            | 503            | 861                | 861         | -358                                |
| 2016   | 218                           | 393                | 0                            | 611            | 861                | 861         | -249                                |
| 2017   | 351                           | 394                | 0                            | 745            | 862                | 862         | -118                                |
| 2018   | 486                           | 394                | 0                            | 880            | 862                | 862         | 18                                  |
| 2019   | 656                           | 394                | 0                            | 1,050          | 862                | 862         | 188                                 |
| 2020   | 803                           | 394                | 0                            | 1,196          | 862                | 862         | 334                                 |
| 2021   | 962                           | 394                | 0                            | 1,356          | 862                | 862         | 493                                 |
| 2022   | 1,144                         | 394                | 0                            | 1,537          | 862                | 862         | 675                                 |
| 2023   | 1,291                         | 394                | 0                            | 1,685          | 862                | 862         | 822                                 |
| 2024   | 1,410                         | 394                | 0                            | 1,804          | 862                | 862         | 942                                 |
| 2025   | 1,341                         | 0                  | 0                            | 1,341          | 0                  | 0           | 1,341                               |
| 2026   | 1,268                         | 0                  | 0                            | 1,268          | 0                  | 0           | 1,268                               |
| 2027   | 1,237                         | 0                  | 0                            | 1,237          | 0                  | 0           | 1,237                               |
| 2028   | 1,196                         | 0                  | 0                            | 1,196          | 0                  | 0           | 1,196                               |
| 2029   | 1,139                         | 0                  | 0                            | 1,139          | 0                  | 0           | 1,139                               |
| 2030   | 1,070                         | 0                  | 0                            | 1,070          | 0                  | 0           | 1,070                               |
| 2031   | 983                           | 0                  | 0                            | 983            | 0                  | 0           | 983                                 |
| 2032   | 931                           | 0                  | 0                            | 931            | 0                  | 0           | 931                                 |
| 2033   | 839                           | 0                  | 0                            | 839            | 0                  | 0           | 839                                 |
| 2034   | 743                           | 0                  | 0                            | 743            | 0                  | 0           | 743                                 |
| 2035   | 663                           | 0                  | 0                            | 663            | 0                  | 0           | 663                                 |
| 2036   | 578                           | 0                  | 0                            | 578            | 0                  | 0           | 578                                 |
| 2037   | 494                           | 0                  | 0                            | 494            | 0                  | 0           | 494                                 |
| 2038   | 399                           | 0                  | 0                            | 399            | 0                  | 0           | 399                                 |
| 2039   | 304                           | 0                  | 0                            | 304            | 0                  | 0           | 304                                 |
| 2040   | 232                           | 0                  | 0                            | 232            | 0                  | 0           | 232                                 |
| 2041   | 158                           | 0                  | 0                            | 158            | 0                  | 0           | 158                                 |
| 2042   | 77                            | 0                  | 0                            | 77             | 0                  | 0           | 77                                  |
| <b>NOMINAL</b>   | 21,084                        | 3,935              | 0                            | 25,019         | 8,621              | 8,621       | 16,398                              |
| <b>NPV</b>   | 10,372                        | 3,017              | 0                            | 13,389         | 6,608              | 6,608       | 6,780                               |

Utility Discount Rate = 6.46  
**Benefit Cost Ratio = 2.026**

**PROGRAM: Low Income Weatherization Assistance - TRC**

| YEAR    | BENEFITS                                  |   |  |   |                              | COSTS                            |  |                           | TRC<br>NET<br>BENEFITS<br>\$(000) |
|---------|---|---|--|---|------------------------------|----------------------------------|--|---------------------------|-----------------------------------|
|         | (1)                                       | (2)                                     | (3)                                      | (4)   | (5)                          | (6)                              | (7)                                    | (8)                       |                                   |
|         | TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | OTHER<br>PARTICIPANT<br>BENEFITS<br>\$(000) | TOTAL<br>BENEFITS<br>\$(000) | PARTICIPANT'S<br>COST<br>\$(000) | UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | TOTAL<br>COSTS<br>\$(000) |                                   |
| 2015    | 52  | 16                                      | 0  | 0   | 68                           | 861                              | 155                                    | 1,016                     | -948                              |
| 2016    | 104                                       | 32                                      | 0  | 0   | 135                          | 861                              | 155                                    | 1,016                     | -880                              |
| 2017    | 169                                       | 48                                      | 0  | 0   | 217                          | 862                              | 157                                    | 1,019                     | -802                              |
| 2018    | 355                                       | 64                                      | 158                                      | 0   | 577                          | 862                              | 158                                    | 1,021                     | -443                              |
| 2019    | 563                                       | 80                                      | 209                                      | 0   | 851                          | 862                              | 160                                    | 1,022                     | -171                              |
| 2020    | 697                                       | 96                                      | 252                                      | 0   | 1,045                        | 862                              | 164                                    | 1,026                     | 19                                |
| 2021    | 613                                       | 112                                     | 740                                      | 0   | 1,465                        | 862                              | 168                                    | 1,030                     | 434                               |
| 2022    | 834                                       | 126                                     | 849                                      | 0   | 1,808                        | 862                              | 172                                    | 1,034                     | 774                               |
| 2023    | 917                                       | 140                                     | 963                                      | 0   | 2,020                        | 862                              | 176                                    | 1,039                     | 981                               |
| 2024    | 939                                       | 155                                     | 726                                      | 0   | 1,820                        | 862                              | 181                                    | 1,043                     | 776                               |
| 2025    | 1,028                                     | 152                                     | 728                                      | 0   | 1,908                        | 0                                | 0                                      | 0                         | 1,908                             |
| 2026    | 994                                       | 149                                     | 476                                      | 0   | 1,619                        | 0                                | 0                                      | 0                         | 1,619                             |
| 2027    | 898                                       | 146                                     | 1,152                                    | 0   | 2,195                        | 0                                | 0                                      | 0                         | 2,195                             |
| 2028    | 931                                       | 143                                     | 495                                      | 0   | 1,569                        | 0                                | 0                                      | 0                         | 1,569                             |
| 2029    | 1,067                                     | 140                                     | 498                                      | 0   | 1,705                        | 0                                | 0                                      | 0                         | 1,705                             |
| 2030    | 1,025                                     | 134                                     | 523                                      | 0   | 1,682                        | 0                                | 0                                      | 0                         | 1,682                             |
| 2031    | 849                                       | 127                                     | 787                                      | 0   | 1,763                        | 0                                | 0                                      | 0                         | 1,763                             |
| 2032    | 798                                       | 123                                     | 786                                      | 0   | 1,707                        | 0                                | 0                                      | 0                         | 1,707                             |
| 2033    | 731                                       | 113                                     | 741                                      | 0   | 1,584                        | 0                                | 0                                      | 0                         | 1,584                             |
| 2034    | 623                                       | 102                                     | 695                                      | 0   | 1,420                        | 0                                | 0                                      | 0                         | 1,420                             |
| 2035    | 547                                       | 89                                      | 628                                      | 0   | 1,264                        | 0                                | 0                                      | 0                         | 1,264                             |
| 2036    | 522                                       | 76                                      | 368                                      | 0   | 966                          | 0                                | 0                                      | 0                         | 966                               |
| 2037    | 493                                       | 63                                      | 264                                      | 0   | 820                          | 0                                | 0                                      | 0                         | 820                               |
| 2038    | 370                                       | 50                                      | 159                                      | 0   | 579                          | 0                                | 0                                      | 0                         | 579                               |
| 2039    | 282                                       | 37                                      | 127                                      | 0   | 446                          | 0                                | 0                                      | 0                         | 446                               |
| 2040    | 241                                       | 27                                      | 97                                       | 0   | 364                          | 0                                | 0                                      | 0                         | 364                               |
| 2041    | 166                                       | 18                                      | 66                                       | 0   | 249                          | 0                                | 0                                      | 0                         | 249                               |
| 2042    | 62  | 8                                       | 76                                       | 0   | 146                          | 0                                | 0                                      | 0                         | 146                               |
| NOMINAL | 16,864                                    | 2,567                                   | 12,563                                   | 0   | 31,993                       | 8,621                            | 1,645                                  | 10,266                    | 21,727                            |
| NPV     | 7,994                                     | 1,253                                   | 5,801                                    | 0   | 15,049                       | 6,608                            | 1,249                                  | 7,858                     | 7,191                             |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 1.915**

| <b>PROGRAM: Residential Energy Management - RIM</b> |                 |          |                |                 |               |                |              |                |                 |
|---|-----------------|----------|----------------|-----------------|---------------|----------------|--------------|----------------|-----------------|
|   | <b>BENEFITS</b> |          |                |                 | <b>COSTS</b>  |                |              |                |                 |
|   | (1)             | (2)      | (3)            | (4)             | (5)           | (6)            | (7)          | (8)            | (9)             |
|   | TOTAL           | AVOIDED  | AVOIDED        |                 | UTILITY       |                |              |                | <b>RIM</b>      |
|   | FUEL & O&M      | T&D CAP. | GEN. CAP.      | <b>TOTAL</b>    | PROGRAM       | INCENTIVE      | REVENUE      | <b>TOTAL</b>   | <b>NET</b>      |
|   | SAVINGS         | COSTS    | COSTS          | <b>BENEFITS</b> | COSTS         | PAYMENTS       | LOSSES       | <b>COSTS</b>   | <b>BENEFITS</b> |
| YEAR  | \$(000)         | \$(000)  | \$(000)        | \$(000)         | \$(000)       | \$(000)        | \$(000)      | \$(000)        | \$(000)         |
| 2015  | 9               | 0        | 0              | 9               | 3,750         | 570            | 0            | 4,320          | -4,311          |
| 2016  | 24              | 0        | 0              | 24              | 3,263         | 1,066          | 0            | 4,329          | -4,305          |
| 2017  | 19              | 0        | 0              | 19              | 3,263         | 1,562          | 0            | 4,825          | -4,806          |
| 2018  | 1,914           | 0        | 2,619          | 4,533           | 3,263         | 2,058          | 21           | 5,342          | -809            |
| 2019  | 4,456           | 0        | 3,425          | 7,882           | 3,263         | 2,554          | 40           | 5,856          | 2,025           |
| 2020  | 5,192           | 0        | 4,113          | 9,305           | 3,263         | 3,050          | 53           | 6,365          | 2,940           |
| 2021  | 2,503           | 0        | 12,033         | 14,535          | 3,263         | 3,545          | 22           | 6,831          | 7,704           |
| 2022  | 4,792           | 0        | 13,966         | 18,758          | 3,263         | 4,041          | 65           | 7,369          | 11,389          |
| 2023  | 4,389           | 0        | 15,991         | 20,380          | 3,263         | 4,537          | 113          | 7,913          | 12,467          |
| 2024  | 11,282          | 0        | 78,178         | 89,460          | 3,263         | 5,033          | 785          | 9,081          | 80,379          |
| 2025  | 5,240           | 0        | 12,417         | 17,657          | 0             | 5,033          | 176          | 5,209          | 12,448          |
| 2026  | 4,945           | 0        | 8,285          | 13,230          | 0             | 5,033          | 135          | 5,169          | 8,062           |
| 2027  | 4,118           | 0        | 20,436         | 24,553          | 0             | 5,033          | 108          | 5,141          | 19,412          |
| 2028  | 4,915           | 0        | 8,957          | 13,872          | 0             | 5,033          | 138          | 5,171          | 8,701           |
| 2029  | 7,841           | 0        | 9,209          | 17,050          | 0             | 5,033          | 241          | 5,274          | 11,775          |
| 2030  | 5,162           | 0        | 6,185          | 11,347          | 0             | 5,033          | 210          | 5,243          | 6,103           |
| 2031  | 6,889           | 0        | 16,020         | 22,909          | 0             | 5,033          | 201          | 5,234          | 17,674          |
| 2032  | 6,678           | 0        | 16,608         | 23,286          | 0             | 5,033          | 200          | 5,233          | 18,052          |
| 2033  | 6,378           | 0        | 17,062         | 23,439          | 0             | 5,033          | 203          | 5,236          | 18,203          |
| 2034  | 5,344           | 0        | 17,574         | 22,917          | 0             | 5,033          | 282          | 5,315          | 17,602          |
| 2035  | 5,336           | 0        | 18,211         | 23,546          | 0             | 5,033          | 290          | 5,323          | 18,223          |
| 2036  | 5,079           | 0        | 12,485         | 17,564          | 0             | 5,033          | 208          | 5,241          | 12,323          |
| 2037  | 6,887           | 0        | 10,817         | 17,704          | 0             | 5,033          | 489          | 5,522          | 12,182          |
| 2038  | 5,263           | 0        | 8,216          | 13,479          | 0             | 5,033          | 262          | 5,295          | 8,184           |
| 2039  | 5,071           | 0        | 8,912          | 13,982          | 0             | 5,033          | 171          | 5,204          | 8,778           |
| 2040  | 7,500           | 0        | 9,122          | 16,622          | 0             | 5,033          | 412          | 5,445          | 11,177          |
| 2041  | 5,209           | 0        | 6,060          | 11,269          | 0             | 5,033          | 292          | 5,325          | 5,944           |
| 2042  | 7,298           | 0        | 23,971         | 31,269          | 0             | 5,033          | 255          | 5,288          | 25,981          |
| <b>NOMINAL</b>                                      | <b>139,727</b>  | <b>0</b> | <b>360,870</b> | <b>500,597</b>  | <b>33,117</b> | <b>118,611</b> | <b>5,371</b> | <b>157,099</b> | <b>343,498</b>  |
| <b>NPV</b>  | <b>56,923</b>   | <b>0</b> | <b>155,145</b> | <b>212,068</b>  | <b>25,503</b> | <b>49,487</b>  | <b>1,962</b> | <b>76,952</b>  | <b>135,116</b>  |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 2.756**

| <b>PROGRAM: Residential Energy Management – Participant</b> |                 |           |               |                 |               |              |                     |
|---|-----------------|-----------|---------------|-----------------|---------------|--------------|---------------------|
|   | <b>BENEFITS</b> |           |               |                 | <b>COSTS</b>  |              |                     |
|   | (1)             | (2)       | (3)           | (4)             | (5)           | (6)          | (7)                 |
|   | SAVINGS IN      |           | OTHER         |                 |               |              | <b>NET BENEFITS</b> |
|   | PARTICIPANT'S   | INCENTIVE | PARTICIPANT'S | <b>TOTAL</b>    | PARTICIPANT'S | <b>TOTAL</b> | <b>TO</b>           |
|   | BILL            | PAYMENTS  | BENEFITS      | <b>BENEFITS</b> | COST          | <b>COSTS</b> | <b>PARTICIPANTS</b> |
| YEAR  | \$(000)         | \$(000)   | \$(000)       | \$(000)         | \$(000)       | \$(000)      | \$(000)             |
| 2015  | 0               | 570       | 0             | 570             | 0             | 0            | 570                 |
| 2016  | 0               | 1,066     | 0             | 1,066           | 0             | 0            | 1,066               |
| 2017  | 0               | 1,562     | 0             | 1,562           | 0             | 0            | 1,562               |
| 2018  | 21              | 2,058     | 0             | 2,079           | 0             | 0            | 2,079               |
| 2019  | 40              | 2,554     | 0             | 2,593           | 0             | 0            | 2,593               |
| 2020  | 53              | 3,050     | 0             | 3,102           | 0             | 0            | 3,102               |
| 2021  | 22              | 3,545     | 0             | 3,568           | 0             | 0            | 3,568               |
| 2022  | 65              | 4,041     | 0             | 4,106           | 0             | 0            | 4,106               |
| 2023  | 113             | 4,537     | 0             | 4,650           | 0             | 0            | 4,650               |
| 2024  | 785             | 5,033     | 0             | 5,818           | 0             | 0            | 5,818               |
| 2025  | 176             | 5,033     | 0             | 5,209           | 0             | 0            | 5,209               |
| 2026  | 135             | 5,033     | 0             | 5,169           | 0             | 0            | 5,169               |
| 2027  | 108             | 5,033     | 0             | 5,141           | 0             | 0            | 5,141               |
| 2028  | 138             | 5,033     | 0             | 5,171           | 0             | 0            | 5,171               |
| 2029  | 241             | 5,033     | 0             | 5,274           | 0             | 0            | 5,274               |
| 2030  | 210             | 5,033     | 0             | 5,243           | 0             | 0            | 5,243               |
| 2031  | 201             | 5,033     | 0             | 5,234           | 0             | 0            | 5,234               |
| 2032  | 200             | 5,033     | 0             | 5,233           | 0             | 0            | 5,233               |
| 2033  | 203             | 5,033     | 0             | 5,236           | 0             | 0            | 5,236               |
| 2034  | 282             | 5,033     | 0             | 5,315           | 0             | 0            | 5,315               |
| 2035  | 290             | 5,033     | 0             | 5,323           | 0             | 0            | 5,323               |
| 2036  | 208             | 5,033     | 0             | 5,241           | 0             | 0            | 5,241               |
| 2037  | 489             | 5,033     | 0             | 5,522           | 0             | 0            | 5,522               |
| 2038  | 262             | 5,033     | 0             | 5,295           | 0             | 0            | 5,295               |
| 2039  | 171             | 5,033     | 0             | 5,204           | 0             | 0            | 5,204               |
| 2040  | 412             | 5,033     | 0             | 5,445           | 0             | 0            | 5,445               |
| 2041  | 292             | 5,033     | 0             | 5,325           | 0             | 0            | 5,325               |
| 2042  | 255             | 5,033     | 0             | 5,288           | 0             | 0            | 5,288               |
| NOMINAL   | 5,371           | 118,611   | 0             | 123,982         | 0             | 0            | 123,982             |
| NPV   | 1,962           | 49,487    | 0             | 51,449          | 0             | 0            | 51,449              |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 9999**

**PROGRAM: Residential Energy Management - TRC**

| YEAR    | BENEFITS                                  |   |  |   |                              | COSTS                            |  |                           | TRC<br>NET<br>BENEFITS |
|---------|---|---|--|---|------------------------------|----------------------------------|--|---------------------------|------------------------|
|         | (1)                                       | (2)                                     | (3)                                      | (4)   | (5)                          | (6)                              | (7)                                    | (8)                       |                        |
|         | TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | OTHER<br>PARTICIPANT<br>BENEFITS<br>\$(000) | TOTAL<br>BENEFITS<br>\$(000) | PARTICIPANT'S<br>COST<br>\$(000) | UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | TOTAL<br>COSTS<br>\$(000) |                        |
| 2015    | 9   | 0                                       | 0  | 0   | 9                            | 0                                | 3,750                                  | 3,750                     | -3,741                 |
| 2016    | 24  | 0                                       | 0  | 0   | 24                           | 0                                | 3,263                                  | 3,263                     | -3,239                 |
| 2017    | 19  | 0                                       | 0  | 0   | 19                           | 0                                | 3,263                                  | 3,263                     | -3,245                 |
| 2018    | 1,914                                     | 0                                       | 2,619                                    | 0   | 4,533                        | 0                                | 3,263                                  | 3,263                     | 1,270                  |
| 2019    | 4,456                                     | 0                                       | 3,425                                    | 0   | 7,882                        | 0                                | 3,263                                  | 3,263                     | 4,619                  |
| 2020    | 5,192                                     | 0                                       | 4,113                                    | 0   | 9,305                        | 0                                | 3,263                                  | 3,263                     | 6,042                  |
| 2021    | 2,503                                     | 0                                       | 12,033                                   | 0   | 14,535                       | 0                                | 3,263                                  | 3,263                     | 11,272                 |
| 2022    | 4,792                                     | 0                                       | 13,966                                   | 0   | 18,758                       | 0                                | 3,263                                  | 3,263                     | 15,495                 |
| 2023    | 4,389                                     | 0                                       | 15,991                                   | 0   | 20,380                       | 0                                | 3,263                                  | 3,263                     | 17,117                 |
| 2024    | 11,282                                    | 0                                       | 78,178                                   | 0   | 89,460                       | 0                                | 3,263                                  | 3,263                     | 86,197                 |
| 2025    | 5,240                                     | 0                                       | 12,417                                   | 0   | 17,657                       | 0                                | 0                                      | 0                         | 17,657                 |
| 2026    | 4,945                                     | 0                                       | 8,285                                    | 0   | 13,230                       | 0                                | 0                                      | 0                         | 13,230                 |
| 2027    | 4,118                                     | 0                                       | 20,436                                   | 0   | 24,553                       | 0                                | 0                                      | 0                         | 24,553                 |
| 2028    | 4,915                                     | 0                                       | 8,957                                    | 0   | 13,872                       | 0                                | 0                                      | 0                         | 13,872                 |
| 2029    | 7,841                                     | 0                                       | 9,209                                    | 0   | 17,050                       | 0                                | 0                                      | 0                         | 17,050                 |
| 2030    | 5,162                                     | 0                                       | 6,185                                    | 0   | 11,347                       | 0                                | 0                                      | 0                         | 11,347                 |
| 2031    | 6,889                                     | 0                                       | 16,020                                   | 0   | 22,909                       | 0                                | 0                                      | 0                         | 22,909                 |
| 2032    | 6,678                                     | 0                                       | 16,608                                   | 0   | 23,286                       | 0                                | 0                                      | 0                         | 23,286                 |
| 2033    | 6,378                                     | 0                                       | 17,062                                   | 0   | 23,439                       | 0                                | 0                                      | 0                         | 23,439                 |
| 2034    | 5,344                                     | 0                                       | 17,574                                   | 0   | 22,917                       | 0                                | 0                                      | 0                         | 22,917                 |
| 2035    | 5,336                                     | 0                                       | 18,211                                   | 0   | 23,546                       | 0                                | 0                                      | 0                         | 23,546                 |
| 2036    | 5,079                                     | 0                                       | 12,485                                   | 0   | 17,564                       | 0                                | 0                                      | 0                         | 17,564                 |
| 2037    | 6,887                                     | 0                                       | 10,817                                   | 0   | 17,704                       | 0                                | 0                                      | 0                         | 17,704                 |
| 2038    | 5,263                                     | 0                                       | 8,216                                    | 0   | 13,479                       | 0                                | 0                                      | 0                         | 13,479                 |
| 2039    | 5,071                                     | 0                                       | 8,912                                    | 0   | 13,982                       | 0                                | 0                                      | 0                         | 13,982                 |
| 2040    | 7,500                                     | 0                                       | 9,122                                    | 0   | 16,622                       | 0                                | 0                                      | 0                         | 16,622                 |
| 2041    | 5,209                                     | 0                                       | 6,060                                    | 0   | 11,269                       | 0                                | 0                                      | 0                         | 11,269                 |
| 2042    | 7,298                                     | 0                                       | 23,971                                   | 0   | 31,269                       | 0                                | 0                                      | 0                         | 31,269                 |
| NOMINAL | 139,727                                   | 0                                       | 360,870                                  | 0   | 500,597                      | 0                                | 33,117                                 | 33,117                    | 467,480                |
| NPV     | 56,923                                    | 0                                       | 155,145                                  | 0   | 212,068                      | 0                                | 25,503                                 | 25,503                    | 186,565                |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 8.316**

**B. COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS**

| PROGRAM: | Better Business - RIM |          |           |          |         |           |         |         |          |
|----------|-----------------------|----------|-----------|----------|---------|-----------|---------|---------|----------|
|          | BENEFITS              |          |           |          | COSTS   |           |         |         |          |
|          | (1)                   | (2)      | (3)       | (4)      | (5)     | (6)       | (7)     | (8)     | (9)      |
|          | TOTAL                 | AVOIDED  | AVOIDED   | TOTAL    | UTILITY | INCENTIVE | REVENUE | TOTAL   | RIM      |
|          | FUEL & O&M            | T&D CAP. | GEN. CAP. | TOTAL    | PROGRAM | PAYMENTS  | LOSSES  | TOTAL   | NET      |
| YEAR     | SAVINGS               | COSTS    | COSTS     | BENEFITS | COSTS   |           |         | COSTS   | BENEFITS |
|          | \$(000)               | \$(000)  | \$(000)   | \$(000)  | \$(000) | \$(000)   | \$(000) | \$(000) | \$(000)  |
| 2015     | 711                   | 146      | 0         | 857      | 1,995   | 1,286     | 1,372   | 4,653   | -3,795   |
| 2016     | 1,259                 | 246      | 0         | 1,505    | 1,995   | 1,034     | 2,373   | 5,402   | -3,896   |
| 2017     | 1,871                 | 333      | 0         | 2,204    | 1,756   | 897       | 3,487   | 6,140   | -3,935   |
| 2018     | 3,370                 | 404      | 1,237     | 5,010    | 1,457   | 730       | 4,414   | 6,601   | -1,591   |
| 2019     | 4,668                 | 458      | 1,480     | 6,606    | 1,139   | 566       | 5,371   | 7,076   | -470     |
| 2020     | 5,213                 | 489      | 1,587     | 7,289    | 852     | 380       | 5,870   | 7,102   | 186      |
| 2021     | 4,317                 | 508      | 4,150     | 8,975    | 581     | 261       | 6,286   | 7,128   | 1,847    |
| 2022     | 5,313                 | 518      | 4,307     | 10,138   | 370     | 158       | 6,827   | 7,354   | 2,784    |
| 2023     | 5,385                 | 523      | 4,429     | 10,336   | 220     | 90        | 7,095   | 7,405   | 2,931    |
| 2024     | 5,267                 | 523      | 3,038     | 8,828    | 122     | 44        | 7,119   | 7,284   | 1,544    |
| 2025     | 5,758                 | 510      | 3,026     | 9,294    | 0       | 0         | 6,982   | 6,982   | 2,312    |
| 2026     | 5,804                 | 499      | 1,972     | 8,274    | 0       | 0         | 6,894   | 6,894   | 1,380    |
| 2027     | 5,547                 | 489      | 4,766     | 10,801   | 0       | 0         | 6,994   | 6,994   | 3,807    |
| 2028     | 5,900                 | 481      | 2,055     | 8,436    | 0       | 0         | 7,067   | 7,067   | 1,369    |
| 2029     | 6,721                 | 475      | 2,087     | 9,284    | 0       | 0         | 7,086   | 7,086   | 2,198    |
| 2030     | 5,664                 | 409      | 1,516     | 7,588    | 0       | 0         | 6,223   | 6,223   | 1,366    |
| 2031     | 4,945                 | 357      | 2,725     | 8,026    | 0       | 0         | 5,522   | 5,522   | 2,504    |
| 2032     | 4,377                 | 311      | 2,466     | 7,153    | 0       | 0         | 4,857   | 4,857   | 2,296    |
| 2033     | 3,974                 | 276      | 2,245     | 6,494    | 0       | 0         | 4,337   | 4,337   | 2,157    |
| 2034     | 3,578                 | 248      | 2,080     | 5,906    | 0       | 0         | 3,935   | 3,935   | 1,971    |
| 2035     | 2,617                 | 166      | 1,432     | 4,215    | 0       | 0         | 2,891   | 2,891   | 1,324    |
| 2036     | 2,139                 | 121      | 716       | 2,976    | 0       | 0         | 2,243   | 2,243   | 733      |
| 2037     | 1,752                 | 87       | 444       | 2,283    | 0       | 0         | 1,746   | 1,746   | 537      |
| 2038     | 1,300                 | 60       | 232       | 1,592    | 0       | 0         | 1,352   | 1,352   | 240      |
| 2039     | 1,003                 | 40       | 168       | 1,211    | 0       | 0         | 1,068   | 1,068   | 143      |
| 2040     | 887                   | 30       | 124       | 1,040    | 0       | 0         | 904     | 904     | 136      |
| 2041     | 762                   | 22       | 81        | 865      | 0       | 0         | 809     | 809     | 55       |
| 2042     | 652                   | 17       | 182       | 851      | 0       | 0         | 755     | 755     | 97       |
| NOMINAL  | 100,750               | 8,746    | 48,543    | 158,039  | 10,486  | 5,445     | 121,878 | 137,809 | 20,229   |
| NPV      | 51,113                | 4,884    | 24,694    | 80,691   | 8,975   | 4,732     | 64,096  | 77,803  | 2,888    |

Utility Discount Rate = 6.46

Benefit Cost Ratio = 1.037

| <b>PROGRAM: Better Business - Participant</b> |                               |                    |                              |                |                    |               |                                     |
|---|-------------------------------|--------------------|------------------------------|----------------|--------------------|---------------|-------------------------------------|
|   | <b>BENEFITS</b>               |                    |                              |                | <b>COSTS</b>       |               | <b>(7)</b>                          |
|   | (1)                           | (2)                | (3)                          | (4)            | (5)                | (6)           |                                     |
|   | SAVINGS IN PARTICIPANT'S BILL | INCENTIVE PAYMENTS | OTHER PARTICIPANT'S BENEFITS | TOTAL BENEFITS | PARTICIPANT'S COST | TOTAL COSTS   | <b>NET BENEFITS TO PARTICIPANTS</b> |
| YEAR  | \$(000)                       | \$(000)            | \$(000)                      | \$(000)        | \$(000)            | \$(000)       | \$(000)                             |
| 2015  | 1,372                         | 1,286              | 0                            | 2,658          | 5,151              | 5,151         | -2,494                              |
| 2016  | 2,373                         | 1,034              | 0                            | 3,407          | 4,189              | 4,189         | -782                                |
| 2017  | 3,487                         | 897                | 0                            | 4,384          | 3,631              | 3,631         | 753                                 |
| 2018  | 4,414                         | 730                | 0                            | 5,144          | 2,947              | 2,947         | 2,197                               |
| 2019  | 5,371                         | 566                | 0                            | 5,937          | 2,295              | 2,295         | 3,642                               |
| 2020  | 5,870                         | 380                | 0                            | 6,250          | 1,545              | 1,545         | 4,705                               |
| 2021  | 6,286                         | 261                | 0                            | 6,547          | 1,056              | 1,056         | 5,491                               |
| 2022  | 6,827                         | 158                | 0                            | 6,985          | 635                | 635           | 6,349                               |
| 2023  | 7,095                         | 90                 | 0                            | 7,185          | 355                | 355           | 6,830                               |
| 2024  | 7,119                         | 44                 | 0                            | 7,163          | 179                | 179           | 6,984                               |
| 2025  | 6,982                         | 0                  | 0                            | 6,982          | 0                  | 0             | 6,982                               |
| 2026  | 6,894                         | 0                  | 0                            | 6,894          | 0                  | 0             | 6,894                               |
| 2027  | 6,994                         | 0                  | 0                            | 6,994          | 0                  | 0             | 6,994                               |
| 2028  | 7,067                         | 0                  | 0                            | 7,067          | 0                  | 0             | 7,067                               |
| 2029  | 7,086                         | 0                  | 0                            | 7,086          | 0                  | 0             | 7,086                               |
| 2030  | 6,223                         | 0                  | 0                            | 6,223          | 0                  | 0             | 6,223                               |
| 2031  | 5,522                         | 0                  | 0                            | 5,522          | 0                  | 0             | 5,522                               |
| 2032  | 4,857                         | 0                  | 0                            | 4,857          | 0                  | 0             | 4,857                               |
| 2033  | 4,337                         | 0                  | 0                            | 4,337          | 0                  | 0             | 4,337                               |
| 2034  | 3,935                         | 0                  | 0                            | 3,935          | 0                  | 0             | 3,935                               |
| 2035  | 2,891                         | 0                  | 0                            | 2,891          | 0                  | 0             | 2,891                               |
| 2036  | 2,243                         | 0                  | 0                            | 2,243          | 0                  | 0             | 2,243                               |
| 2037  | 1,746                         | 0                  | 0                            | 1,746          | 0                  | 0             | 1,746                               |
| 2038  | 1,352                         | 0                  | 0                            | 1,352          | 0                  | 0             | 1,352                               |
| 2039  | 1,068                         | 0                  | 0                            | 1,068          | 0                  | 0             | 1,068                               |
| 2040  | 904                           | 0                  | 0                            | 904            | 0                  | 0             | 904                                 |
| 2041  | 809                           | 0                  | 0                            | 809            | 0                  | 0             | 809                                 |
| 2042  | 755                           | 0                  | 0                            | 755            | 0                  | 0             | 755                                 |
| <b>NOMINAL</b>                                | <b>121,878</b>                | <b>5,445</b>       | <b>0</b>                     | <b>127,323</b> | <b>21,984</b>      | <b>21,984</b> | <b>105,339</b>                      |
| <b>NPV</b>                                    | <b>64,096</b>                 | <b>4,732</b>       | <b>0</b>                     | <b>68,828</b>  | <b>19,100</b>      | <b>19,100</b> | <b>49,728</b>                       |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 3.604**

| PROGRAM: Better Business - TRC |   |   |  |   |                              |                                 |  |                           |                        |
|--------------------------------|---|---|--|---|------------------------------|---------------------------------|--|---------------------------|------------------------|
| YEAR                           | BENEFITS                                  |   |  |   |                              | COSTS                           |  |                           | TRC<br>NET<br>BENEFITS |
|                                | (1)                                       | (2)                                     | (3)                                      | (4)   | (5)                          | (6)                             | (7)                                    | (8)                       |                        |
|                                | TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | OTHER<br>PARTICIPANT<br>BENEFITS<br>\$(000) | TOTAL<br>BENEFITS<br>\$(000) | PARTICIPANTS<br>COST<br>\$(000) | UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | TOTAL<br>COSTS<br>\$(000) |                        |
| 2015                           | 711                                       | 146                                     | 0  | 0   | 857                          | 5,151                           | 1,995                                  | 7,147                     | -6,289                 |
| 2016                           | 1,259                                     | 246                                     | 0  | 0   | 1,505                        | 4,189                           | 1,995                                  | 6,184                     | -4,678                 |
| 2017                           | 1,871                                     | 333                                     | 0  | 0   | 2,204                        | 3,631                           | 1,756                                  | 5,387                     | -3,183                 |
| 2018                           | 3,370                                     | 404                                     | 1,237                                    | 0   | 5,010                        | 2,947                           | 1,457                                  | 4,404                     | 606                    |
| 2019                           | 4,668                                     | 458                                     | 1,480                                    | 0   | 6,606                        | 2,295                           | 1,139                                  | 3,434                     | 3,171                  |
| 2020                           | 5,213                                     | 489                                     | 1,587                                    | 0   | 7,289                        | 1,545                           | 852                                    | 2,397                     | 4,891                  |
| 2021                           | 4,317                                     | 508                                     | 4,150                                    | 0   | 8,975                        | 1,056                           | 581                                    | 1,637                     | 7,339                  |
| 2022                           | 5,313                                     | 518                                     | 4,307                                    | 0   | 10,138                       | 635                             | 370                                    | 1,005                     | 9,133                  |
| 2023                           | 5,385                                     | 523                                     | 4,429                                    | 0   | 10,336                       | 355                             | 220                                    | 575                       | 9,762                  |
| 2024                           | 5,267                                     | 523                                     | 3,038                                    | 0   | 8,828                        | 179                             | 122                                    | 301                       | 8,528                  |
| 2025                           | 5,758                                     | 510                                     | 3,026                                    | 0   | 9,294                        | 0                               | 0                                      | 0                         | 9,294                  |
| 2026                           | 5,804                                     | 499                                     | 1,972                                    | 0   | 8,274                        | 0                               | 0                                      | 0                         | 8,274                  |
| 2027                           | 5,547                                     | 489                                     | 4,766                                    | 0   | 10,801                       | 0                               | 0                                      | 0                         | 10,801                 |
| 2028                           | 5,900                                     | 481                                     | 2,055                                    | 0   | 8,436                        | 0                               | 0                                      | 0                         | 8,436                  |
| 2029                           | 6,721                                     | 475                                     | 2,087                                    | 0   | 9,284                        | 0                               | 0                                      | 0                         | 9,284                  |
| 2030                           | 5,664                                     | 409                                     | 1,516                                    | 0   | 7,588                        | 0                               | 0                                      | 0                         | 7,588                  |
| 2031                           | 4,945                                     | 357                                     | 2,725                                    | 0   | 8,026                        | 0                               | 0                                      | 0                         | 8,026                  |
| 2032                           | 4,377                                     | 311                                     | 2,466                                    | 0   | 7,153                        | 0                               | 0                                      | 0                         | 7,153                  |
| 2033                           | 3,974                                     | 276                                     | 2,245                                    | 0   | 6,494                        | 0                               | 0                                      | 0                         | 6,494                  |
| 2034                           | 3,578                                     | 248                                     | 2,080                                    | 0   | 5,906                        | 0                               | 0                                      | 0                         | 5,906                  |
| 2035                           | 2,617                                     | 166                                     | 1,432                                    | 0   | 4,215                        | 0                               | 0                                      | 0                         | 4,215                  |
| 2036                           | 2,139                                     | 121                                     | 716                                      | 0   | 2,976                        | 0                               | 0                                      | 0                         | 2,976                  |
| 2037                           | 1,752                                     | 87                                      | 444                                      | 0   | 2,283                        | 0                               | 0                                      | 0                         | 2,283                  |
| 2038                           | 1,300                                     | 60                                      | 232                                      | 0   | 1,592                        | 0                               | 0                                      | 0                         | 1,592                  |
| 2039                           | 1,003                                     | 40                                      | 168                                      | 0   | 1,211                        | 0                               | 0                                      | 0                         | 1,211                  |
| 2040                           | 887                                       | 30                                      | 124                                      | 0   | 1,040                        | 0                               | 0                                      | 0                         | 1,040                  |
| 2041                           | 762                                       | 22                                      | 81                                       | 0   | 865                          | 0                               | 0                                      | 0                         | 865                    |
| 2042                           | 652                                       | 17                                      | 182                                      | 0   | 851                          | 0                               | 0                                      | 0                         | 851                    |
| NOMINAL                        | 100,750                                   | 8,746                                   | 48,543                                   | 0   | 158,039                      | 21,984                          | 10,486                                 | 32,470                    | 125,568                |
| NPV                            | 51,113                                    | 4,884                                   | 24,694                                   | 0   | 80,691                       | 19,100                          | 8,975                                  | 28,075                    | 52,616                 |

Utility Discount Rate = 6.46  
Benefit Cost Ratio = 2.874

| <b>PROGRAM: Stand-By Generation - RIM</b> |                           |                     |                  |                 |                |                  |                |                |                 |
|---|---------------------------|---------------------|------------------|-----------------|----------------|------------------|----------------|----------------|-----------------|
|   | <b>BENEFITS</b>           |                     |                  |                 | <b>COSTS</b>   |                  |                |                | <b>(9)</b>      |
|   | <b>(1)</b>                | <b>(2)</b>          | <b>(3)</b>       | <b>(4)</b>      | <b>(5)</b>     | <b>(6)</b>       | <b>(7)</b>     | <b>(8)</b>     |                 |
|   | <b>TOTAL</b>              | <b>AVOIDED</b>      | <b>AVOIDED</b>   |                 | <b>UTILITY</b> |                  |                |                | <b>RIM</b>      |
|   | <b>FUEL &amp; O&amp;M</b> | <b>T&amp;D CAP.</b> | <b>GEN. CAP.</b> | <b>TOTAL</b>    | <b>PROGRAM</b> | <b>INCENTIVE</b> | <b>REVENUE</b> | <b>TOTAL</b>   | <b>NET</b>      |
|   | <b>SAVINGS</b>            | <b>COSTS</b>        | <b>COSTS</b>     | <b>BENEFITS</b> | <b>COSTS</b>   | <b>PAYMENTS</b>  | <b>LOSSES</b>  | <b>COSTS</b>   | <b>BENEFITS</b> |
| <b>YEAR</b>                               | <b>\$(000)</b>            | <b>\$(000)</b>      | <b>\$(000)</b>   | <b>\$(000)</b>  | <b>\$(000)</b> | <b>\$(000)</b>   | <b>\$(000)</b> | <b>\$(000)</b> | <b>\$(000)</b>  |
| 2015                                      | 24                        | 0                   | 0                | 24              | 230            | 216              | 13             | 459            | -436            |
| 2016                                      | 34                        | 0                   | 0                | 34              | 430            | 432              | 18             | 880            | -846            |
| 2017                                      | 35                        | 0                   | 0                | 35              | 630            | 648              | 28             | 1,306          | -1,272          |
| 2018                                      | 747                       | 0                   | 901              | 1,647           | 830            | 864              | 61             | 1,755          | -108            |
| 2019                                      | 1,594                     | 0                   | 1,186            | 2,780           | 1,030          | 1,080            | 34             | 2,144          | 636             |
| 2020                                      | 1,875                     | 0                   | 1,432            | 3,307           | 1,230          | 1,296            | 55             | 2,581          | 725             |
| 2021                                      | 968                       | 0                   | 4,203            | 5,171           | 1,430          | 1,512            | 59             | 3,001          | 2,170           |
| 2022                                      | 1,812                     | 0                   | 4,891            | 6,702           | 1,630          | 1,728            | 89             | 3,447          | 3,255           |
| 2023                                      | 1,791                     | 0                   | 5,612            | 7,402           | 1,830          | 1,944            | 165            | 3,939          | 3,463           |
| 2024                                      | 1,650                     | 0                   | 4,270            | 5,920           | 2,030          | 2,160            | 344            | 4,534          | 1,386           |
| 2025                                      | 2,286                     | 0                   | 4,365            | 6,651           | 2,000          | 2,160            | 317            | 4,477          | 2,173           |
| 2026                                      | 2,202                     | 0                   | 2,912            | 5,114           | 2,000          | 2,160            | 387            | 4,547          | 567             |
| 2027                                      | 1,858                     | 0                   | 7,183            | 9,041           | 2,000          | 2,160            | 344            | 4,504          | 4,537           |
| 2028                                      | 2,086                     | 0                   | 3,148            | 5,234           | 2,000          | 2,160            | 303            | 4,463          | 771             |
| 2029                                      | 3,075                     | 0                   | 3,237            | 6,312           | 2,000          | 2,160            | 295            | 4,455          | 1,856           |
| 2030                                      | 3,233                     | 0                   | 3,527            | 6,760           | 2,000          | 2,160            | 408            | 4,568          | 2,192           |
| 2031                                      | 2,844                     | 0                   | 5,631            | 8,475           | 2,000          | 2,160            | 339            | 4,499          | 3,976           |
| 2032                                      | 2,698                     | 0                   | 5,837            | 8,535           | 2,000          | 2,160            | 308            | 4,468          | 4,068           |
| 2033                                      | 2,537                     | 0                   | 5,997            | 8,533           | 2,000          | 2,160            | 269            | 4,429          | 4,104           |
| 2034                                      | 2,429                     | 0                   | 6,177            | 8,605           | 2,000          | 2,160            | 464            | 4,624          | 3,981           |
| 2035                                      | 2,419                     | 0                   | 6,401            | 8,820           | 2,000          | 2,160            | 483            | 4,643          | 4,177           |
| 2036                                      | 2,366                     | 0                   | 4,388            | 6,754           | 2,000          | 2,160            | 580            | 4,740          | 2,014           |
| 2037                                      | 3,100                     | 0                   | 3,802            | 6,902           | 2,000          | 2,160            | 642            | 4,802          | 2,100           |
| 2038                                      | 2,507                     | 0                   | 2,888            | 5,395           | 2,000          | 2,160            | 665            | 4,825          | 570             |
| 2039                                      | 2,074                     | 0                   | 3,132            | 5,206           | 2,000          | 2,160            | 339            | 4,499          | 707             |
| 2040                                      | 3,075                     | 0                   | 3,206            | 6,281           | 2,000          | 2,160            | 461            | 4,621          | 1,659           |
| 2041                                      | 3,202                     | 0                   | 3,456            | 6,658           | 2,000          | 2,160            | 475            | 4,635          | 2,024           |
| 2042                                      | 2,916                     | 0                   | 8,426            | 11,341          | 2,000          | 2,160            | 286            | 4,446          | 6,895           |
| <b>NOMINAL</b>                            | <b>57,432</b>             | <b>0</b>            | <b>106,207</b>   | <b>163,639</b>  | <b>47,300</b>  | <b>50,760</b>    | <b>8,234</b>   | <b>106,294</b> | <b>57,345</b>   |
| <b>NPV</b>                                | <b>22,349</b>             | <b>0</b>            | <b>42,037</b>    | <b>64,386</b>   | <b>19,782</b>  | <b>21,116</b>    | <b>2,899</b>   | <b>43,797</b>  | <b>20,589</b>   |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 1.470**

| <b>PROGRAM: Stand-By Generation - Participant</b> |                                     |                       |                                    |                           |                       |                        |   |
|---|-------------------------------------|-----------------------|------------------------------------|---------------------------|-----------------------|------------------------|---|
|   | <b>BENEFITS</b>                     |                       |                                    |                           | <b>COSTS</b>          |                        | <b>(7)</b>                                  |
|   | (1)                                 | (2)                   | (3)                                | (4)                       | (5)                   | (6)                    |   |
|   | SAVINGS IN<br>PARTICIPANT'S<br>BILL | INCENTIVE<br>PAYMENTS | OTHER<br>PARTICIPANT'S<br>BENEFITS | <b>TOTAL<br/>BENEFITS</b> | PARTICIPANT'S<br>COST | <b>TOTAL<br/>COSTS</b> | <b>NET BENEFITS<br/>TO<br/>PARTICIPANTS</b> |
| YEAR  | \$(000)                             | \$(000)               | \$(000)                            | \$(000)                   | \$(000)               | \$(000)                | \$(000)                                     |
| 2015  | 13                                  | 216                   | 0                                  | 229                       | 0                     | 0                      | 229   |
| 2016  | 18                                  | 432                   | 0                                  | 450                       | 0                     | 0                      | 450   |
| 2017  | 28                                  | 648                   | 0                                  | 676                       | 0                     | 0                      | 676   |
| 2018  | 61                                  | 864                   | 0                                  | 925                       | 0                     | 0                      | 925   |
| 2019  | 34                                  | 1,080                 | 0                                  | 1,114                     | 0                     | 0                      | 1,114                                       |
| 2020  | 55                                  | 1,296                 | 0                                  | 1,351                     | 0                     | 0                      | 1,351                                       |
| 2021  | 59                                  | 1,512                 | 0                                  | 1,571                     | 0                     | 0                      | 1,571                                       |
| 2022  | 89                                  | 1,728                 | 0                                  | 1,817                     | 0                     | 0                      | 1,817                                       |
| 2023  | 165                                 | 1,944                 | 0                                  | 2,109                     | 0                     | 0                      | 2,109                                       |
| 2024  | 344                                 | 2,160                 | 0                                  | 2,504                     | 0                     | 0                      | 2,504                                       |
| 2025  | 317                                 | 2,160                 | 0                                  | 2,477                     | 0                     | 0                      | 2,477                                       |
| 2026  | 387                                 | 2,160                 | 0                                  | 2,547                     | 0                     | 0                      | 2,547                                       |
| 2027  | 344                                 | 2,160                 | 0                                  | 2,504                     | 0                     | 0                      | 2,504                                       |
| 2028  | 303                                 | 2,160                 | 0                                  | 2,463                     | 0                     | 0                      | 2,463                                       |
| 2029  | 295                                 | 2,160                 | 0                                  | 2,455                     | 0                     | 0                      | 2,455                                       |
| 2030  | 408                                 | 2,160                 | 0                                  | 2,568                     | 0                     | 0                      | 2,568                                       |
| 2031  | 339                                 | 2,160                 | 0                                  | 2,499                     | 0                     | 0                      | 2,499                                       |
| 2032  | 308                                 | 2,160                 | 0                                  | 2,468                     | 0                     | 0                      | 2,468                                       |
| 2033  | 269                                 | 2,160                 | 0                                  | 2,429                     | 0                     | 0                      | 2,429                                       |
| 2034  | 464                                 | 2,160                 | 0                                  | 2,624                     | 0                     | 0                      | 2,624                                       |
| 2035  | 483                                 | 2,160                 | 0                                  | 2,643                     | 0                     | 0                      | 2,643                                       |
| 2036  | 580                                 | 2,160                 | 0                                  | 2,740                     | 0                     | 0                      | 2,740                                       |
| 2037  | 642                                 | 2,160                 | 0                                  | 2,802                     | 0                     | 0                      | 2,802                                       |
| 2038  | 665                                 | 2,160                 | 0                                  | 2,825                     | 0                     | 0                      | 2,825                                       |
| 2039  | 339                                 | 2,160                 | 0                                  | 2,499                     | 0                     | 0                      | 2,499                                       |
| 2040  | 461                                 | 2,160                 | 0                                  | 2,621                     | 0                     | 0                      | 2,621                                       |
| 2041  | 475                                 | 2,160                 | 0                                  | 2,635                     | 0                     | 0                      | 2,635                                       |
| 2042  | 286                                 | 2,160                 | 0                                  | 2,446                     | 0                     | 0                      | 2,446                                       |
| <b>NOMINAL</b>                                    | 8,234                               | 50,760                | 0                                  | 58,994                    | 0                     | 0                      | 58,994                                      |
| <b>NPV</b>  | 2,899                               | 21,116                | 0                                  | 24,015                    | 0                     | 0                      | 24,015                                      |

Utility Discount Rate = 6.46  
**Benefit Cost Ratio = 9999**

| PROGRAM: Stand-By Generation - TRC |                                       |                                     |                                      |   |                          |                              |                                    |                       |                        |
|------------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|---|--------------------------|------------------------------|------------------------------------|-----------------------|------------------------|
| YEAR                               | BENEFITS                              |                                     |                                      |   |                          | COSTS                        |                                    |                       | TRC<br>NET<br>BENEFITS |
|                                    | (1)<br>TOTAL<br>FUEL & O&M<br>SAVINGS | (2)<br>AVOIDED<br>T&D CAP.<br>COSTS | (3)<br>AVOIDED<br>GEN. CAP.<br>COSTS | (4)<br>OTHER<br>PARTICIPANT<br>BENEFITS | (5)<br>TOTAL<br>BENEFITS | (6)<br>PARTICIPANT'S<br>COST | (7)<br>UTILITY<br>PROGRAM<br>COSTS | (8)<br>TOTAL<br>COSTS |                        |
|                                    | \$(000)                               | \$(000)                             | \$(000)                              | \$(000)                                 | \$(000)                  | \$(000)                      | \$(000)                            | \$(000)               | \$(000)                |
| 2015                               | 24                                    | 0                                   | 0                                    | 0                                       | 24                       | 0                            | 230                                | 230                   | -206                   |
| 2016                               | 34                                    | 0                                   | 0                                    | 0                                       | 34                       | 0                            | 430                                | 430                   | -396                   |
| 2017                               | 35                                    | 0                                   | 0                                    | 0                                       | 35                       | 0                            | 630                                | 630                   | -595                   |
| 2018                               | 747                                   | 0                                   | 901                                  | 0                                       | 1,647                    | 0                            | 830                                | 830                   | 817                    |
| 2019                               | 1,534                                 | 0                                   | 1,186                                | 0                                       | 2,780                    | 0                            | 1,030                              | 1,030                 | 1,750                  |
| 2020                               | 1,875                                 | 0                                   | 1,432                                | 0                                       | 3,307                    | 0                            | 1,230                              | 1,230                 | 2,077                  |
| 2021                               | 968                                   | 0                                   | 4,203                                | 0                                       | 5,171                    | 0                            | 1,430                              | 1,430                 | 3,741                  |
| 2022                               | 1,812                                 | 0                                   | 4,891                                | 0                                       | 6,702                    | 0                            | 1,630                              | 1,630                 | 5,072                  |
| 2023                               | 1,791                                 | 0                                   | 5,612                                | 0                                       | 7,402                    | 0                            | 1,830                              | 1,830                 | 5,572                  |
| 2024                               | 1,650                                 | 0                                   | 4,270                                | 0                                       | 5,920                    | 0                            | 2,030                              | 2,030                 | 3,890                  |
| 2025                               | 2,286                                 | 0                                   | 4,365                                | 0                                       | 6,651                    | 0                            | 2,000                              | 2,000                 | 4,651                  |
| 2026                               | 2,202                                 | 0                                   | 2,912                                | 0                                       | 5,114                    | 0                            | 2,000                              | 2,000                 | 3,114                  |
| 2027                               | 1,858                                 | 0                                   | 7,183                                | 0                                       | 9,041                    | 0                            | 2,000                              | 2,000                 | 7,041                  |
| 2028                               | 2,086                                 | 0                                   | 3,148                                | 0                                       | 5,234                    | 0                            | 2,000                              | 2,000                 | 3,234                  |
| 2029                               | 3,075                                 | 0                                   | 3,237                                | 0                                       | 6,312                    | 0                            | 2,000                              | 2,000                 | 4,312                  |
| 2030                               | 3,233                                 | 0                                   | 3,527                                | 0                                       | 6,760                    | 0                            | 2,000                              | 2,000                 | 4,760                  |
| 2031                               | 2,844                                 | 0                                   | 5,631                                | 0                                       | 8,475                    | 0                            | 2,000                              | 2,000                 | 6,475                  |
| 2032                               | 2,698                                 | 0                                   | 5,837                                | 0                                       | 8,535                    | 0                            | 2,000                              | 2,000                 | 6,535                  |
| 2033                               | 2,537                                 | 0                                   | 5,997                                | 0                                       | 8,533                    | 0                            | 2,000                              | 2,000                 | 6,533                  |
| 2034                               | 2,429                                 | 0                                   | 6,177                                | 0                                       | 8,605                    | 0                            | 2,000                              | 2,000                 | 6,605                  |
| 2035                               | 2,419                                 | 0                                   | 6,401                                | 0                                       | 8,820                    | 0                            | 2,000                              | 2,000                 | 6,820                  |
| 2036                               | 2,366                                 | 0                                   | 4,388                                | 0                                       | 6,754                    | 0                            | 2,000                              | 2,000                 | 4,754                  |
| 2037                               | 3,100                                 | 0                                   | 3,802                                | 0                                       | 6,902                    | 0                            | 2,000                              | 2,000                 | 4,902                  |
| 2038                               | 2,507                                 | 0                                   | 2,888                                | 0                                       | 5,395                    | 0                            | 2,000                              | 2,000                 | 3,395                  |
| 2039                               | 2,074                                 | 0                                   | 3,132                                | 0                                       | 5,206                    | 0                            | 2,000                              | 2,000                 | 3,206                  |
| 2040                               | 3,075                                 | 0                                   | 3,206                                | 0                                       | 6,281                    | 0                            | 2,000                              | 2,000                 | 4,281                  |
| 2041                               | 3,202                                 | 0                                   | 3,456                                | 0                                       | 6,658                    | 0                            | 2,000                              | 2,000                 | 4,658                  |
| 2042                               | 2,916                                 | 0                                   | 8,426                                | 0                                       | 11,341                   | 0                            | 2,000                              | 2,000                 | 9,341                  |
| NOMINAL                            | 57,432                                | 0                                   | 106,207                              | 0                                       | 163,639                  | 0                            | 47,300                             | 47,300                | 116,339                |
| NPV                                | 22,349                                | 0                                   | 42,037                               | 0                                       | 64,386                   | 0                            | 19,782                             | 19,782                | 44,604                 |

Utility Discount Rate = 6.46

Benefit Cost Ratio = 3.255

| <b>PROGRAM: Interruptible Service - RIM</b> |                                |                              |                               |                   |                             |                       |                   |                |                                 |
|---|--------------------------------|------------------------------|-------------------------------|-------------------|-----------------------------|-----------------------|-------------------|----------------|---------------------------------|
|   | <b>BENEFITS</b>                |                              |                               |                   | <b>COSTS</b>                |                       |                   |                | <b>(9)</b>                      |
|   | (1)                            | (2)                          | (3)                           | (4)               | (5)                         | (6)                   | (7)               | (8)            |                                 |
|   | TOTAL<br>FUEL & O&M<br>SAVINGS | AVOIDED<br>T&D CAP.<br>COSTS | AVOIDED<br>GEN. CAP.<br>COSTS | TOTAL<br>BENEFITS | UTILITY<br>PROGRAM<br>COSTS | INCENTIVE<br>PAYMENTS | REVENUE<br>LOSSES | TOTAL<br>COSTS | <b>RIM<br/>NET<br/>BENEFITS</b> |
| YEAR  | \$(000)                        | \$(000)                      | \$(000)                       | \$(000)           | \$(000)                     | \$(000)               | \$(000)           | \$(000)        | \$(000)                         |
| 2015  | 0                              | 0                            | 0                             | 0                 | 17                          | 42                    | 0                 | 60             | -60                             |
| 2016  | 1                              | 0                            | 0                             | 1                 | 18                          | 85                    | 0                 | 103            | -103                            |
| 2017  | 1                              | 0                            | 0                             | 1                 | 19                          | 127                   | 1                 | 148            | -147                            |
| 2018  | 49                             | 0                            | 68                            | 117               | 20                          | 170                   | 1                 | 191            | -73                             |
| 2019  | 118                            | 0                            | 90                            | 208               | 22                          | 65                    | 1                 | 87             | 121                             |
| 2020  | 138                            | 0                            | 108                           | 246               | 23                          | 78                    | 1                 | 102            | 144                             |
| 2021  | 67                             | 0                            | 318                           | 385               | 24                          | 91                    | 1                 | 115            | 270                             |
| 2022  | 136                            | 0                            | 370                           | 506               | 25                          | 103                   | 5                 | 133            | 372                             |
| 2023  | 129                            | 0                            | 425                           | 554               | 27                          | 116                   | 6                 | 149            | 405                             |
| 2024  | 81                             | 0                            | 323                           | 405               | 28                          | 129                   | 2                 | 159            | 246                             |
| 2025  | 159                            | 0                            | 330                           | 489               | 12                          | 129                   | 12                | 153            | 336                             |
| 2026  | 147                            | 0                            | 221                           | 368               | 12                          | 129                   | 12                | 153            | 214                             |
| 2027  | 125                            | 0                            | 544                           | 668               | 12                          | 129                   | 12                | 154            | 515                             |
| 2028  | 146                            | 0                            | 238                           | 384               | 12                          | 129                   | 13                | 155            | 230                             |
| 2029  | 226                            | 0                            | 245                           | 471               | 12                          | 129                   | 15                | 156            | 315                             |
| 2030  | 292                            | 0                            | 355                           | 647               | 12                          | 129                   | 16                | 158            | 489                             |
| 2031  | 204                            | 0                            | 426                           | 630               | 12                          | 129                   | 16                | 157            | 473                             |
| 2032  | 197                            | 0                            | 442                           | 638               | 12                          | 129                   | 17                | 158            | 480                             |
| 2033  | 191                            | 0                            | 454                           | 645               | 12                          | 129                   | 14                | 156            | 489                             |
| 2034  | 166                            | 0                            | 468                           | 634               | 12                          | 129                   | 19                | 160            | 473                             |
| 2035  | 163                            | 0                            | 485                           | 647               | 12                          | 129                   | 20                | 161            | 486                             |
| 2036  | 154                            | 0                            | 332                           | 486               | 12                          | 129                   | 20                | 161            | 324                             |
| 2037  | 204                            | 0                            | 288                           | 492               | 12                          | 129                   | 24                | 165            | 327                             |
| 2038  | 160                            | 0                            | 219                           | 379               | 12                          | 129                   | 23                | 165            | 214                             |
| 2039  | 146                            | 0                            | 237                           | 383               | 12                          | 129                   | 14                | 156            | 228                             |
| 2040  | 222                            | 0                            | 243                           | 465               | 12                          | 129                   | 27                | 168            | 297                             |
| 2041  | 300                            | 0                            | 348                           | 648               | 12                          | 129                   | 29                | 170            | 478                             |
| 2042  | 213                            | 0                            | 638                           | 851               | 12                          | 129                   | 17                | 159            | 692                             |
| <b>NOMINAL</b>                              | <b>4,132</b>                   | <b>0</b>                     | <b>8,215</b>                  | <b>12,347</b>     | <b>437</b>                  | <b>3,334</b>          | <b>339</b>        | <b>4,111</b>   | <b>8,236</b>                    |
| <b>NPV</b>                                  | <b>1,592</b>                   | <b>0</b>                     | <b>3,234</b>                  | <b>4,826</b>      | <b>237</b>                  | <b>1,525</b>          | <b>111</b>        | <b>1,873</b>   | <b>2,953</b>                    |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 2.576**

| <b>PROGRAM: Interruptible Service - Participant</b> |                 |           |               |                 |               |              |                     |
|---|-----------------|-----------|---------------|-----------------|---------------|--------------|---------------------|
|   | <b>BENEFITS</b> |           |               |                 | <b>COSTS</b>  |              | <b>(7)</b>          |
|   | (1)             | (2)       | (3)           | (4)             | (5)           | (6)          |                     |
|   | SAVINGS IN      | INCENTIVE | OTHER         | TOTAL           | PARTICIPANT'S | TOTAL        | <b>NET BENEFITS</b> |
|   | PARTICIPANT'S   | PAYMENTS  | PARTICIPANT'S | <b>BENEFITS</b> | COST          | <b>COSTS</b> | <b>TO</b>           |
|   | BILL            |           | BENEFITS      |                 |               |              | <b>PARTICIPANTS</b> |
| YEAR  | \$(000)         | \$(000)   | \$(000)       | \$(000)         | \$(000)       | \$(000)      | \$(000)             |
| 2015  | 0               | 42        | 0             | 43              | 0             | 0            | 43                  |
| 2016  | 0               | 85        | 0             | 85              | 0             | 0            | 85                  |
| 2017  | 1               | 127       | 0             | 128             | 0             | 0            | 128                 |
| 2018  | 1               | 170       | 0             | 171             | 0             | 0            | 171                 |
| 2019  | 1               | 65        | 0             | 66              | 0             | 0            | 66                  |
| 2020  | 1               | 78        | 0             | 79              | 0             | 0            | 79                  |
| 2021  | 1               | 91        | 0             | 91              | 0             | 0            | 91                  |
| 2022  | 5               | 103       | 0             | 108             | 0             | 0            | 108                 |
| 2023  | 6               | 116       | 0             | 122             | 0             | 0            | 122                 |
| 2024  | 2               | 129       | 0             | 131             | 0             | 0            | 131                 |
| 2025  | 12              | 129       | 0             | 141             | 0             | 0            | 141                 |
| 2026  | 12              | 129       | 0             | 141             | 0             | 0            | 141                 |
| 2027  | 12              | 129       | 0             | 142             | 0             | 0            | 142                 |
| 2028  | 13              | 129       | 0             | 143             | 0             | 0            | 143                 |
| 2029  | 15              | 129       | 0             | 144             | 0             | 0            | 144                 |
| 2030  | 16              | 129       | 0             | 146             | 0             | 0            | 146                 |
| 2031  | 16              | 129       | 0             | 145             | 0             | 0            | 145                 |
| 2032  | 17              | 129       | 0             | 146             | 0             | 0            | 146                 |
| 2033  | 14              | 129       | 0             | 144             | 0             | 0            | 144                 |
| 2034  | 19              | 129       | 0             | 148             | 0             | 0            | 148                 |
| 2035  | 20              | 129       | 0             | 149             | 0             | 0            | 149                 |
| 2036  | 20              | 129       | 0             | 149             | 0             | 0            | 149                 |
| 2037  | 24              | 129       | 0             | 153             | 0             | 0            | 153                 |
| 2038  | 23              | 129       | 0             | 153             | 0             | 0            | 153                 |
| 2039  | 14              | 129       | 0             | 144             | 0             | 0            | 144                 |
| 2040  | 27              | 129       | 0             | 156             | 0             | 0            | 156                 |
| 2041  | 29              | 129       | 0             | 158             | 0             | 0            | 158                 |
| 2042  | 17              | 129       | 0             | 147             | 0             | 0            | 147                 |
| <b>NOMINAL</b>                                      | 339             | 3,334     | 0             | 3,673           | 0             | 0            | 3,673               |
| <b>NPV</b>  | 111             | 1,525     | 0             | 1,636           | 0             | 0            | 1,636               |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 9999**

| PROGRAM: Interruptible Service - TRC |  |  |   |  |                                     |   |   |                                  |                                   |
|--------------------------------------|--|--|---|--|-------------------------------------|---|---|----------------------------------|-----------------------------------|
| YEAR                                 | BENEFITS   |  |   |  |                                     | COSTS                                   |   |                                  | TRC<br>NET<br>BENEFITS<br>\$(000) |
|                                      | (1)<br>TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | (2)<br>AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | (3)<br>AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | (4)<br>OTHER<br>PARTICIPANT<br>BENEFITS<br>\$(000) | (5)<br>TOTAL<br>BENEFITS<br>\$(000) | (6)<br>PARTICIPANT'S<br>COST<br>\$(000) | (7)<br>UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | (8)<br>TOTAL<br>COSTS<br>\$(000) |                                   |
| 2015                                 | 0  | 0  | 0   | 0  | 0                                   | 0                                       | 17  | 17                               | -17                               |
| 2016                                 | 1  | 0  | 0   | 0  | 1                                   | 0                                       | 18  | 18                               | -18                               |
| 2017                                 | 1  | 0  | 0   | 0  | 1                                   | 0                                       | 19  | 19                               | -18                               |
| 2018                                 | 49   | 0  | 68  | 0  | 117                                 | 0                                       | 20  | 20                               | 97                                |
| 2019                                 | 118  | 0  | 90  | 0  | 208                                 | 0                                       | 22  | 22                               | 186                               |
| 2020                                 | 138  | 0  | 108   | 0  | 246                                 | 0                                       | 23  | 23                               | 223                               |
| 2021                                 | 67   | 0  | 318   | 0  | 385                                 | 0                                       | 24  | 24                               | 361                               |
| 2022                                 | 136  | 0  | 370   | 0  | 506                                 | 0                                       | 25  | 25                               | 481                               |
| 2023                                 | 129  | 0  | 425   | 0  | 554                                 | 0                                       | 27  | 27                               | 527                               |
| 2024                                 | 81   | 0  | 323   | 0  | 405                                 | 0                                       | 28  | 28                               | 377                               |
| 2025                                 | 159  | 0  | 330   | 0  | 489                                 | 0                                       | 12  | 12                               | 477                               |
| 2026                                 | 147  | 0  | 221   | 0  | 368                                 | 0                                       | 12  | 12                               | 356                               |
| 2027                                 | 125  | 0  | 544   | 0  | 668                                 | 0                                       | 12  | 12                               | 656                               |
| 2028                                 | 146  | 0  | 238   | 0  | 384                                 | 0                                       | 12  | 12                               | 372                               |
| 2029                                 | 226  | 0  | 245   | 0  | 471                                 | 0                                       | 12  | 12                               | 459                               |
| 2030                                 | 292  | 0  | 355   | 0  | 647                                 | 0                                       | 12  | 12                               | 635                               |
| 2031                                 | 204  | 0  | 426   | 0  | 630                                 | 0                                       | 12  | 12                               | 618                               |
| 2032                                 | 197  | 0  | 442   | 0  | 638                                 | 0                                       | 12  | 12                               | 626                               |
| 2033                                 | 191  | 0  | 454   | 0  | 645                                 | 0                                       | 12  | 12                               | 633                               |
| 2034                                 | 166  | 0  | 468   | 0  | 634                                 | 0                                       | 12  | 12                               | 622                               |
| 2035                                 | 163  | 0  | 485   | 0  | 647                                 | 0                                       | 12  | 12                               | 635                               |
| 2036                                 | 154  | 0  | 332   | 0  | 486                                 | 0                                       | 12  | 12                               | 474                               |
| 2037                                 | 204  | 0  | 288   | 0  | 492                                 | 0                                       | 12  | 12                               | 480                               |
| 2038                                 | 160  | 0  | 219   | 0  | 379                                 | 0                                       | 12  | 12                               | 367                               |
| 2039                                 | 146  | 0  | 237   | 0  | 383                                 | 0                                       | 12  | 12                               | 371                               |
| 2040                                 | 222  | 0  | 243   | 0  | 465                                 | 0                                       | 12  | 12                               | 453                               |
| 2041                                 | 300  | 0  | 348   | 0  | 648                                 | 0                                       | 12  | 12                               | 636                               |
| 2042                                 | 213  | 0  | 638   | 0  | 851                                 | 0                                       | 12  | 12                               | 839                               |
| NOMINAL                              | 4,132  | 0  | 8,215   | 0  | 12,347                              | 0                                       | 437   | 437                              | 11,910                            |
| NPV                                  | 1,532  | 0  | 3,234   | 0  | 4,826                               | 0                                       | 237   | 237                              | 4,589                             |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 20.348**

| <b>PROGRAM: Curtailable Service - RIM</b> |                 |          |              |                 |              |            |           |              |                 |
|---|-----------------|----------|--------------|-----------------|--------------|------------|-----------|--------------|-----------------|
|   | <b>BENEFITS</b> |          |              |                 | <b>COSTS</b> |            |           |              |                 |
|   | (1)             | (2)      | (3)          | (4)             | (5)          | (6)        | (7)       | (8)          | (9)             |
|   | TOTAL           | AVOIDED  | AVOIDED      |                 | UTILITY      |            |           |              | <b>RIM</b>      |
|   | FUEL & O&M      | T&D CAP. | GEN. CAP.    | <b>TOTAL</b>    | PROGRAM      | INCENTIVE  | REVENUE   | <b>TOTAL</b> | <b>NET</b>      |
|   | SAVINGS         | COSTS    | COSTS        | <b>BENEFITS</b> | COSTS        | PAYMENTS   | LOSSES    | <b>COSTS</b> | <b>BENEFITS</b> |
| YEAR                                      | \$(000)         | \$(000)  | \$(000)      | \$(000)         | \$(000)      | \$(000)    | \$(000)   | \$(000)      | \$(000)         |
| 2015                                      | 0               | 0        | 0            | 0               | 0            | 0          | 0         | 0            | 0               |
| 2016                                      | 0               | 0        | 0            | 0               | 0            | 0          | 0         | 0            | 0               |
| 2017                                      | 0               | 0        | 0            | 0               | 1            | 28         | 0         | 29           | -28             |
| 2018                                      | 10              | 0        | 13           | 23              | 1            | 28         | 0         | 28           | -5              |
| 2019                                      | 19              | 0        | 14           | 33              | 1            | 8          | 0         | 9            | 24              |
| 2020                                      | 37              | 0        | 28           | 65              | 2            | 17         | 0         | 19           | 46              |
| 2021                                      | 16              | 0        | 72           | 88              | 1            | 17         | 0         | 18           | 69              |
| 2022                                      | 25              | 0        | 73           | 98              | 1            | 17         | 0         | 18           | 80              |
| 2023                                      | 34              | 0        | 112          | 146             | 2            | 25         | 2         | 29           | 117             |
| 2024                                      | 28              | 0        | 77           | 104             | 2            | 25         | 3         | 30           | 74              |
| 2025                                      | 38              | 0        | 78           | 116             | 2            | 25         | 3         | 30           | 86              |
| 2026                                      | 36              | 0        | 52           | 88              | 2            | 25         | 3         | 30           | 58              |
| 2027                                      | 30              | 0        | 129          | 158             | 2            | 25         | 3         | 30           | 128             |
| 2028                                      | 34              | 0        | 56           | 90              | 2            | 25         | 3         | 30           | 60              |
| 2029                                      | 53              | 0        | 58           | 110             | 2            | 25         | 3         | 30           | 81              |
| 2030                                      | 75              | 0        | 91           | 166             | 2            | 25         | 4         | 31           | 135             |
| 2031                                      | 49              | 0        | 101          | 150             | 2            | 25         | 4         | 31           | 119             |
| 2032                                      | 47              | 0        | 104          | 151             | 2            | 25         | 4         | 31           | 120             |
| 2033                                      | 45              | 0        | 107          | 152             | 2            | 25         | 3         | 29           | 122             |
| 2034                                      | 39              | 0        | 111          | 150             | 2            | 25         | 5         | 32           | 118             |
| 2035                                      | 39              | 0        | 115          | 153             | 2            | 25         | 5         | 32           | 121             |
| 2036                                      | 36              | 0        | 79           | 115             | 2            | 25         | 5         | 32           | 82              |
| 2037                                      | 50              | 0        | 68           | 118             | 2            | 25         | 6         | 33           | 85              |
| 2038                                      | 40              | 0        | 52           | 91              | 2            | 25         | 6         | 33           | 58              |
| 2039                                      | 35              | 0        | 56           | 91              | 2            | 25         | 3         | 30           | 60              |
| 2040                                      | 53              | 0        | 57           | 110             | 2            | 25         | 6         | 33           | 77              |
| 2041                                      | 79              | 0        | 89           | 168             | 2            | 25         | 7         | 34           | 134             |
| 2042                                      | 50              | 0        | 151          | 201             | 2            | 25         | 4         | 31           | 170             |
| <b>NOMINAL</b>                            | <b>990</b>      | <b>0</b> | <b>1,944</b> | <b>2,934</b>    | <b>40</b>    | <b>617</b> | <b>84</b> | <b>742</b>   | <b>2,192</b>    |
| <b>NPV</b>                                | <b>377</b>      | <b>0</b> | <b>759</b>   | <b>1,136</b>    | <b>17</b>    | <b>268</b> | <b>28</b> | <b>313</b>   | <b>823</b>      |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 3.633**

| <b>PROGRAM: Curtailable Service - Participant</b> |                                      |                           |                                     |                       |                           |                    |                                     |
|---|--------------------------------------|---------------------------|-------------------------------------|-----------------------|---------------------------|--------------------|-------------------------------------|
|   | <b>BENEFITS</b>                      |                           |                                     |                       | <b>COSTS</b>              |                    | <b>(7)</b>                          |
|   | <b>(1)</b>                           | <b>(2)</b>                | <b>(3)</b>                          | <b>(4)</b>            | <b>(5)</b>                | <b>(6)</b>         |                                     |
|   | <b>SAVINGS IN PARTICIPANT'S BILL</b> | <b>INCENTIVE PAYMENTS</b> | <b>OTHER PARTICIPANT'S BENEFITS</b> | <b>TOTAL BENEFITS</b> | <b>PARTICIPANT'S COST</b> | <b>TOTAL COSTS</b> | <b>NET BENEFITS TO PARTICIPANTS</b> |
| <b>YEAR</b>                                       | <b>\$(000)</b>                       | <b>\$(000)</b>            | <b>\$(000)</b>                      | <b>\$(000)</b>        | <b>\$(000)</b>            | <b>\$(000)</b>     | <b>\$(000)</b>                      |
| 2015  | 0                                    | 0                         | 0                                   | 0                     | 0                         | 0                  | 0                                   |
| 2016  | 0                                    | 0                         | 0                                   | 0                     | 0                         | 0                  | 0                                   |
| 2017  | 0                                    | 28                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2018  | 0                                    | 28                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2019  | 0                                    | 8                         | 0                                   | 9                     | 0                         | 0                  | 9                                   |
| 2020  | 0                                    | 17                        | 0                                   | 17                    | 0                         | 0                  | 17                                  |
| 2021  | 0                                    | 17                        | 0                                   | 17                    | 0                         | 0                  | 17                                  |
| 2022  | 0                                    | 17                        | 0                                   | 17                    | 0                         | 0                  | 17                                  |
| 2023  | 2                                    | 25                        | 0                                   | 27                    | 0                         | 0                  | 27                                  |
| 2024  | 3                                    | 25                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2025  | 3                                    | 25                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2026  | 3                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| 2027  | 3                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| 2028  | 3                                    | 25                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2029  | 3                                    | 25                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2030  | 4                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| 2031  | 4                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| 2032  | 4                                    | 25                        | 0                                   | 30                    | 0                         | 0                  | 30                                  |
| 2033  | 3                                    | 25                        | 0                                   | 28                    | 0                         | 0                  | 28                                  |
| 2034  | 5                                    | 25                        | 0                                   | 30                    | 0                         | 0                  | 30                                  |
| 2035  | 5                                    | 25                        | 0                                   | 30                    | 0                         | 0                  | 30                                  |
| 2036  | 5                                    | 25                        | 0                                   | 31                    | 0                         | 0                  | 31                                  |
| 2037  | 6                                    | 25                        | 0                                   | 31                    | 0                         | 0                  | 31                                  |
| 2038  | 6                                    | 25                        | 0                                   | 31                    | 0                         | 0                  | 31                                  |
| 2039  | 3                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| 2040  | 6                                    | 25                        | 0                                   | 32                    | 0                         | 0                  | 32                                  |
| 2041  | 7                                    | 25                        | 0                                   | 32                    | 0                         | 0                  | 32                                  |
| 2042  | 4                                    | 25                        | 0                                   | 29                    | 0                         | 0                  | 29                                  |
| <b>NOMINAL</b>                                    | <b>84</b>                            | <b>617</b>                | <b>0</b>                            | <b>702</b>            | <b>0</b>                  | <b>0</b>           | <b>702</b>                          |
| <b>NPV</b>  | <b>28</b>                            | <b>268</b>                | <b>0</b>                            | <b>296</b>            | <b>0</b>                  | <b>0</b>           | <b>296</b>                          |

Utility Discount Rate = 6.46  
**Benefit Cost Ratio = 9999**

| PROGRAM: Curtailable Service - TRC |  |  |   |  |                                     |   |   |                                  |                                   |
|------------------------------------|--|--|---|--|-------------------------------------|---|---|----------------------------------|-----------------------------------|
| YEAR                               | BENEFITS   |  |   |  |                                     | COSTS                                   |   |                                  | TRC<br>NET<br>BENEFITS<br>\$(000) |
|                                    | (1)<br>TOTAL<br>FUEL & O&M<br>SAVINGS<br>\$(000) | (2)<br>AVOIDED<br>T&D CAP.<br>COSTS<br>\$(000) | (3)<br>AVOIDED<br>GEN. CAP.<br>COSTS<br>\$(000) | (4)<br>OTHER<br>PARTICIPANT<br>BENEFITS<br>\$(000) | (5)<br>TOTAL<br>BENEFITS<br>\$(000) | (6)<br>PARTICIPANT'S<br>COST<br>\$(000) | (7)<br>UTILITY<br>PROGRAM<br>COSTS<br>\$(000) | (8)<br>TOTAL<br>COSTS<br>\$(000) |                                   |
| 2015                               | 0  | 0  | 0   | 0  | 0                                   | 0                                       | 0   | 0                                | 0                                 |
| 2016                               | 0  | 0  | 0   | 0  | 0                                   | 0                                       | 0   | 0                                | 0                                 |
| 2017                               | 0  | 0  | 0   | 0  | 0                                   | 0                                       | 1   | 1                                | -1                                |
| 2018                               | 10   | 0  | 13  | 0  | 23                                  | 0                                       | 1   | 1                                | 23                                |
| 2019                               | 19   | 0  | 14  | 0  | 33                                  | 0                                       | 1   | 1                                | 32                                |
| 2020                               | 37   | 0  | 28  | 0  | 65                                  | 0                                       | 2   | 2                                | 63                                |
| 2021                               | 16   | 0  | 72  | 0  | 88                                  | 0                                       | 1   | 1                                | 87                                |
| 2022                               | 25   | 0  | 73  | 0  | 98                                  | 0                                       | 1   | 1                                | 97                                |
| 2023                               | 34   | 0  | 112   | 0  | 146                                 | 0                                       | 2   | 2                                | 144                               |
| 2024                               | 28   | 0  | 77  | 0  | 104                                 | 0                                       | 2   | 2                                | 102                               |
| 2025                               | 38   | 0  | 78  | 0  | 116                                 | 0                                       | 2   | 2                                | 114                               |
| 2026                               | 36   | 0  | 52  | 0  | 88                                  | 0                                       | 2   | 2                                | 86                                |
| 2027                               | 30   | 0  | 129   | 0  | 158                                 | 0                                       | 2   | 2                                | 156                               |
| 2028                               | 34   | 0  | 56  | 0  | 90                                  | 0                                       | 2   | 2                                | 88                                |
| 2029                               | 53   | 0  | 58  | 0  | 110                                 | 0                                       | 2   | 2                                | 109                               |
| 2030                               | 75   | 0  | 91  | 0  | 166                                 | 0                                       | 2   | 2                                | 164                               |
| 2031                               | 49   | 0  | 101   | 0  | 150                                 | 0                                       | 2   | 2                                | 148                               |
| 2032                               | 47   | 0  | 104   | 0  | 151                                 | 0                                       | 2   | 2                                | 150                               |
| 2033                               | 45   | 0  | 107   | 0  | 152                                 | 0                                       | 2   | 2                                | 150                               |
| 2034                               | 39   | 0  | 111   | 0  | 150                                 | 0                                       | 2   | 2                                | 148                               |
| 2035                               | 39   | 0  | 115   | 0  | 153                                 | 0                                       | 2   | 2                                | 151                               |
| 2036                               | 36   | 0  | 79  | 0  | 115                                 | 0                                       | 2   | 2                                | 113                               |
| 2037                               | 50   | 0  | 68  | 0  | 118                                 | 0                                       | 2   | 2                                | 116                               |
| 2038                               | 40   | 0  | 52  | 0  | 91                                  | 0                                       | 2   | 2                                | 90                                |
| 2039                               | 35   | 0  | 56  | 0  | 91                                  | 0                                       | 2   | 2                                | 89                                |
| 2040                               | 53   | 0  | 57  | 0  | 110                                 | 0                                       | 2   | 2                                | 109                               |
| 2041                               | 79   | 0  | 89  | 0  | 168                                 | 0                                       | 2   | 2                                | 166                               |
| 2042                               | 50   | 0  | 151   | 0  | 201                                 | 0                                       | 2   | 2                                | 199                               |
| NOMINAL                            | 990  | 0  | 1,944   | 0  | 2,934                               | 0                                       | 40  | 40                               | 2,894                             |
| NPV                                | 377  | 0  | 759   | 0  | 1,136                               | 0                                       | 17  | 17                               | 1,119                             |

Utility Discount Rate = 6.46

**Benefit Cost Ratio = 67.671**

**XII. SUMMARY OF PROPOSED CHANGES – ALL PROGRAMS**

**XII. SUMMARY OF PROPOSED CHANGES****PROGRAM NAME: HOME ENERGY CHECK**

The table below provides a summary of changes to this program:

| <b>Measures</b>                        | <b>Modified</b> | <b>New</b> | <b>Eliminated</b> | <b>Explanation</b>                    |
|--|-----------------|------------|-------------------|---------------------------------------|
| Mail-in Audit                          |                 |            | X                 | Lack of participation                 |
| Student Audit                          |                 |            | X                 | Lack of participation                 |
| Walk through, phone and on-line Audits | X               |            |                   | Modified savings impacts              |
| BERS Energy Gauge Audit 2.6            | X               |            |                   | Tariff updated to reflect cost change |
| Miscellaneous Tariff 2.3               |                 |            | X                 | Elimination of paid audit             |

**PROGRAM NAME: RESIDENTIAL INCENTIVE PROGRAM**

The table below provides a summary of changes to this program:

| <b>Measures</b>   | <b>Modified</b> | <b>New</b> | <b>Eliminated</b> | <b>Explanation</b>   |
|---|-----------------|------------|-------------------|--|
| 15 SEER Split-System Heat Pump / Single Detached (strip to 15 SEER)             | X               |            |                   | Incentive changed from \$350 to \$375  |
| 15 SEER Split-System Heat Pump / Single Detached (less efficient HP to 15 SEER) | X               |            |                   | Incentive changed from \$150 to \$200  |
| Single Pane Clear Windows to Double Pane Low-E Windows / Single Detached        | X               |            |                   | Incentive changed from \$1.00 per square foot to \$2.00 per square foot - \$400 Max                                  |
| Ceiling R-0 to R-19 Insulation / Single Detached                                | X               |            |                   | Incentive changed from \$75 plus \$0.05 per square foot above 1500 square foot to \$0.19 per square foot - \$200 Max |
| 14 SEER Split-System Heat Pump / Multi Attached (strip to HP)                   | X               |            |                   | Incentive changed from \$250 to \$150  |
| Duct Repair / Single Detached   | X               |            |                   | Incentive changed from \$100 to \$150  |
| Duct Repair / Multi Attached  | X               |            |                   | Incentive changed from \$100 to \$150  |
| Ceiling R-0 to R-19 Insulation / Multi Attached                                 | X               |            |                   | Incentive changed from \$75 plus \$0.05 per square foot above 1500 square foot to \$0.19 per square foot - \$200 max |
| 17 SEER Split-System Heat Pump / Single Detached (strip to 17 SEER)             |                 | X          |                   | Incentive \$800  |
| 17 SEER Split-System Heat Pump / Single Detached (less efficient HP to 17 SEER) |                 | X          |                   | Incentive \$600  |
| 15 SEER Split-System Heat Pump / Single   | X               |            |                   | Incentive changed from \$350 to \$375  |

|  |   |  |   |   |
|--|---|--|---|---|
| Detached – Manufactured (strip to 15 SEER)   |   |  |   |   |
| 15 SEER Split-System Heat Pump / Single Detached – Manufactured (less efficient HP to 15 SEER)                           | X |  |   | Incentive changed from \$150 to \$200   |
| Duct Repair / Single Detached – Manufactured   | X |  |   | Incentive changed from \$50 to \$150  |
| Single Family Ceiling Insulation - AC, Electric Resistance, R-11 (base)  | X |  |   | Incentive changed from \$75 plus \$0.05 per square foot above 1500 square foot to \$0.19 per square foot \$200 max<br>Impacts/Sq. Ft.: SW 0.17 / WW 0.25 / kWh 0.18 |
| Multi-Family Ceiling Insulation – AC, Electric Resistance, R-11 (base)   | X |  |   | Incentive changed from \$75 plus \$0.05 per square foot above 1500 square foot to \$0.19 per square foot \$200 max<br>Impacts/Sq. Ft.: SW 0.08 / WW 0.09 / kWh 0.10 |
| Energy Efficient Home (1 story 1500 to 2200 Sq. Ft.) qualifying with Energy Star 3.1 and specified prescriptive measures | X |  |   | Incentive changed from maximum of \$425 to maximum of \$200;<br>Impacts: SkW 0.142 / WkW 0.152 / kWh 569  |
| Energy Efficient Home (1 story 2200 to 3000 Sq. Ft.) qualifying with Energy Star 3.1 and specified prescriptive measures | X |  |   | Incentive changed from maximum of \$425 to maximum of \$200;<br>Impacts: SkW 0.212 / WkW 0.227 / kWh 850  |
| Energy Efficient Home (2 story over 3000 Sq. Ft.) qualifying with Energy Star 3.1 and specified prescriptive measures    | X |  |   | Incentive changed from maximum of \$425 to maximum of \$200;<br>Impacts: SkW 0.254 / WkW 0.272 / kWh 1019   |
| Spray-In Wall Insulation   |   |  | X | Not cost effective under RIM  |
| HVAC Commissioning   |   |  | X | Not cost effective under RIM  |
| Central Electric Air Conditioning (Existing Non-Electric Heat)   |   |  | X | Not cost effective under RIM  |
| Reflective Roof  |   |  | X | Not cost effective under  |

|   |  |  |   |                              |
|---|--|--|---|------------------------------|
| Manufactured Homes  |  |  |   | RIM                          |
| Reflective Roof Single Family   |  |  | X | Not cost effective under RIM |
| Window Film and Window Screen   |  |  | X | Low program participation    |
| Supplemental Bonus – High Efficiency HP & ceiling insulation or duct repair |  |  | X | Not cost effective under RIM |
| Supplemental Bonus – High Efficiency HP & ceiling insulation & duct repair  |  |  | X | Not cost effective under RIM |

Changes proposed include the following:

- Changed program name from Home Energy Improvement to Residential Incentive.
- Impacts that are different than those presented in Achievable Potential in Goals Docket 130200 EG are specified in the above table.

**PROGRAM NAME:           LOW INCOME WEATHERIZATION ASSISTANCE  
PROGRAM (LIWAP)**

The table below provides a summary of changes to this program:

| <b>Measures</b>                     | <b>Modified</b> | <b>Removed</b> | <b>New</b> | <b>Explanation</b>                 |
|-------------------------------------|-----------------|----------------|------------|------------------------------------|
| Compact Fluorescent Light Bulbs (5) | X               |                |            | Increased from 3 to 5 bulbs        |
| Heat Pump Water Heater              |                 | X              |            | Lack of participation              |
| Refrigerator Coil Brush             |                 | X              |            | Low impacts; behavior modification |
| Heat Recovery                       |                 | X              |            | Lack of participation              |
| LED Bulbs                           |                 |                | X          | New measure                        |
| Refrigerator Replacement            |                 |                | X          | New measure                        |

**PROGRAM NAME: NEIGHBORHOOD ENERGY SAVER**

The table below provides a summary of changes to this program:

| <b>Measures</b>                         | <b>Modified</b> | <b>New</b> | <b>Eliminated</b> | <b>Explanation</b>                                    |
|---|-----------------|------------|-------------------|---|
| Attic insulation upgrade <R11 to R19    |                 | X          |                   |   |
| Duct sealing                            |                 | X          |                   |   |
| LED light bulbs                         |                 | X          |                   |   |
| Comprehensive energy efficiency reports |                 | X          |                   |   |
| HVAC filters                            | X               |            |                   | Reduced number of HVAC filters from 12 to 4 per home. |
|   |                 |            |                   |   |
| HVAC Tune up                            |                 | X          |                   |   |
| Light bulbs                             | X               |            |                   | Increased number of bulbs from 5 to 8 per home.       |
| Refrigerator Coil Brush                 |                 |            | X                 |   |

Changes below include the following:

- Change eligibility by increasing census block requirements from 150% of federal poverty guidelines to 200% of federal poverty guidelines
- Increased participation from 3,000 to 4,500 annually
- Add Comprehensive report detailing comparative usage for homes of similar size and make up in the surrounding area, energy saving tips and seasonal reminders.

**PROGRAM NAME: RESIDENTIAL ENERGY MANAGEMENT RSL-1 & RSL-2**

The table below provides a summary of changes to this program:

| <b>Measures</b>   | <b>Modified</b>   | <b>Explanation</b>  |
|---|---|---|
| Tariff RSL-1 Schedule A, Schedule B and Schedule S and Tariff RSL-2 | Control periods changed from minutes of control to effective duty cycle | To provide flexibility within tariff to leverage technology changes to extract more savings |
| Tariff RSL-1 and RSL-2 Special Provisions Item 6                    | Added language regarding WI-FI availability                             | To ensure WI-FI availability for customers who have WI-FI switches                          |
| Tariffs RSL-1 and RSL-2 - Peak Periods                              | Hours changed   | To allow for extended control period from 10 pm to 11 pm                                    |

SUMMARY OF CHANGES TO RESIDENTIAL LOAD MANAGEMENT TARIFF RSL-1:

- Schedule A changed from not to exceed 10 minutes to effective duty cycle of approximately 66%
- Schedule B changed from not to exceed 16.5 minutes to effective duty cycle of approximately 45%
- Schedule S changed from not to exceed 16.5 minutes to effective duty cycle of approximately 45%
- Peak Periods changed in Item 1 from 6pm to 10pm to 6pm to 11pm.
- Peak Periods changed in Item 2 from 1pm to 10pm to 1pm to 11pm.
- Special Provisions item (6) verbiage added to include that availability of customer WI-FI network must not be disrupted.
- Special Provision item (7) removed – alternative thermal storage heating systems are no longer offered through this program.
- Special Provision item (10) changed to end at 12/31/2015.

SUMMARY OF CHANGES TO RESIDENTIAL LOAD MANAGEMENT WINTER-ONLY TARIFF- RSL-2:

- Changed from not to exceed 16.5 minutes to effective duty cycle of approximately 45%
- Peak Periods changed from 6pm to 10pm to 6pm to 11pm
- Special Provisions item (6) verbiage added to include that availability of customer WI-FI network must not be disrupted.
- Special Provision item (9) changed to end at 12/31/2015.

**PROGRAM NAME: BUSINESS ENERGY CHECK**

The table below provides a summary of changes to this program:

| <b>Measures</b>                  | <b>Modified</b> | <b>New</b> | <b>Eliminated</b> | <b>Explanation</b>    |
|----------------------------------|-----------------|------------|-------------------|-----------------------|
| Commercial Energy Efficiency Kit |                 | X          |                   | Added kits            |
| Online Audit                     |                 |            | X                 | Lack of participation |
| Paid Audit                       |                 |            | X                 | Lack of participation |

**PROGRAM NAME: BETTER BUSINESS**

The table below provides a summary of changes to this program:

| <b>Measures</b>  | <b>Modified</b> | <b>New</b> | <b>Eliminated</b> | <b>Explanation</b>  |
|--|-----------------|------------|-------------------|---|
| Heat Pumps < 65,000 Btu/h replacing resistance heat                          | X               |            |                   | Incentive changed from \$350 to \$375   |
| Heat pumps < 65,000 Btu/h replacing heat pump (less efficient HP to 15 SEER) | X               |            |                   | Incentive changed from \$150 to \$200   |
| Unitary A/C and Heat Pumps > 65,000 Btu/h                                    | X               |            |                   | Current incentive is up to \$150 per kW reduced from baseline efficiency. Change to \$75 average dollars per ton. |
| Package Terminal Heat Pumps (PTHPs)  | X               |            |                   | Current Incentive is \$150 per kW reduced from baseline efficiency. Change to \$100 average dollars per ton.      |
| Single Package Vertical Heat Pump (SPVHP)                                    | X               |            |                   | Current Incentive is \$150 per kW reduced from baseline efficiency. Change to \$75 average dollars per ton.       |
| Ceiling R-0 to R-19 Insulation /   | X               |            |                   | Incentive changed to \$0.10 per square foot.  |
| Ceiling Insulation R-19 to R-38  | X               |            |                   | Incentive changed to \$.075 per square foot.  |
| Cool Roof  | X               |            |                   | Incentive changed from 0.10 per square foot to 0.15 per square foot.  |
| Air-Cooled and Water Cooled Electric Chillers                                | X               |            |                   | Current Incentive is \$150 per kW reduced from baseline efficiency. Change to \$50 average dollars per ton.       |
| Energy Recovery Ventilation  | X               |            |                   | Incentive changed from \$1.00 per CFM to \$1.40 per CFM.  |
| Roof Top Re-commissioning  | X               |            |                   | Incentive changed from \$15 per ton to \$25 per ton.  |
| HVAC Steam Cleaning  | X               |            |                   | Incentive changed from \$15 per unit to \$20 per unit.  |
| HVAC Chemical Cleaning   | X               |            |                   | Incentive changed from \$15 per unit to \$20 per unit.  |
| HVAC Tune-up   |                 | X          |                   | Incentive of \$10 per ton; 0.39 SKW, 0.00 WKW and 341 KWh   |

|                                  |  |  |   |                              |
|----------------------------------|--|--|---|------------------------------|
| Green Roof                       |  |  | X | Not cost effective under RIM |
| Efficient Indoor Lighting        |  |  | X | Not cost effective under RIM |
| Occupancy Sensors                |  |  | X | Not cost effective under RIM |
| Efficient Compressed Air Systems |  |  | X | Not cost effective under RIM |
| Efficient Motors                 |  |  | X | Not cost effective under RIM |
| Window Film and Window Screen    |  |  | X | Not cost effective under RIM |

Changes below include the following:

- Impacts that are different than those presented in Achievable Potential in Goals Docket 130200 EG are specified in the above table.

**PROGRAM NAME: FLORIDA CUSTOM INCENTIVE**

**SUMMARY OF PROPOSED CHANGES**

- Innovation Incentive Program name will be changed to Florida Custom Incentive program.

**PROGRAM NAME: STANDBY GENERATION**SUMMARY OF PROPOSED CHANGES

With the advent of the latest EPA RICE NESHAP emissions standards (40 CFR Parts 60 and 63) which have recently gone into effect, restrictions now exist in the way DEF can utilize our current Standby Generation program. The most significant change restricts the total annual Emergency run-time to 100 hours inclusive of test/maintenance hours. DEF can only activate system wide Emergency Standby Generation during an Energy Emergency Alert Level 2 (EAA2) as defined by NERC (except for regional controls up to 50 run-time hours which do not require an EAA2 to be declared. The 50 hours are included in the 100 total annual run-time hour limitation). Unlike the “Emergency” operation of Standby Generation, customer generators certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subparts IIII and JJJJ, can be operated at any time and do not require any type of Energy Emergency to be declared.

As a result of these regulatory changes, the following modifications to DEF’s current Standby Generation Program are proposed:

- Divide the current program into two schedules. Schedule A – Emergency Standby Generation and Schedule B – Non-Emergency Standby Generation. A customer wishing to enroll in DEF’s Standby Generation Program will have the option of enrolling in either Schedule A – Emergency Standby Generation or Schedule B – Non-Emergency Standby Generation based on RICE NESHAP EPA emission certification of the customer’s generation equipment as described below. Additionally, existing Standby Generation participants whose generation equipment meets the new EPA emission requirements can elect to convert from Schedule A to Schedule B. Such conversion will become effective on the customers next billing cycle.
- Schedule A - Emergency Standby Generation:  
Requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time during the day. Schedule A – Emergency

Standby Generation (except for regional controls up to 50 hours per year) will only be requested during an Energy Emergency Alert Level 2 (EAA2) as defined by NERC and will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

- **Schedule B – Non-Emergency Standby Generation:**  
Available only to those customers whose standby generation equipment is certified RICE NESHAP compliant with current version EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ. Non-Emergency Standby Generation requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time.

Proposed credit structure is as follows:

| <b>Schedule</b>                             | <b>Credit</b>  | <b>Cumulative Annual Hours</b>                |
|---|--|---|
| Schedule A Emergency Standby Generation     | $\$4.50 \times C^1 + \$0.05^2 \times \text{kWh monthly}$ | $0 \leq \text{Cumulative Run Hours} \leq 100$ |
| Schedule B Non-Emergency Standby Generation | $\$4.50 \times C^1 + \$0.50^2 \times \text{kWh monthly}$ | All Run Hours                                 |

<sup>1</sup>C = Customer's standby generator capacity (see Rate Schedule GLSM-2)

<sup>2</sup>Represents incentive credit to support Customer O&M associated with run time requested by Company

**PROGRAM NAME:            INTERRUPTIBLE SERVICE**

**SUMMARY OF PROPOSED CHANGES**

- No Changes Proposed to Program

**PROGRAM NAME:           CURTAILABLE SERVICE**

**SUMMARY OF PROPOSED CHANGES**

- No Changes Proposed to Program

**PROGRAM NAME: SOLAR WATER HEATING FOR LOW INCOME  
RESIDENTIAL CUSTOMERS**

The table below provides a summary of changes to this program:

| <b>Measures</b>                  | <b>Modified</b> | <b>Explanation</b>   |
|----------------------------------|-----------------|--|
| Program incentive cap            | X               | \$114,000 to \$150,000 due to increased installation costs |
| Per customer incentive increased | X               | \$3,600 to \$4,400 due to increased installation costs     |

**PROGRAM NAME: SOLAR WATER HEATING – ENERGY MANAGEMENT**

The table below provides a summary of changes to this program:

| <b>Measures</b> | <b>Modified</b> | <b>Explanation</b>       |
|-----------------|-----------------|--------------------------|
| Incentive cap   | X               | \$1,237,500 to \$200,000 |
| Participants    | X               | 2,250 to 300             |

**SUMMARY OF PROPOSED CHANGES**

- Annual incentive cap has been reduced to reflect lower anticipated participation.
- Participation estimates have decreased based on historic actual participation experience.

**PROGRAM NAME: RESIDENTIAL SOLAR PHOTOVOLTAIC PILOT**

The table below provides a summary of changes to this program:

| <b>Measures</b> | <b>Modified</b> | <b>Explanation</b>            |
|-----------------|-----------------|-------------------------------|
| Incentive cap   | X               | \$1,900,000 to<br>\$2,750,000 |
| Participation   | X               | 137 to160                     |

- Transferred additional money to this program from the Solar Water Heating with Energy Management program due to increased interest in this program.

**PROGRAM NAME: COMMERCIAL SOLAR PHOTOVOLTAIC PILOT**

The table below provides a summary of changes to this program:

| <b>Measures</b> | <b>Modified</b> | <b>Explanation</b>               |
|-----------------|-----------------|----------------------------------|
| Incentive cap   | X               | \$1,300,000<br>to<br>\$1,400,000 |
| Participation   | X               | 23 to 19                         |

**SUMMARY OF PROPOSED CHANGES**

- Removed proposed requirement that eligible customers must have an electric water heater that qualifies for the load management program.
- Incentives have increased and participation decreased due to bigger systems being installed.

**PROGRAM NAME: PHOTOVOLTAIC FOR SCHOOLS PILOT**

**SUMMARY OF PROPOSED CHANGES**

- No Changes Proposed to Program

**PROGRAM NAME: RESEARCH AND DEMONSTRATION PILOT**

SUMMARY OF PROPOSED CHANGES

- No Changes Proposed to Program

**PROGRAM NAME:            TECHNOLOGY DEVELOPMENT**

**SUMMARY OF PROPOSED CHANGES**

- No Changes Proposed to Program

**PROGRAM NAME:            QUALIFYING FACILITIES**

**SUMMARY OF PROPOSED CHANGES**

- No Changes Proposed to Program

**XIII. TARIFFS**

### **XIII. TARIFFS**

DEF proposes modifications to the following rate schedules. DEF has included the legislative and clean copy formats of each tariff:

- Miscellaneous Index 2.0
- Home Energy Check 2.3
- Non-Residential Energy Audit 2.4
- Florida BERS/HERS Audit 2.6
- GSLM-1, General Service-Load Management, Revised Sheets Nos. 6.220 and 6.221
- GSLM-2, General Service-Load Management-Standby Generation, Revised Sheet Nos. 6.225 and 6.226
- RSL-1, Residential Load Management, Revised Sheet Nos. 6.131 and 6.132
- RSL-2, Residential Load Management-Winter Only, Revised Sheet Nos. 6.135 and 6.136

## **LEGISLATIVE COPY FORMAT TARIFFS**

NINTH REVISED SHEET NO. 2.0

SIXTH REVISED SHEET NO. 2.3

SIXTH REVISED SHEET NO. 2.4

FIFTH REVISED SHEET NO. 2.6

THIRTEENTH REVISED SHEET NO. 6.220

TENTH REVISED SHEET NO. 6.221

EIGHTH REVISED SHEET NO. 6.225

THIRD REVISED SHEET NO. 6.226

THIRTEENTH REVISED SHEET NO. 6.131

FIFTEENTH REVISED SHEET NO. 6.132

SIXTEENTH REVISED SHEET NO. 6.135

FIFTH REVISED SHEET NO. 6.136



MISCELLANEOUS  
INDEX

| <u>DESCRIPTION</u>   | <u>SHEET NO.</u> |
|--|------------------|
| <del>Home Energy Check-up</del>                                | <del>2.3</del>   |
| <del>Non-Residential Energy Audit</del>                        | <del>2.4</del>   |
| Florida <del>Energy Gauge Ratings</del> <u>BERS/HERS Audit</u> | 2.6              |
| Load Profiler Online   | 2.7              |
| Remote Access  | 2.8              |



RESERVED FOR FUTURE USE

HOME ENERGY CHECKUP

~~The Company has available a "Home Energy Checkup" program. This program is designed to assist residential customers in identifying electric energy conservation measures that may be taken in existing residences.~~

~~Upon request, the Company will make an inspection of a customer's residence and give the customer a written report on the economic benefits of energy saving improvements that can be made. The report will show the estimated costs of recommended changes or additions and the expected savings in future electric bills.~~

~~A \$15.00 fee will be charged for the Home Energy Checkup. The fee shall be payable at the time the inspection is performed.~~

~~Only residential customers are eligible for this service.~~



RESERVED FOR FUTURE USE

NON-RESIDENTIAL ENERGY AUDIT

Upon request, the Company will perform an energy analysis of a non-residential customer's facilities and give the customer a written report of the findings and any recommendations for improvements that can be made to save energy and/or demand. This report will show the estimated annual savings based on implementation of these recommendations.

The schedule of fees is as follows:

| <u>AVERAGE MONTHLY ENERGY USE</u> | <u>AUDIT FEE*</u>                 |
|-----------------------------------|-----------------------------------|
| <del>0 – 10,000 KWH</del>         | <del>\$35.00</del>                |
| <del>Over 10,000 KWH</del>        | <del>\$35.00 + \$0.0035/KWH</del> |

\*NOTES:

- ~~(1) Fee amount shall be rounded to the nearest dollar.~~
- ~~(2) Fee amount shall not exceed \$4,000.~~
- ~~(3) If any or all audit recommendations are implemented, the audit fee, less \$35, is refundable to the customer for implementation costs incurred; however, the refund amount cannot exceed customer's implementation costs.~~



**Florida ~~Energy Gauge Ratings~~ BERS/HERS Audit  
 Energy Gauge**

**Availability:**

Available throughout the entire territory served by the Company.

**Applicable:**

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a state-certified energy rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A require a review of code calculations to be eligible for a rating certificate.

**Schedule of Fees:**

| Rating                          | * New Home          | * New Home (With Energy Code Compliance Form Provided) | * Existing Home     |
|---------------------------------|---------------------|--|---------------------|
| <del>Class I-HERS On-Site</del> | <del>\$195630</del> | N/A  | <del>\$195630</del> |
| <del>Class II On-Site</del>     | <del>\$145</del>    | N/A  | <del>\$145</del>    |
| <del>Class III From Plans</del> | <del>\$110</del>    | <del>\$35</del>  | <del>N/A</del>      |

\* Includes electronic registration fees charged by the ~~State of Florida~~ RESNET Provider.

**Definitions:**

Existing home: ~~is a~~ completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy, has been issued.

~~Florida Energy Code Whole Building Performance Method A: Required by the State listing building components, dimensions and system efficiencies.~~

~~BERS: The Florida Building Energy-Efficiency Rating System (BERS) is a whole building energy evaluation system established and maintained by RESNET.~~

~~HERS: The Home Energy Rating System (HERS), established and maintained by RESNET, measures homes' energy efficiency.~~

~~RESNET: The Residential Energy Services Network (RESNET) is a not-for-profit, membership corporation that is a recognized national standards making body for building energy efficiency rating and certification systems.~~

**Energy Gauge Ratings are Categorized in Three Classes:**

~~Class I: Energy rating requiring an on-site energy audit with specialized performance testing for air infiltration and duct leakage. Class I ratings have the highest level of confidence.~~

~~Class II: Energy rating requiring an on-site energy audit. Class II ratings have a good level of confidence.~~

~~Class III: Energy rating reserved for new buildings only and uses construction plans to generate data for ratings. Class III ratings have a fair level of confidence.~~

**Terms of Payment:**

The fee shall be payable at the time the rating is completed and delivered.



**RATE SCHEDULE GSLM-1  
 GENERAL SERVICE - LOAD MANAGEMENT  
 (Closed to New Customers as of 07/20/2000)**

**Availability:**

Available only within the range of the Company's Load Management System.

**Applicable:**

To customers who are eligible for service under Rate Schedules GS-1, GST-1, GSD-1, or GSDT-1, excluding those customers served under the General Service transition rates, and who elect service under this rate schedule and have electric space cooling equipment suitable for interruptible operation. Also applicable to those customers who have any of the following electrical equipment installed on permanent residential structures and utilized for domestic (household) purposes: (1) water heater(s), (2) central electric heating system(s), (3) central electric cooling system(s), and/or (4) swimming pool pump(s).

**Limitation of Service:**

Service to specified electrical equipment may be interrupted at the option of the Company by means of load management devices installed on the customer's premises.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

The rates and all other terms and conditions of Company Rate Schedules GS-1, GST-1, GSD-1 or GSDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

**LOAD MANAGEMENT MONTHLY CREDIT AMOUNT**

| <u>Interruptible Equipment</u>                 | <u>Interruption Schedule</u>  | <u>Credit Based on Installed Capacity<sup>1</sup></u> | <u>Applicable Billing Months</u> |
|--|---|---|----------------------------------|
| Electric Space Cooling <sup>3</sup>            | A   | \$ 0.26 Per kW  | April thru October               |
| Electric Space Cooling <sup>3</sup>            | B   | \$ 0.56 Per kW  | April thru October               |
| Domestically Utilized Equipment <sup>2,3</sup> | [Availability, Schedules and Credits of the otherwise applicable Rate Schedule RSL-1or RSL-2 shall apply] |   |                                  |

**Notes:**

- (1) Credit shall not exceed 50% of the Non-Fuel Energy and Demand Charges; nor, for otherwise applicable Rate Schedule GSDT-1, shall the credit exceed the On-Peak and Base Demand Charges.
- (2) Equipment includes water heaters, central heating systems, central cooling systems and swimming pool pumps when such equipment is installed on permanent residential structures and utilized for domestic purposes.
- (3) Restricted to existing customers as of July 20, 2000.

**Interruption Schedules:**

- Schedule A Interruptions ~~to achieve an effective equipment duty cycle of approximately 66% during control periods will not exceed an accumulated total of 10 minutes during any 30-minute interval~~ within the designated Peak Periods.
- Schedule B Interruptions ~~to achieve an effective equipment duty cycle of approximately 45% during control periods will not exceed an accumulated total of 16.5 minutes during any 30-minute interval~~ within the designated Peak Periods.

(Continued on Page No. 2)



**RATE SCHEDULE GSLM-1  
GENERAL SERVICE – LOAD MANAGEMENT**  
(Continued from Page No. 1)

**Peak Periods:**

The designated Peak Periods expressed in terms of prevailing clock time shall be as follows:

- (1) For the calendar months of November through March,  
All Days: 6:00 a.m. to 11:00 a.m., and  
6:00 p.m. to ~~11~~:00 p.m.
- (2) For the calendar months of April through October,  
All Days: 1:00 p.m. to ~~11~~:00 p.m.

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices on the electrical equipment specified above.
2. Prior to the installation of load management devices, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment. The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. The Company shall not be required to install load management devices on electrical equipment, which would not be economically justified, for reasons such as excessive installation costs, oversized equipment or abnormal utilization of equipment, including operating hours which are not considered within the designated Peak Periods.
4. If the Company determines that equipment operating schedules and/or business hours have reduced the ability of the Company to control electric demand during the above designated peak periods, then service under this rate will be discontinued.
5. Where multiple units (including standby or multi-stage) of space conditioning equipment are used to heat or cool a building, all of these units must be equipped with load management devices and normally must be controlled on the same interruption cycle.
6. Billing under this rate schedule will commence with the first complete billing period following installation of the load management devices. During the first year of service, a customer may transfer to another rate schedule by notifying the Company forty-five (45) days in advance. After the first year of service, the customer may transfer to another rate schedule by notifying the Company twelve (12) months in advance. However, in the event of any revision to the interruption schedules which may affect customer, the customer shall be allowed ninety (90) days from the effective date of the revision to change schedules or equipment or transfer to another rate schedule.
7. The limitations on Interruptible Schedules shall not apply during critical capacity conditions on the Company's system; nor shall limitations apply at times the Company requires additional generating resources to maintain firm power sales commitments or supply emergency interchange service to another utility for its firm load obligations only. The Company may also exercise equipment interruptions at any time for purposes of testing and performance evaluation of its Load Management System.
8. If the Company determines that the load management devices have been tampered with or disconnected without notice or customer Wi-Fi network availability for use by Company's load management devices has been disrupted, the Company may discontinue service under this rate schedule and bill for prior load management credits received by the customer, plus applicable investigative charges.
9. If the Company determines that the effect of equipment interruptions have been offset by the customer's use of supplementary or alternative electrical equipment, service under this rate schedule may be discontinued and the customer billed for all prior load management credits received over a period not in excess of six (6) months.
10. For purposes of determining eligible credits related to domestically utilized equipment, the customer shall provide the Company actual occupancy rates of permanent residential structures containing each type of equipment for the previous winter (November through March) and summer (April through October) periods. Credits for the current billing period shall apply to the number of items of each installed type of equipment multiplied by the corresponding previous seasonal period's occupancy rate.



**RATE SCHEDULE GSLM-2  
 GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION**

**Availability:**

Available only within the range of the Company's radio switch communications capability.

**Applicable:**

To customers who are eligible for service under Rate Schedules GS-1, GST-1, GSD-1, or GSDDT-1 who have standby generation that will allow facility demand reduction at the request of the Company. The customer's Standby Generation Capacity calculation must be at least 50 kW in order to remain eligible for the rate. Customers cannot be on this rate schedule and also the General Service Load Management (GSLM-1) rate schedule. Not applicable to Net Metering customers. Customers cannot use the standby generation for peak shaving. Customer has the option to select to participate under Schedule A – Emergency Standby Generation or Schedule B – Non-Emergency Standby Generation based on EPA emissions certification of customer's generation equipment as described below.

**Limitation of Service:**

Operation of the customer's equipment will occur at the Company's request. Power to the facility from the Company will normally remain as back up power for the standby generation. The Customer will be given fifteen (15) minutes to initiate the demand reduction before the capacity calculation (see Definitions) is impacted.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

The rates and all other terms and conditions of Company Rate Schedules GS-1, GST-1, GSD-1 or GSDDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

**GSLM-2 MONTHLY CREDIT AMOUNT  
 STANDBY GENERATION**

|   | <u>Credit</u>  | <u>Cumulative Fiscal Year Hours</u>         |
|---|--|---|
| <u>Schedule A Emergency Standby Generation:</u>     | $\$4.50 \times C + \$0.05^1 \times \text{kWh monthly}$                         | $0 \leq \text{CRH} \leq 200$ <u>100</u>     |
|   | <del><math>\\$5.40 \times C + \\$0.05^1 \times \text{kWh monthly}</math></del> | <del><math>200 &lt; \text{CRH}</math></del> |
| <u>Schedule B Non-Emergency Standby Generation:</u> | $\$4.50 \times C + \$0.50^1 \times \text{kWh monthly}$                         | <u>All CRH</u>                              |

Immediately upon going on the rate, the customer's Capacity (**C**) is set to a value equivalent to the load the customer's standby generator carries during testing observed by the Customer and a Company representative. The **C** will remain at that value until the equipment is requested to run by the Company. The **C** for that month and subsequent months will be a calculated value based upon the following formula:

$$C = \frac{\text{kWh annual}}{[\text{CAH} - (\# \text{ of Requests} \times \frac{1}{4} \text{ hour})]}$$

**Definitions:**

kWh annual = Actual measured kWh generated by the standby generator during the previous twelve (12) months during Company control periods (rolling total).

CAH = Cumulative hours requested by the Company for the standby generation to operate for the previous twelve (12) months (rolling total).

CRH = Cumulative standby generator running hours during request periods of the Company for the current fiscal year (the fiscal year begins on the month the customer goes on the GSLM-2 rate).

# of Requests = The cumulative number of times the Company has requested the standby generation to be operated for the previous twelve (12) months (rolling total).

kWh monthly = Actual measured kWh generated by the standby generator for the current month during Company control periods.

<sup>1</sup> This \$ per kWh rate represents an incentive credit to support Customer O&M associated with run time requested by the Company. DEF will periodically review this incentive rate and request changes as deemed appropriate.

(Continued on Page No. 2)

ISSUED BY: **Javier J. Portuondo, Director Rates & Regulatory Strategy – FL**

EFFECTIVE: **January 1, 2014**

**RATE SCHEDULE GSLM-2**  
**GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION**  
(Continued from Page No. 1)

**Schedules:**

**Schedule A – Emergency Standby Generation:**

Requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time during the day. Schedule A – Emergency Standby Generation (except for regional controls up to 50 hours per year as defined in EPA 40 CFR Section 60.4243) will only be requested during an Energy Emergency Alert Level 2 (EEA2) as defined by NERC and The GSLM-2 will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

**Schedule B – Non-Emergency Standby Generation:**

Available only to those customers whose standby generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ.

Customers currently on Schedule A and whose standby generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ can convert to Schedule B – Non-Emergency Standby Generation. Conversion will be effective on their next regular bill cycle.

Schedule B – Non-Emergency Standby Generation requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time.

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. Prior to installation of equipment for Schedule B or conversion from Schedule A to Schedule B, customer must provide the Company with documentation certifying customer's generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ. The default schedule will be Schedule A.
34. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.

**RATE SCHEDULE RSL-1  
RESIDENTIAL LOAD MANAGEMENT**  
(Continued from Page No. 1)

Any customer with a heat pump not taking service under Schedule S who requests a change under this tariff will be required to take service under Schedule S.

Premises taking service under this tariff and controlled by load management devices will remain on the existing schedule until such time as the current customer affirmatively requests a change.

See also Special Provisions 10 and 11 below for further customer optional adjustments to the above credits.

Notes: (1) Load Management credits shall not exceed 40% of the Non-Fuel Energy Charge associated with kWh billed in excess of 600 kWh per month.

(2) Premises that have load management devices installed prior to June 30, 2007 may remain on the existing schedule until such time as the customer requests a change under this tariff. When a change is requested, customers may take service only under Schedule B or Schedule S if the customer has a heat pump. Customers may also opt for Schedule C if taking service under another Schedule. Customers whose premises have load management devices installed after June 30, 2007 will be subject to the Limitations of Service above.

—(3) For the billing months of November through March only.

—(4) For the billing months of April through October only.

**Interruption Schedules:**

Schedule A Equipment interruptions ~~to achieve an effective equipment duty cycle of approximately 66% during control periods will not exceed an accumulated total of 10 minutes during any 30 minute interval~~ within the Company's designated Peak Periods.

Schedule B Equipment interruptions ~~to achieve an effective equipment duty cycle of approximately 45% during control periods will not exceed an accumulated total of 16.5 minutes during any 30 minute interval~~ within the Company's designated Peak Periods.

Schedule C Equipment may be interrupted continuously, not to exceed 300 minutes, and during the Company's designated Peak Periods. Where a thermal storage system has been installed hereunder, additional interruptions to the water heater will be made during periods of charging thermal storage system.

Schedule D The regular heating system may be interrupted continuously and alternative heating provided by means of a thermal storage system installed hereunder.

Schedule S Equipment interruptions ~~to achieve an effective equipment duty cycle of approximately 45% during control periods will not exceed an accumulated total of 16.5 minutes during any 30 minute interval~~ within the Company's designated Peak Periods. Heat pump back-up strip may be interrupted continuously, not to exceed 300 minutes, during the Company's designated Peak. When the heat pump back-up strip is being interrupted, the heat pump will not be interrupted.

**Peak Periods:**

The Peak Periods expressed in terms of prevailing clock time shall be, but are not limited to these as follows:

(1) For the calendar months of November through March, All Days: 6:00 a.m. to 11:00 a.m., and 6:00 p.m. to ~~11:00~~ 11:00 p.m.

(2) For the calendar months of April through October, All Days: 1:00 p.m. to ~~11:00~~ 11:00 p.m.

**Terms and Conditions:**

All terms and conditions of Rate Schedule RS-1, Residential Service, (i.e. Fuel Charges and other Billing Adjustments, Minimum Monthly Bill, Terms of Payment, Term of Service and Average Billing Plan), shall apply to service under this rate schedule.

(Continued on Page No. 3)

RATE SCHEDULE RSL-1  
RESIDENTIAL LOAD MANAGEMENT  
(Continued from Page No. 2)**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices on the electrical equipment specified above.
2. Prior to the installation of load management devices, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment.
3. The Company shall not be required to install load management devices on electrical equipment which would not be economically justified for reasons, such as, excessive installation costs, insufficient load, oversized equipment or abnormal utilization of equipment, including but not limited to, vacation or other limited occupancy residences or qualifying common use facilities.
4. Multiple units of any electrical equipment specified above must all be installed with load management devices to qualify for the credit attributable to that equipment type at that premise.
5. The limitation on interruptible schedules shall not apply during critical capacity conditions on the Company's system; nor shall limitations apply at times the Company requires additional generating resources to maintain firm power sales commitments or supply emergency interchange service to another utility for its firm load obligations only. The Company may also exercise equipment interruptions at any time for purposes of testing and performance evaluation of its Load Management System.
6. If the Company determines that the load management devices have been tampered with or customer Wi-Fi network availability for use by Company's load management devices has been disrupted, the Company may discontinue service under this rate schedule and bill for all prior load management credits received by the customer, unless an earlier tampering date can be established, plus applicable investigative charges.
- ~~7. An alternative thermal storage heating system is available to customers who (a) have resistance strip heating solely as their central electric heating system, (b) have adequate space and provide access for installation and maintenance of a thermal storage system, (c) have an electric water heater circuit which can be utilized for charging a thermal storage system and (d) have normal residential water heating and central heating requirements. The Company shall not be required to provide a thermal storage system where the Company deems the installation to be economically unjustified.  
  
For qualifying customers, the Company will install, maintain and operate a thermal storage system consisting of a thermal storage (water) tank, a pump, and a heat-exchanging coil. The storage tank will be charged at the option and under the control of the Company. When this option is exercised, heating from this system will be available in place of the customer's regular heating system. During periods that the storage tank is being charged, electric service to the customer's regular water heater will be interrupted. An initial incentive payment of \$50.00 shall be made to a participating customer.~~
87. Billing under this Rate Schedule will commence with the first complete billing period following installation of the load management devices. A customer may change interruption schedules or the selection of electrical equipment installed with load management devices or transfer to another rate schedule by notifying the Company forty-five days in advance. However, in the event of any revision to the interruption schedules which may affect customer, the Customer shall be allowed ninety days from the effective date of the revision to change schedules or equipment or transfer to another rate schedule. If a customer transfers to another rate schedule they are not eligible for service under this rate schedule for 12 months from the date of transfer.
98. If the Company determines that the effect of equipment interruptions has been offset by the customer's use of supplementary or alternative electrical equipment, or if access cannot be obtained by the Company to inspect, maintain, or remove load management devices, service under this rate schedule may be discontinued and the customer billed for all prior load management credits received over a period not in excess of six months.
109. Effective 8/31/07, for customers at premises taking service under Interruption Schedule B or S, and C for electric water heating, for which the premise at any time received the solar thermal water heating incentive, the monthly credit amount will be 25% of the above credit values for Interruption Schedules B, S and C, except for the pool pump. The pool pump credit amount will be at 100%.
1410. Effective 8/31/07 through 12/31/15, a customer may elect to have all their credits contributed to the Duke Energy Florida "Photovoltaics for Schools" green program. No partial contributions will be allowed. This program installs photovoltaic panels on schools as funds become available.



**RATE SCHEDULE RSL-2  
 RESIDENTIAL LOAD MANAGEMENT – WINTER ONLY**

**Availability:**

Available only within the range of the Company's Load Management System.

**Applicable:**

To customers eligible for Residential Service under Rate Schedule RS-1 or RSS-1 having a minimum average monthly usage of 600 kWh for the months of November through March (based on the most recent billings, where not available, a projection for those months) and utilizing **both** electric water heater and central electric heating systems.

**Character of Service:**

Continuous service, alternating current, 60 cycle, single-phase, at the Company's standard distribution secondary voltage available. Three-phase service, if available, will be supplied only under the conditions set forth in the Company's booklet "Requirements for Electric Service and Meter Installations."

**Limitation of Service:**

Service to the electrical equipment specified above may be interrupted at the option of the Company by means of load management devices installed on the customer's premises.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

**Customer Charge:** \$ 8.76

**Energy and Demand Charges:**

Non-Fuel Energy Charges:

|                    |                |
|--------------------|----------------|
| First 1,000 kWh    | 4.974¢ per kWh |
| All additional kWh | 6.336¢ per kWh |

Plus the Cost Recovery Factors listed in Rate Schedule BA-1, *Billing Adjustments*, except the Fuel Cost Recovery Factor: See Sheet No. 6.105 and 6.106

**Additional Charges:**

|                               |                     |
|-------------------------------|---------------------|
| Fuel Cost Recovery Factor:    | See Sheet No. 6.105 |
| Gross Receipts Tax Factor:    | See Sheet No. 6.106 |
| Right-of-Way Utilization Fee: | See Sheet No. 6.106 |
| Municipal Tax:                | See Sheet No. 6.106 |
| Sales Tax:                    | See Sheet No. 6.106 |

**Load Management Credit Amount:<sup>1</sup>**

| <u>Interruptible Equipment</u>          | <u>Monthly Credit<sup>2</sup></u> |
|---|-----------------------------------|
| Water Heater and Central Heating System | \$11.50                           |

Notes: (1) Load management credit shall not exceed 40% of the Non-Fuel Energy Charge associated with kWh billed in excess of 600 kWh/month.  
 (2) For billing months of November through March only.

**Appliance Interruption Schedule:**

|              |  |
|--------------|--|
| Heating      | Equipment interruptions <del>to achieve an effective equipment duty cycle of approximately 45% during control periods will not exceed an accumulated total of 16.5 minutes during any 30 minute interval</del> within the Company's designated Peak Periods. Heat pump back-up strip may be interrupted continuously, not to exceed 300 minutes, during the Company's designated Peak. When the heat pump back-up strip is being interrupted, the heat pump will not be interrupted. |
| Water Heater | Equipment may be interrupted continuously, not to exceed 300 minutes, and during the Company's designated Peak Periods.  |

(Continued on Page No. 2)



**RATE SCHEDULE RSL-2  
RESIDENTIAL LOAD MANAGEMENT – WINTER ONLY**  
(Continued from Page No. 1)

**Peak Periods:**

The Peak Periods expressed in terms of prevailing clock time shall be, but are not limited to these as follows:

- (1) For the calendar months of November through March - All Days:      6:00 a.m. to 11:00 a.m., and  
6:00 p.m. to ~~4~~11:00 p.m.

**Terms and Conditions:**

All terms and conditions of Rate Schedule RS-1, Residential Service (i.e. Fuel Charges and other Billing Adjustments, Minimum Monthly Bill, Terms of Payment, Term of Service and Budget Billing Plan), shall apply to service under this rate schedule.

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices on the electrical equipment specified above.
2. Prior to the installation of load management devices, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment.
3. The Company shall not be required to install load management devices on electrical equipment which would not be economically justified for reasons, such as, excessive installation costs, insufficient load, oversized equipment, or abnormal utilization of equipment, including but not limited to, vacation or other limited occupancy residences or qualifying common use facilities.
4. Multiple units of any electrical equipment specified above must all be installed with load management devices to qualify for the credit attributable to that equipment at that premise.
5. The limitation on interruptible schedules shall not apply during critical capacity conditions on the Company's system; nor shall limitations apply at times the Company requires additional generating resources to maintain firm power sales commitments or supply emergency interchange service to another utility for its firm load obligations only. The Company may also exercise equipment interruptions at any time for purposes of testing and performance evaluation of its Load Management System.
6. If the Company determines that the load management devices have been tampered with or customer Wi-Fi network availability for use by Company's load management devices has been disrupted, the Company may discontinue service under this rate schedule and bill for all prior load management credits received by the customer, unless an earlier tampering date can be established, plus applicable investigative charges.
7. Billing under this Rate Schedule will commence with the first complete billing period following installation of the load management devices. A customer may transfer to another rate schedule by notifying the Company forty-five (45) days in advance. If a customer transfers to another rate schedule they are not eligible for service under this rate schedule for 12 months from the date of transfer.
8. If the Company determines that the effect of equipment interruptions has been offset by the customer's use of supplementary or alternative electrical equipment, or if access cannot be obtained by the Company to inspect, maintain, or remove load management devices, service under this rate schedule may be discontinued and the customer billed for all prior load management credits received over a period not in excess of six (6) months.
9. A-Effective through 12/31/15, a customer may elect to have all their credits contributed to the Duke Energy Florida "Photovoltaics for Schools" green program. No partial contributions will be allowed. This program installs photovoltaic panels on schools as funds become available.

## **CLEAN COPY FORMAT TARIFFS**

NINTH REVISED SHEET NO. 2.0

SIXTH REVISED SHEET NO. 2.3

SIXTH REVISED SHEET NO. 2.4

FIFTH REVISED SHEET NO. 2.6

THIRTEENTH REVISED SHEET NO. 6.220

TENTH REVISED SHEET NO. 6.221

EIGHTH REVISED SHEET NO. 6.225

THIRD REVISED SHEET NO. 6.226

THIRTEENTH REVISED SHEET NO. 6.131

FIFTEENTH REVISED SHEET NO. 6.132

SIXTEENTH REVISED SHEET NO. 6.135

FIFTH REVISED SHEET NO. 6.136



SECTION NO. II  
NINTH REVISED SHEET NO. 2.0  
CANCELS EIGHTH REVISED SHEET NO. 2.0

MISCELLANEOUS  
INDEX

| <u>DESCRIPTION</u>      | <u>SHEET NO.</u> |
|-------------------------|------------------|
| Florida BERS/HERS Audit | 2.6              |
| Load Profiler Online    | 2.7              |
| Remote Access           | 2.8              |



SECTION NO. II  
SIXTH REVISED SHEET NO. 2.3  
CANCELS FIFTH REVISED SHEET NO. 2.3

RESERVED FOR FUTURE USE



SECTION NO. II  
SIXTH REVISED SHEET NO. 2.4  
CANCELS FIFTH REVISED SHEET NO. 2.4

RESERVED FOR FUTURE USE

ISSUED BY: Javier J. Portuondo, Director, Rates & Regulatory Strategy – FL

EFFECTIVE:



**Florida BERS/HERS Audit**

**Availability:**

Available throughout the entire territory served by the Company.

**Applicable:**

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a certified energy rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A require a review of code calculations to be eligible for a rating certificate.

**Schedule of Fees:**

| <i>Rating</i> | <i>* New Home</i> | <i>* New Home (With Energy Code Compliance Form Provided)</i> | <i>* Existing Home</i> |
|---------------|-------------------|---|------------------------|
| HERS On-Site  | \$630             | N/A   | \$630                  |

\* Includes electronic registration fees charged by the RESNET Provider.

**Definitions:**

- Existing home: A completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy has been issued.
- BERS: The Florida Building Energy-Efficiency Rating System (BERS) is a whole building energy evaluation system established and maintained by RESNET.
- HERS: The Home Energy Rating System (HERS), established and maintained by RESNET, measures homes' energy efficiency.
- RESNET: The Residential Energy Services Network (RESNET) is a not-for-profit, membership corporation that is a recognized national standards making body for building energy efficiency rating and certification systems.

**Terms of Payment:**

The fee shall be payable at the time the rating is completed and delivered.



**RATE SCHEDULE GSLM-1  
 GENERAL SERVICE - LOAD MANAGEMENT  
 (Closed to New Customers as of 07/20/2000)**

**Availability:**

Available only within the range of the Company's Load Management System.

**Applicable:**

To customers who are eligible for service under Rate Schedules GS-1, GST-1, GSD-1, or GSDT-1, excluding those customers served under the General Service transition rates, and who elect service under this rate schedule and have electric space cooling equipment suitable for interruptible operation. Also applicable to those customers who have any of the following electrical equipment installed on permanent residential structures and utilized for domestic (household) purposes: (1) water heater(s), (2) central electric heating system(s), (3) central electric cooling system(s), and/or (4) swimming pool pump(s).

**Limitation of Service:**

Service to specified electrical equipment may be interrupted at the option of the Company by means of load management devices installed on the customer's premises.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

The rates and all other terms and conditions of Company Rate Schedules GS-1, GST-1, GSD-1 or GSDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

**LOAD MANAGEMENT MONTHLY CREDIT AMOUNT**

| <u>Interruptible Equipment</u>                 | <u>Interruption Schedule</u>  | <u>Credit Based on Installed Capacity<sup>1</sup></u> | <u>Applicable Billing Months</u> |
|--|---|---|----------------------------------|
| Electric Space Cooling <sup>3</sup>            | A   | \$ 0.26 Per kW  | April thru October               |
| Electric Space Cooling <sup>3</sup>            | B   | \$ 0.56 Per kW  | April thru October               |
| Domestically Utilized Equipment <sup>2,3</sup> | [Availability, Schedules and Credits of the otherwise applicable Rate Schedule RSL-1or RSL-2 shall apply] |   |                                  |

**Notes:**

- (1) Credit shall not exceed 50% of the Non-Fuel Energy and Demand Charges; nor, for otherwise applicable Rate Schedule GSDT-1, shall the credit exceed the On-Peak and Base Demand Charges.
- (2) Equipment includes water heaters, central heating systems, central cooling systems and swimming pool pumps when such equipment is installed on permanent residential structures and utilized for domestic purposes.
- (3) Restricted to existing customers as of July 20, 2000.

**Interruption Schedules:**

- Schedule A Interruptions to achieve an effective equipment duty cycle of approximately 66% during control periods within the designated Peak Periods.
- Schedule B Interruptions to achieve an effective equipment duty cycle of approximately 45% during control periods within the designated Peak Periods.

(Continued on Page No. 2)

**RATE SCHEDULE GSLM-1  
GENERAL SERVICE – LOAD MANAGEMENT**  
(Continued from Page No. 1)**Peak Periods:**

The designated Peak Periods expressed in terms of prevailing clock time shall be as follows:

- (1) For the calendar months of November through March,  
All Days: 6:00 a.m. to 11:00 a.m., and  
6:00 p.m. to 11:00 p.m.
- (2) For the calendar months of April through October,  
All Days: 1:00 p.m. to 11:00 p.m.

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices on the electrical equipment specified above.
2. Prior to the installation of load management devices, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment. The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. The Company shall not be required to install load management devices on electrical equipment, which would not be economically justified, for reasons such as excessive installation costs, oversized equipment or abnormal utilization of equipment, including operating hours which are not considered within the designated Peak Periods.
4. If the Company determines that equipment operating schedules and/or business hours have reduced the ability of the Company to control electric demand during the above designated peak periods, then service under this rate will be discontinued.
5. Where multiple units (including standby or multi-stage) of space conditioning equipment are used to heat or cool a building, all of these units must be equipped with load management devices and normally must be controlled on the same interruption cycle.
6. Billing under this rate schedule will commence with the first complete billing period following installation of the load management devices. During the first year of service, a customer may transfer to another rate schedule by notifying the Company forty-five (45) days in advance. After the first year of service, the customer may transfer to another rate schedule by notifying the Company twelve (12) months in advance. However, in the event of any revision to the interruption schedules which may affect customer, the customer shall be allowed ninety (90) days from the effective date of the revision to change schedules or equipment or transfer to another rate schedule.
7. The limitations on Interruptible Schedules shall not apply during critical capacity conditions on the Company's system; nor shall limitations apply at times the Company requires additional generating resources to maintain firm power sales commitments or supply emergency interchange service to another utility for its firm load obligations only. The Company may also exercise equipment interruptions at any time for purposes of testing and performance evaluation of its Load Management System.
8. If the Company determines that the load management devices have been tampered with or disconnected without notice or customer Wi-Fi network availability for use by Company's load management devices has been disrupted, the Company may discontinue service under this rate schedule and bill for prior load management credits received by the customer, plus applicable investigative charges.
9. If the Company determines that the effect of equipment interruptions have been offset by the customer's use of supplementary or alternative electrical equipment, service under this rate schedule may be discontinued and the customer billed for all prior load management credits received over a period not in excess of six (6) months.
10. For purposes of determining eligible credits related to domestically utilized equipment, the customer shall provide the Company actual occupancy rates of permanent residential structures containing each type of equipment for the previous winter (November through March) and summer (April through October) periods. Credits for the current billing period shall apply to the number of items of each installed type of equipment multiplied by the corresponding previous seasonal period's occupancy rate.



**RATE SCHEDULE GSLM-2  
 GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION**

**Availability:**

Available only within the range of the Company's radio switch communications capability.

**Applicable:**

To customers who are eligible for service under Rate Schedules GS-1, GST-1, GSD-1, or GSDD-1 who have standby generation that will allow facility demand reduction at the request of the Company. The customer's Standby Generation Capacity calculation must be at least 50 kW in order to remain eligible for the rate. Customers cannot be on this rate schedule and also the General Service Load Management (GSLM-1) rate schedule. Not applicable to Net Metering customers. Customers cannot use the standby generation for peak shaving. Customer has the option to select to participate under Schedule A – Emergency Standby Generation or Schedule B – Non-Emergency Standby Generation based on EPA emissions certification of customer's generation equipment as described below.

**Limitation of Service:**

Operation of the customer's equipment will occur at the Company's request. Power to the facility from the Company will normally remain as back up power for the standby generation. The Customer will be given fifteen (15) minutes to initiate the demand reduction before the capacity calculation (see Definitions) is impacted.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

The rates and all other terms and conditions of Company Rate Schedules GS-1, GST-1, GSD-1 or GSDD-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

**GSLM-2 MONTHLY CREDIT AMOUNT  
 STANDBY GENERATION**

|  | <u>Credit</u>  | <u>Cumulative Fiscal Year Hours</u> |
|--|--|-------------------------------------|
| Schedule A Emergency Standby Generation:     | $\$4.50 \times C + \$0.05^1 \times \text{kWh monthly}$ | $0 \leq \text{CRH} \leq 100$        |
| Schedule B Non-Emergency Standby Generation: | $\$4.50 \times C + \$0.50^1 \times \text{kWh monthly}$ | All CRH                             |

Immediately upon going on the rate, the customer's Capacity (**C**) is set to a value equivalent to the load the customer's standby generator carries during testing observed by the Customer and a Company representative. The **C** will remain at that value until the equipment is requested to run by the Company. The **C** for that month and subsequent months will be a calculated value based upon the following formula:

$$C = \frac{\text{kWh annual}}{[\text{CAH} - (\# \text{ of Requests} \times \frac{1}{4} \text{ hour})]}$$

**Definitions:**

kWh annual = Actual measured kWh generated by the standby generator during the previous twelve (12) months during Company control periods (rolling total).

CAH = Cumulative hours requested by the Company for the standby generation to operate for the previous twelve (12) months (rolling total).

CRH = Cumulative standby generator running hours during request periods of the Company for the current fiscal year (the fiscal year begins on the month the customer goes on the GSLM-2 rate).

# of Requests = The cumulative number of times the Company has requested the standby generation to be operated for the previous twelve (12) months (rolling total).

kWh monthly = Actual measured kWh generated by the standby generator for the current month during Company control periods.

<sup>1</sup> This \$ per kWh rate represents an incentive credit to support Customer O&M associated with run time requested by the Company. DEF will periodically review this incentive rate and request changes as deemed appropriate.

(Continued on Page No. 2)



**RATE SCHEDULE GSLM-2  
GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION**  
(Continued from Page No. 1)

**Schedules:**

**Schedule A – Emergency Standby Generation:**

Requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time during the day. Schedule A – Emergency Standby Generation (except for regional controls up to 50 hours per year as defined in EPA 40 CFR Section 60.4243) will only be requested during an Energy Emergency Alert Level 2 (EEA2) as defined by NERC and will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

**Schedule B – Non-Emergency Standby Generation:**

Available only to those customers whose standby generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ.

Customers currently on Schedule A and whose standby generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ can convert to Schedule B – Non-Emergency Standby Generation. Conversion will be effective on their next regular bill cycle.

Schedule B – Non-Emergency Standby Generation requests by the Company for the customer to reduce facility demand by operation of their standby generation can occur at any time.

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. Prior to installation of equipment for Schedule B or conversion from Schedule A to Schedule B, customer must provide the Company with documentation certifying customer's generation equipment is certified RICE NESHAP compliant as per current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60 subpart IIII and JJJJ. The default schedule will be Schedule A.
4. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.



**RATE SCHEDULE RSL-1  
RESIDENTIAL LOAD MANAGEMENT**  
(Continued from Page No. 1)

Any customer with a heat pump not taking service under Schedule S who requests a change under this tariff will be required to take service under Schedule S.

Premises taking service under this tariff and controlled by load management devices will remain on the existing schedule until such time as the current customer affirmatively requests a change.

See also Special Provisions 10 and 11 below for further customer optional adjustments to the above credits.

- Notes:
- (1) Load Management credits shall not exceed 40% of the Non-Fuel Energy Charge associated with kWh billed in excess of 600 kWh per month.
  - (2) Premises that have load management devices installed prior to June 30, 2007 may remain on the existing schedule until such time as the customer requests a change under this tariff. When a change is requested, customers may take service only under Schedule B or Schedule S if the customer has a heat pump. Customers may also opt for Schedule C if taking service under another Schedule. Customers whose premises have load management devices installed after June 30, 2007 will be subject to the Limitations of Service above.
  - (3) For the billing months of November through March only.
  - (4) For the billing months of April through October only.

**Interruption Schedules:**

- |            |  |
|------------|--|
| Schedule A | Equipment interruptions to achieve an effective equipment duty cycle of approximately 66% during control periods within the Company's designated Peak Periods.   |
| Schedule B | Equipment interruptions to achieve an effective equipment duty cycle of approximately 45% during control periods within the Company's designated Peak Periods.   |
| Schedule C | Equipment may be interrupted continuously, not to exceed 300 minutes, and during the Company's designated Peak Periods. Where a thermal storage system has been installed hereunder, additional interruptions to the water heater will be made during periods of charging thermal storage system.  |
| Schedule D | The regular heating system may be interrupted continuously and alternative heating provided by means of a thermal storage system installed hereunder.  |
| Schedule S | Equipment interruptions to achieve an effective equipment duty cycle of approximately 45% during control periods within the Company's designated Peak Periods. Heat pump back-up strip may be interrupted continuously, not to exceed 300 minutes, during the Company's designated Peak. When the heat pump back-up strip is being interrupted, the heat pump will not be interrupted. |

**Peak Periods:**

The Peak Periods expressed in terms of prevailing clock time shall be, but are not limited to these as follows:

- (1) For the calendar months of November through March, All Days: 6:00 a.m. to 11:00 a.m., and  
6:00 p.m. to 11:00 p.m.
- (2) For the calendar months of April through October, All Days: 1:00 p.m. to 11:00 p.m.

**Terms and Conditions:**

All terms and conditions of Rate Schedule RS-1, Residential Service, (i.e. Fuel Charges and other Billing Adjustments, Minimum Monthly Bill, Terms of Payment, Term of Service and Average Billing Plan), shall apply to service under this rate schedule.

(Continued on Page No. 3)



**RATE SCHEDULE RSL-1  
RESIDENTIAL LOAD MANAGEMENT**  
(Continued from Page No. 2)

**Special Provisions:**

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices on the electrical equipment specified above.
2. Prior to the installation of load management devices, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment.
3. The Company shall not be required to install load management devices on electrical equipment which would not be economically justified for reasons, such as, excessive installation costs, insufficient load, oversized equipment or abnormal utilization of equipment, including but not limited to, vacation or other limited occupancy residences or qualifying common use facilities.
4. Multiple units of any electrical equipment specified above must all be installed with load management devices to qualify for the credit attributable to that equipment type at that premise.
5. The limitation on interruptible schedules shall not apply during critical capacity conditions on the Company's system; nor shall limitations apply at times the Company requires additional generating resources to maintain firm power sales commitments or supply emergency interchange service to another utility for its firm load obligations only. The Company may also exercise equipment interruptions at any time for purposes of testing and performance evaluation of its Load Management System.
6. If the Company determines that the load management devices have been tampered with or customer Wi-Fi network availability for use by Company's load management devices has been disrupted, the Company may discontinue service under this rate schedule and bill for all prior load management credits received by the customer, unless an earlier tampering date can be established, plus applicable investigative charges.
7. Billing under this Rate Schedule will commence with the first complete billing period following installation of the load management devices. A customer may change interruption schedules or the selection of electrical equipment installed with load management devices or transfer to another rate schedule by notifying the Company forty-five days in advance. However, in the event of any revision to the interruption schedules which may affect customer, the Customer shall be allowed ninety days from the effective date of the revision to change schedules or equipment or transfer to another rate schedule. If a customer transfers to another rate schedule they are not eligible for service under this rate schedule for 12 months from the date of transfer.
8. If the Company determines that the effect of equipment interruptions has been offset by the customer's use of supplementary or alternative electrical equipment, or if access cannot be obtained by the Company to inspect, maintain, or remove load management devices, service under this rate schedule may be discontinued and the customer billed for all prior load management credits received over a period not in excess of six months.
9. Effective 8/31/07, for customers at premises taking service under Interruption Schedule B or S, and C for electric water heating, for which the premise at any time received the solar thermal water heating incentive, the monthly credit amount will be 25% of the above credit values for Interruption Schedules B, S and C, except for the pool pump. The pool pump credit amount will be at 100%.
10. Effective 8/31/07 through 12/31/15, a customer may elect to have all their credits contributed to the Duke Energy Florida "Photovoltaics for Schools" green program. No partial contributions will be allowed. This program installs photovoltaic panels on schools as funds become available.



**RATE SCHEDULE RSL-2  
 RESIDENTIAL LOAD MANAGEMENT – WINTER ONLY**

**Availability:**

Available only within the range of the Company's Load Management System.

**Applicable:**

To customers eligible for Residential Service under Rate Schedule RS-1 or RSS-1 having a minimum average monthly usage of 600 kWh for the months of November through March (based on the most recent billings, where not available, a projection for those months) and utilizing **both** electric water heater and central electric heating systems.

**Character of Service:**

Continuous service, alternating current, 60 cycle, single-phase, at the Company's standard distribution secondary voltage available. Three-phase service, if available, will be supplied only under the conditions set forth in the Company's booklet "Requirements for Electric Service and Meter Installations."

**Limitation of Service:**

Service to the electrical equipment specified above may be interrupted at the option of the Company by means of load management devices installed on the customer's premises.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

**Rate Per Month:**

**Customer Charge:** \$ 8.76

**Energy and Demand Charges:**

Non-Fuel Energy Charges:

|                    |                |
|--------------------|----------------|
| First 1,000 kWh    | 4.974¢ per kWh |
| All additional kWh | 6.336¢ per kWh |

Plus the Cost Recovery Factors listed in Rate Schedule BA-1, *Billing Adjustments*, except the Fuel Cost Recovery Factor: See Sheet No. 6.105 and 6.106

**Additional Charges:**

|                               |                     |
|-------------------------------|---------------------|
| Fuel Cost Recovery Factor:    | See Sheet No. 6.105 |
| Gross Receipts Tax Factor:    | See Sheet No. 6.106 |
| Right-of-Way Utilization Fee: | See Sheet No. 6.106 |
| Municipal Tax:                | See Sheet No. 6.106 |
| Sales Tax:                    | See Sheet No. 6.106 |

**Load Management Credit Amount:<sup>1</sup>**

| <u>Interruptible Equipment</u>          | <u>Monthly Credit<sup>2</sup></u> |
|---|-----------------------------------|
| Water Heater and Central Heating System | \$11.50                           |

Notes: (1) Load management credit shall not exceed 40% of the Non-Fuel Energy Charge associated with kWh billed in excess of 600 kWh/month.  
 (2) For billing months of November through March only.

**Appliance Interruption Schedule:**

|              |  |
|--------------|--|
| Heating      | Equipment interruptions to achieve an effective equipment duty cycle of approximately 45% during control periods within the Company's designated Peak Periods. Heat pump back-up strip may be interrupted continuously, not to exceed 300 minutes, during the Company's designated Peak. When the heat pump back-up strip is being interrupted, the heat pump will not be interrupted. |
| Water Heater | Equipment may be interrupted continuously, not to exceed 300 minutes, and during the Company's designated Peak Periods.  |

(Continued on Page No. 2)

ISSUED BY: Javier J. Portuondo, Director Rates & Regulatory Strategy – FL

EFFECTIVE:

