DUKE ENERGY
FLORIDA

Stephanie A. Cuello
SENIOR COUNSEL

April 2, 2024

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Commission Review of Numeric Conservation Goals (Duke Energy Florida, LLC)*;
        Docket 20240013-EG

Dear Mr. Teitzman:

        In accordance with Rule 25-17.0021(3), F.A.C., please find attached for filing Duke Energy Florida, LLC's (DEF) Petition for Approval of Conservation Goals, along with the Direct Testimony and Exhibits TD-1 through TD-8 of Mr. Timothy J. Duff, to be filed in the above-referenced Docket. This filing is in compliance with the Order Establishing Procedure dated January 23, 2024.

        Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1425 should you have any questions concerning this filing.

                                Sincerely,

                                /s/ Stephanie A. Cuello

                                Stephanie A. Cuello

SAC/clg
Attachments

106 East College Avenue, Suite 800 ▪ Tallahassee, Florida 32301
Phone: 850.521.1425 ▪ Email: stephanie.cuello@duke-energy.com

In re: Commission Review of Numeric Conservation Goals (Duke Energy Florida, LLC).	Docket No. 20240013-EG Filed: April 2, 2024

DUKE ENERGY FLORIDA, LLC'S
<u>PETITION FOR APPROVAL OF CONSERVATION GOALS</u>

Pursuant to Sections 366.81 and 366.82, Florida Statutes, and Rule 25-17.0021, Florida Administrative Code ("F.A.C."), Duke Energy Florida, LLC ("DEF") petitions the Florida Public Service Commission ("Commission") for approval of DEF's proposed conservation goals for the period 2025-2034. In support of this petition, DEF states:

1.   The name and address of the affected agency is:

      Florida Public Service Commission
      2540 Shumard Oak Boulevard
      Tallahassee, Florida 32399-0850

2.   The name and address of the petitioner is:

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

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

Dianne M. Triplett	Robert Pickels
Deputy General Counsel	Director, State Government Affairs
Duke Energy Florida, LLC	Duke Energy Florida, LLC
299 1st Avenue North	106 East College Avenue, Suite 800
St. Petersburg, FL 33701	Tallahassee, FL 32301
Telephone: (727) 820-4692	Telephone: (850) 521-1421
Dianne.Triplett@duke-energy.com	Robert.Pickels@duke-energy.com

Matthew R. Bernier
Associate General Counsel
Duke Energy Florida, LLC
106 East College Avenue, Suite 800
Tallahassee, FL 32301
Telephone: (850) 521-1428
Matt.Bernier@duke-energy.com
FLRegulatoryLegal@duke-energy.com

Stephanie A. Cuello
Senior Counsel
Duke Energy Florida, LLC
106 East College Avenue, Suite 800
Tallahassee, FL 32301
Telephone: (850) 521-1437
Stephanie.Cuello@duke-energy.com

4.   Pursuant to Section 366.81, Florida Statutes, the Commission requires each utility to develop plans and implement programs for increasing energy efficiency and conservation and demand-side renewable energy systems within its service area, subject to the approval of the Commission. DEF is a public utility within the meaning of Section 366.02(1), Florida Statutes, and is subject to the Commission's jurisdiction under Chapter 366, Florida Statutes. The establishment of DEF's conservation goals will affect the need for and selection of resource alternatives by DEF, and the goals will be the target for DEF to meet in its filing of a demand side management plan; therefore, DEF's substantial interests will be determined in this proceeding.

5.   This docket and separate dockets for each of the other five FEECA utilities in Florida were established for the purpose of developing and prescribing numeric conservation or DSM goals for each of the six Florida FEECA utilities to be applicable during the period 2025-2034. The six separate dockets were consolidated in Order No. PSC-2024-0022-PCO-EG for the purpose of conducting Staff workshops and for hearing.

6.   DEF is not aware of any disputed issues of material fact. DEF's programs, assumptions, and evaluation methodology in the proposed conservation goals are reasonable and are developed based upon the criteria set forth in Rule 25-17.0021, F.A.C. The Commission should approve the DSM goals proposed by DEF for the 2025 through 2034 time period.

7.   For this DSM goal-setting proceeding, the FEECA utilities formed a collaborative effort and worked with an independent company, Resource Innovations, Inc. ("Resource Innovations"), to develop a comprehensive evaluation to assess the technical potential for reducing electricity use and peak demand by implementing a wide range of end-use energy efficiency and demand response measures, as well as customer-scale solar photovoltaic and solar thermal installations in the service territories of the six collaborative utilities. Resource Innovation's Technical Potential Study served as the foundation for economic analysis screening and adoption forecasts for each collaborative utility, i.e., the Technical Potential Study, as described in the testimony of Jim Herndon and as shown for DEF in Exhibit No. JH-3. The Technical Potential Study developed by Resource Innovation identified the theoretical limit of electric peak demand and energy reductions in Florida. Mr. Herndon's testimony and exhibits (to the extent they pertain to DEF)[1] are incorporated herein by reference.

8.   DEF is simultaneously filing the prepared direct testimony and exhibits of Tim Duff. Mr. Duff's testimony, along with the exhibits contained therein, set forth proposed conservation goals for the ten-year period 2025-2034 and summarize DEF's ten-year projections based upon DEF's most recent planning process of the total, cost-effective, winter and summer peak demand (MW) and annual energy (GWH) savings reasonably achievable in the residential and commercial/industrial classes through demand side management. DEF's goals are delineated in Mr. Duff's direct testimony.

9.   Projections of summer and winter demand savings and annual energy savings are identified in Mr. Duff's testimony and presented in Exhibit No. TD-1, also appended to Mr. Duff's

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[1] Mr. Herndon's exhibits pertaining to DEF and incorporated by reference are: Exhibit No. JH-3; Exhibit No. JH-9; and Exhibit No. JH-10.

testimony filed together with this Petition. DEF's projections reflect consideration of overlapping measures, rebound effects, free riders, interactions with building codes and appliance efficiency standards, and DEF's latest monitoring and evaluation of conservation programs and measures. The Commission should approve DEF's overall Residential MW and GWH goals and overall Commercial/Industrial MW and GWH goals set forth in this filing. These goals reflect the reasonably achievable demand side management potential in DEF's service territory over the ten-year period 2025-2034 developed in DEF's planning process.

10.   DEF is entitled to relief pursuant to Sections 366.81 and 366.82, Florida Statutes and Rule 25-17.0021, F.A.C. DEF's proposed goals reflect the reasonably achievable demand side management potential in DEF's service territory over the ten-year period 2025-2034 developed in DEF's planning process. The Commission should approve the recommended goals set forth in DEF's recommended portfolio as set forth in this filing.

WHEREFORE, DEF respectfully requests that the Commission enter an order approving and establishing DEF's proposed numeric conservation goals pursuant to Rule 25-17.0021, F.A.C., as set forth in this filing.

Respectfully submitted,

/s/ Stephanie A. Cuello

DIANNE TRIPLETT
Deputy General Counsel
299 1st Avenue North
St. Petersburg, Florida 33701
T: (727) 820-4692
E: dianne.triplett@duke-energy.com

MATTHEW R. BERNIER
Associate General Counsel
106 East College Avenue, Suite 800
Tallahassee, Florida 32301

T: (850) 521-1428
E: matt.bernier@duke-energy.com

STEPHANIE A. CUELLO
Senior Counsel
106 East College Avenue, Suite 800
Tallahassee, Florida 32301
T: (850) 521-1425
E: stephanie.cuello@duke-energy.com
FLRegulatoryLegal@duke-energy.com

Attorneys for Duke Energy Florida, LLC

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished to the following by electronic mail this 2nd day of April, 2024, to all parties of record as indicated below.

<div align="right">
<i>/s/ Stephanie A. Cuello</i>

Attorney
</div>

Jacob Imig / Jonathan Rubottom Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 jimig@psc.state.fl.us JRubotto@psc.state.fl.us James W. Brew / Laura Wynn Baker / Sarah B. Newman Stone Mattheis Xenopoulos & Brew, PC PCS Phosphate – White Springs 1025 Thomas Jefferson Street, NW Suite 800 West Washington, DC 20007-5201 jbrew@smxblaw.com lwb@smxblaw.com sbn@smxblaw.com	Walt Trierweiler / Patricia A. Christensen Office of Public Counsel 111 West Madison Street, Suite 812 Tallahassee, FL 32399-1400 trierweiler.walt@leg.state.fl.us christensen.patty@leg.state.fl.us

<p style="text-align:center">**DUKE ENERGY FLORIDA**</p>

<p style="text-align:center">**DOCKET NO. 20240013-EG**</p>

<p style="text-align:center">**DIRECT TESTIMONY OF**</p>

<p style="text-align:center">**TIM DUFF**</p>

<p style="text-align:center">**INTRODUCTION AND QUALIFICATIONS**</p>

Q.   Please state your name and business address.

A.   My name is Timothy J. Duff. My business address is 525 South Tyron Street, Charlotte, NC 28201.

Q.   By whom are you employed and in what capacity?

A.   I am employed by Duke Energy Florida, LLC ("Duke Energy Florida," "DEF," "the Company," or "the utility") as General Manager, Grid Strategy Enablement, in the Pricing and Customer Solutions Department.

Q.   Please describe the duties and responsibilities of your position with the Company.

A.   I am responsible for the development of strategies, policies, regulatory planning, and compliance related to the implementation of Customer Solutions retail products and offerings that are designed to create customer and utility system value including Demand-Side Management ("DSM") programs. By DSM, I mean both dispatchable (demand response or direct load control) and

<div style="text-align:center">1</div>

1 non-dispatchable (energy efficiency) types of programs. I also oversee the

2 analytics functions associated with evaluating and tracking the performance of

3 Customer's Solutions retail products and services. My responsibilities cover all

4 of Duke Energy's utility operating companies, including DEF.

5

6 **Q. Please summarize your educational background and professional**

7 **experience.**

8 A. I graduated from Michigan State University with a Bachelor of Arts in Political

9 Economics and a Bachelor of Arts in Business Administration and received a

10 Master of Business Administration degree from Stephen M. Ross School of

11 Business at the University of Michigan.

12

13 **Q. Have you previously testified before the Florida Public Service**

14 **Commission?**

15 A. Yes. I have provided both written and oral testimony to the Florida Public

16 Service Commission ("FPSC" or the "Commission") on behalf of the Company

17 on numerous occasions in support of the Company's DSM programs and

18 Energy Conservation Cost Recovery clause filings.

19

20 **Q. What is the purpose of your testimony?**

21 A. The purpose of my testimony is to present Duke Energy Florida's proposed

22 numerical DSM goals ("Recommended goals") for 2025-2034 for Commission

1   review and approval. DEF's Recommended goals are based upon the analysis

2   completed by the Company in accordance with the requirements set forth by

3   Commission Staff in the Order Establishing Procedure (OEP) in this docket and

4   Fla. Admin. Code Rule 25-17.0021 ("Rule 25-17.0021"). Additionally, the

5   Recommended goals proposed in this proceeding are supported by the results

6   of a new Technical Potential ("TP") study completed by Resource Innovations,

7   Inc. ("RI") as outlined by Witness Jim Herndon's testimony in Exhibit JH-3.

8

9 Q. **Please describe how the Company conducted the analysis on the cost-**

10   **effectiveness of the portfolios responsive to the Rulemaking change**

11   **effective June 6, 2023 for Rule 25-17.0021?**

12 A. Rule 25-17.0021 was amended effective June 6, 2023. Rule 25-17.0021(3)

13   states that "each utility must file its proposed demand-side management goals.

14   Each utility must also file demand-side management goals developed under

15   two scenarios: one scenario that includes **potential demand-side**

16   **management programs** that pass the Participant and Rate Impact Measure

17   Tests, and one scenario that includes **potential demand-side management**

18   **programs** that pass the Participant and Total Resource Costs Tests."

19   (emphasis added). As such, in compliance with Rule 25-17.0021, the

20   Company assessed the respective cost-effectiveness test of the portfolio at the

21   program level and not at the measure level as done in prior goals setting

22   proceedings. DEF also provides a proposed Recommended portfolio

3

1   evaluation, Rate Impact Measure ("RIM") portfolio evaluation and a Total

2   Resource Cost Test ("TRC") portfolio evaluation.

3

4   **Q.   Are you sponsoring any Exhibits to your testimony?**

5   A.   Yes, I have prepared or supervised the preparation of the following exhibits to

6   my direct testimony:

7   1. Exhibit TD-1: Duke Energy Florida's Residential and Non-Residential

8   Annual Potential RIM Portfolio Evaluation for 2025-2034 at the generator.

9   2. Exhibit TD-2: Duke Energy Florida's Residential and Non-Residential

10   Annual Potential TRC Portfolio Evaluation for 2025-2034 at the generator.

11   3. Exhibit TD-3: Duke Energy Florida Residential and Non-Residential Annual

12   Potential Recommended Portfolio Evaluation for 2025-2034 at the

13   generator.

14   4. Exhibit TD-4: Duke Energy Florida's Avoided Cost Assumptions.

15   5. Exhibit TD-5: Projected Costs of implementing the RIM, TRC and

16   Recommended Portfolio and the associated Projected Residential

17   Customer Rate Impacts.

18   6. Exhibit TD-6: The RIM, TRC and Participant Tests benefits and cost

19   analysis for all programs for all Portfolios.

20   7. Exhibit TD-7: The cost-effectiveness tests for all programs in the RIM

21   Portfolio.

1   8. Exhibit TD-8: The cost-effectiveness test for all programs in the TRC

2   Portfolio.

3   These exhibits are true and accurate.

4

5 **Q.**   **Please summarize your testimony.**

6 A.   My testimony presents the Company's Recommended goals for the 2025-2034

7   period for Commission review. I describe the process that was used to develop

8   the three potential portfolios for proposed DSM goals and provide a summary

9   of those results. My testimony includes the estimated average residential

10   customer bill impacts for the RIM Portfolio evaluation, the TRC Portfolio

11   evaluation, and a Recommended Portfolio evaluation that includes measures

12   that passed RIM, TRC or both, as well as measures included in programs

13   targeting low-income customers. I will also discuss the current DSM programs

14   and provide an explanation for the differences in the Recommended goals and

15   the current goals.

16

17 **Q.**   **Are the utility's proposed goals based on an adequate assessment of the**

18   **full Technical Potential of all available demand-side and supply-side**

19   **conservation and efficiency measures, including demand-side renewable**

20   **energy systems?**

21 A.   Yes, the TP, that is the basis for the proposed Recommended goals, includes

22   an evaluation of all potential demand-side conservation and efficiency

1   measures and demand-side renewable energy systems available in the DEF

2   Service territory. Demand-side renewable energy systems were evaluated

3   based on the same cost-effectiveness standards that were used to evaluate

4   other energy efficiency measures. No renewable measures were found to be

5   cost-effective and therefore, none are included in the measure adoption

6   forecasts results.

7

8 **Q.**   **Do the utility's proposed goals adequately reflect the costs and benefits**

9   **to customers participating?**

10 A.   Yes. The proposed Recommended goals are based on measures that pass

11   the Participant Cost Test (PCT). The PCT compares the incremental cost to

12   participants to the participant benefits (bill savings). This ensures that the

13   measures provide net benefits to participants.

14

15 **Q.**   **Do the utility's proposed goals adequately reflect the costs and benefits**

16   **to the general body of ratepayers as a whole, including utility incentives**

17   **and participant contributions?**

18 A.   Yes, the proposed Recommended goals adequately reflect the total costs and

19   benefits to the general body of ratepayers as a whole because the

20   Recommended goals are based on measures that pass RIM, TRC and PCT,

21   with the exception of a few measures included in programs targeting low-

22   income customers. The RIM, TRC and PCT tests, altogether, effectively ensure

1		both participants and non-participants benefit.
2		
3	**Q.**	**Do the utility's proposed goals adequately reflect the need for incentives**
4		**to promote both customer-owned and utility-owned energy efficiency and**
5		**demand-side renewable energy systems?**
6	A.	Yes. DEF does not believe there is currently a need for incentives to promote
7		demand-side renewable energy systems as the demand-side renewable
8		market has continued to mature and there has been significant growth in
9		customer sited demand-side renewable energy systems. DEF continues to see
10		significant growth in the number of customers installing demand-side
11		renewable systems on their own, without incentives from the utility.
12		
13	**Q.**	**Do the utility's proposed goals adequately reflect the costs imposed by**
14		**state and federal regulations on the emissions of greenhouse gases?**
15	A.	Yes. Given the uncertainty of future carbon regulation and the lack of any
16		formally established cost of carbon emissions, it is reasonable to exclude any
17		formal recognition of the cost of carbon emissions in this DSM goals setting
18		process. Any state and federal mandates pertaining to equipment efficiency
19		and availability in Florida related to the emissions of greenhouse gases have
20		been appropriately recognized in the development of the TP evaluation. The
21		Company believes that the utilization of a high fuel cost sensitivity in the

1 economic modeling performed by RI serves as an appropriate proxy for any

2 needed recognition of the cost of carbon emissions.

3

4 **Q. Do the utility's proposed goals adequately reflect consideration of free**

5 **riders?**

6 A. Yes, the Recommended goals are based on measures that have greater than

7 a two-year payback period. A two-year payback period is a reasonable time

8 period in which to limit measures and assume that customers will adopt them

9 absent a utility incentive. This time period has been recognized by the

10 Commission in past proceedings as a reasonable proxy to eliminate free riders.

11 Since 1991, a payback of two years or less has been recognized by the

12 Commission as an appropriate threshold to reduce free ridership, limit

13 unnecessary program incentive costs ultimately borne by customers, and

14 maximize cost-effectiveness.

15

16 **Q. What residential and commercial/industrial summer and winter Megawatt**

17 **(MW) and annual Gigawatt-hour (GWh) goals should be established for**

18 **the period of 2025-2034?**

19 A. DEF requests the Commission approve the Recommended cumulative

20 numeric goals for 2025-2034 presented in Table 1 below. The annual goals

21 that comprise the Recommended cumulative goals are provided on Exhibit TD-

22 1. Exhibit TD-2 and Exhibit TD-3 provide a breakdown of the RIM and TRC

1   annual goals, respectively, into the energy efficiency and demand response

2   components that reconcile to the EE achievable potential and DR achievable

3   potential presented in the TP. These proposed Recommended goals, at the

4   program level, have been developed in accordance with the requirements of

5   Rule 25-17.0021(3), which directs utilities to propose goals "… based upon the

6   utility's most recent planning process, and must reflect the annual (KW) and

7   energy (KWH) savings, over a ten-year period". These Recommended goals

8   are based on programs that are cost-effective based on RIM, TRC, and PCT

9   and exclude measures that have a payback period of less than 2 years. The

10   conjunction of these tests captures all of the relevant costs and benefits that

11   should be evaluated when considering an efficiency or load reduction program.

12   Evaluating measures with RIM ensures that non-participating customers will

13   not subsidize participating customers and reasonably limits overall rate impacts

14   to customers. Evaluating measures using TRC accounts for the total benefits

15   of the program including both the participants and the overall value to the utility

16   system. The PCT ensures that the energy efficiency measures provide benefits

17   to participants. Recommended Goals based on RIM, TRC, and PCT ensure

18   that the benefits and costs are considered from the perspective of participants

19   as well as ratepayers to ensure the rate impact for non-participants is

20   appropriately considered.

21

1 **Table 1**

DUKE ENERGY FLORIDA - RECOMMENDED GOALS 2025-2034			
	Winter Peak MWs	**Summer Peak MWs**	**GWH's**
Residential	320	207	506
Non-Residential	42	84	55
Total	362	291	561

2

3

4 **Q.** **What goals, if any, should be established for increasing the development**

5 **of demand-side renewable energy systems?**

6 A. Given that renewable systems were not deemed cost-effective under the RIM

7 test, it would not be appropriate to establish goals for demand-side renewable

8 systems in this goals setting proceeding. Demand-side renewable systems

9 were evaluated using the same criteria as were used for other energy efficiency

10 measures. Programs that provide incentives to customers who install

11 renewable systems would result in cross subsidies between participants and

12 non-participants and increase rates to all customers.

13

14 **Q.** **Provide a description of how the utility's Technical Potential Study has**

15 **been updated and modified, including any measures eliminated or added**

16 **since the utility's last filed Technical Potential Study. Specifically identify**

17 **any changes associated with changes to building code or appliance**

18 **efficiency standards.**

1   A.   DEF, along with the other FEECA utilities, contracted with RI to develop a new

2   comprehensive TP study of all available demand-side conservation and energy

3   efficiency measures, including renewable energy systems, to support this goals

4   setting process. To maintain modeling consistency, DEF also contracted with

5   RI to develop the economic analysis and measure adoption forecasts of these

6   measures for the utility.

7

8   The FEECA utilities worked collaboratively with RI and interested parties to

9   develop a list of measures and assumptions for potential demand and energy

10   impacts for each of the measures included in the TP. The results of that effort

11   and a discussion of that process are included in the TP presented in Exhibit

12   JH-3 to Mr. Herndon's testimony. This report includes a summary of the

13   measures eliminated or added compared to the 2019 TP study and discusses

14   changes associated with updated building codes and standards and are

15   presented in Exhibit JH-9.

16

17   RI then developed the avoided cost assumptions for the base case (no carbon

18   dioxide pricing) and the high and low fuel sensitivities and carbon sensitivity as

19   identified in the OEP. The assumptions that support each of these cases are

20   provided in Mr. Herndon's testimony.

21

1   RI collected the cost-effectiveness of each measure included in the TP study

2   based on both a RIM and TRC evaluation. RI evaluated the cost-effectiveness

3   for the base case, the fuel sensitivities, and the 1 and 3-year payback

4   sensitivities for free ridership. The list of passing measures for the base case

5   and each sensitivity for the RIM and TRC scenarios was developed by RI for

6   the Economic ("EA") analysis. The list of passing measures for the base case

7   and each sensitivity are provided in Exhibit JH-9.

8

9   RI then performed the economic screening and developed the EA for the base

10   case and each of the sensitivities utilizing the results of the RIM and TRC

11   scenarios. Next, RI developed the measure adoption forecasts for customer

12   adoption and current known market conditions for the base case for both a RIM

13   and TRC portfolio.   A detailed discussion of the process to develop the

14   economic screening and measure adoption forecasts is included in RI's TP

15   report.

16

17   DEF   reviewed   the   results   of   the   measure   adoption   forecasts   for

18   reasonableness by comparing the results to historical actual achievements and

19   analyzing the potential impacts of changes in savings and incentive levels on

20   future participation for similar measures. Consistent with the methodology

21   used   to   develop   the   currently   approved   goals,   DEF   is   proposing   that

22   Recommended goals are based on a portfolio of programs which include RIM

1   measures, a modest number of TRC measures to enhance the

2   comprehensiveness of the programs, and the Company's two existing

3   programs that target low-income customers, which primarily include measures

4   that are not cost-effective under RIM or TRC. It is important to note that the

5   total costs and benefits associated with the portfolio of programs underlying the

6   Recommended goals are cost-effective under both RIM and TRC.

7

8 **Q.**   **Please provide a description of how the utility's Base Case with no**

9   **incremental demand-side management was developed. This should**

10   **include forecasts for generation resources, customer winter and summer**

11   **demand and annual energy for load, and fuel prices based on the utility's**

12   **most recent planning process, as well as a discussion of the impacts**

13   **related to changes in Federal and State efficiency standards.**

14 A.   The Base Case was developed using the same integrated resource planning

15   model and assumptions for customer winter and summer demand, annual

16   energy for load, and fuel prices that were the basis for the 2023 Ten Year Site

17   Plan filing with two exceptions. The first exception is that the Base Case

18   assumes no new DSM after 2023 and the second exception is that the Base

19   Case also excludes any costs for carbon dioxide emissions. This process

20   identified a portfolio of potential units required to meet future capacity

21   requirements. The next combustion turbine unit in DEF's resource plan was

22   identified as the avoided unit for purposes of evaluating the cost-effectiveness

1   of potential DSM measures. Please see Exhibit TD-4 for a summary of the

2   avoided cost assumptions resulting from this process. Resource planning and

3   forecasting includes changes related to Federal and State efficiency standards.

4   A discussion of the process and impacts is included in the 2023 Ten Year Site

5   Plan.

6

7   **Q.**   **The Base Case should not include estimated costs associated with**

8   **carbon dioxide emissions, but utilities may provide sensitivities**

9   **including these costs. If included, provide a detailed description of how**

10   **the sensitivity was developed and compares to the Base Case, including**

11   **forecasts for fuel prices and emissions costs.**

12   A.   As mentioned previously, the Base Case excludes any costs for carbon dioxide

13   emissions.

14

15   **Q.**   **Provide a description of the Base Case's next avoidable generating unit**

16   **and describe the methodology used to determine it. Utilities may provide**

17   **sensitivities with a different avoided unit, and if so, should describe it and**

18   **methodology used to select it.**

19   A.   The next avoidable generating unit is a combustion turbine unit in the resource

20   plan and was identified as the avoided unit for purposes of evaluating the cost-

21   effectiveness of potential DSM measures. Please see Exhibit TD-4 for a

22   summary of the assumptions resulting from this process.

14

1

Q. **For the utility's proposed goals, as well as for the goals developed under the two cost-effectiveness scenarios as required by Rule 25-17.0021(3), F.A.C., provide the estimated rate impact on residential 1,000 kWh/month bill and a breakdown at the program level with demand and energy savings, program costs and benefits, cost-effectiveness test results, list of measures included, and participation rates.**

A. The residential bill impacts for the proposed RIM programs, TRC programs, and Recommended programs portfolios are presented in Tables 2, 3, and 4 below. These impacts include the normal components that comprise a residential bill, namely, base rates, recovery clauses, customer charges, gross receipts taxes, and regulatory assessment fees. These costs also include the costs for maintaining the existing level of load management on the system, as well as the costs of residential and commercial energy audits. The results of these analyses show an estimated total cost for a 1000 kWh/month residential bill for the ten-year period for the RIM portfolio of $22,304, the TRC portfolio of $22,354, and the Recommended portfolio of $22,323. These differences are due entirely to the differences in incentives and program management costs for the energy efficiency programs. The assumptions for incentives and program management costs for the demand response programs are the same in the RIM, TRC, and the Recommended analyses. The TRC portfolio cost is 13% higher on average on an annual basis than the RIM portfolio cost. The

1   Recommended portfolio is 5% higher on average on an annual basis than the

2   RIM portfolio costs and the TRC portfolio is 7% higher on average on an annual

3   basis than the Recommended portfolio costs. The projected annual RIM, TRC,

4   and Recommended portfolio costs along with the projected energy

5   conservation clause recovery rate for a residential 1000 kwh bill are provided

6   in Exhibit TD-5.

7

8   Additionally, a break down at the program level with demand and energy

9   savings, program costs and benefits, and cost-effectiveness test results are

10   also provided in Exhibit TD-6 for the Recommended Portfolio, Exhibit TD-7 for

11   the RIM Portfolio, and Exhibit TD-8 for the TRC Portfolio.

12

TABLE 2
RIM PORTFOLIO
PROJECTED ANNUAL RESIDENTIAL BILL - MONTHLY USAGE OF 1000 KWH'S

Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
$22,304	$2,121	$2,142	$2,141	$2,188	$2,213	$2,231	$2,258	$2,299	$2,343	$2,371

13

14

TABLE 3
TRC PORTFOLIO
PROJECTED ANNUAL RESIDENTIAL BILL - MONTHLY USAGE OF 1000 KWH

	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
$	22,354	$ 2,123	$ 2,145	$ 2,144	$ 2,192	$ 2,218	$ 2,236	$ 2,264	$ 2,305	$ 2,349	$ 2,377

15

16

16

		TABLE 4 RECOMMENDED PORTFOLIO PROJECTED ANNUAL RESIDENTIAL BILL - MONTHLY USAGE OF 1000 KWH									
	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
$	22,323 $	2,122 $	2,144 $	2,142 $	2,189 $	2,215 $	2,233 $	2,260 $	2,301 $	2,345 $	2,373

Q. Provide a description of the program development process and identify measures excluded during each stage of the process and why. As part of this description, identify restrictions, if any, on program design due to current settlements, such as rebate amounts.

A. The program development process and identification of measures excluded during each stage are provided in the TP presented in Exhibit JH-10 to Mr. Herndon's testimony.

Q. For the utility's proposed goals, as well as for the goals developed under the two cost-effectiveness scenarios as required by Rule 25-17.0021(3), F.A.C., provide a description of how free-ridership is addressed. If the utility elects to use a payback period for free-ridership screening, provide sensitivities on the payback period.

A. The Recommended portfolio, as well as the RIM and TRC portfolios, are based on measures that have greater than a two-year payback period. A two-year payback period is a reasonable time period in which to limit measures and assume that customers will adopt them absent a utility incentive. As explained above, RI completed 1 and 3-year payback sensitivities for free ridership.

17

1

Q. **Please provide a description on how supply-side efficiencies are incorporated in the utility's most recent planning process and how supply-side efficiencies impact demand-side management programs.**

5 A. DEF evaluates supply-side alternatives and develops the optimal plan as an integral part of its Integrated Resource Planning ("IRP") process. DEF employs the IRP process to determine the most cost-effective mix of supply and demand-side alternatives that will reliably satisfy customers' future demand and energy needs. DEF's IRP process evaluates a wide range of future generation alternatives and cost-effective conservation and dispatchable demand-side management programs on a consistent and integrated basis. DEF develops projects that will contribute to the overall fleet efficiency and screens these projects in the IRP process. DEF's IRP process includes modeling for both capital optimization and production cost impacts. The selected plans are identified based on the lowest overall life cycle costs including operational efficiencies. The cost of demand-side projects is measured against the avoided supply-side costs in determining program measures that will achieve the most cost-effective integrated demand and supply-side portfolio.

20

1   **Q.**   **Provide a description of the efforts made to address customers who rent**

2   **in program development, including a list of programs they would be**

3   **eligible to participate in.**

4   A.   Customers who rent are eligible to participate in all existing residential energy

5   efficiency programs and demand response programs offered by DEF.

6

7   The following is a list of DEF's Residential DSM programs that customers who

8   rent are eligible to participate in:

9

10   Home Energy Check - This residential energy audit program provides

11   customers with an analysis of their energy consumption as well as educational

12   information on how to save money by reducing energy usage. The program

13   offers a variety of options to customers for home energy audits including walk-

14   through, phone assisted, and online audits. At the completion of the audit, DEF

15   provides kits that contain energy saving measures that can be easily installed

16   by the customer.

17

18   Residential Incentive Program - This program provides incentives on a variety

19   of cost-effective measures designed to provide energy savings across different

20   housing types. It also provides customers with energy savings and demand

21   reduction through installation of energy efficient equipment.

22

1   New Builder Construction-Multi-Family - DEF is proposing a new builder

2   construction bundle offering that would allow bundling of multi-family measures

3   through this program.   This additional offering will allow builders to install

4   energy efficiency measures and provide them an opportunity to participate in

5   incentives.

6

7   Residential Load Management - This program is a direct load control program

8   that is designed to reduce DEF's demand during peak or emergency conditions

9   by temporarily interrupting service to selected customer electrical equipment.

10

11   Additionally, low-income/income qualified customers who rent are eligible to

12   participate in our Neighborhood Energy Saver and Low-Income Weatherization

13   Assistance Program programs.

14

15   In 2021, the Commission approved program modifications, and DEF increased

16   targeted low-income residential customers through its Neighborhood Energy

17   Saver program by 5% above the 2020 DSM Plan levels for calendar years

18   2022-2024 (or an additional 250 customers).   Also in 2021, DEF began to

19   provide Assistance Kits to low-income customers through its Home Energy

20   Check program. The Assistance Kits are available for up to 20,000 qualifying

21   low-income customers for calendar years 2022-2025.   The kits contain a

22   number of measures that fail the two-year payback screen but provide energy

1		efficiency savings to low-income customers. These changes increased the
2		savings opportunity for low-income customers at no cost to program
3		participants.
4		
5	**Q.**	**Provide a comparison of the programs used to determine the utility's**
6		**proposed Recommended goals to its current demand-side management**
7		**program offerings.**
8	A.	The comparison of programs included in the utility's proposed Recommended
9		goals to its current demand-side management program offerings is provided in
10		the table below. As shown, DEF has dropped measures that no longer meet
11		efficiency standards or have not been successful in the market, added
12		measures that were needed and created a new bundling of measures targeting
13		the multi-family sector to increase participation and the focus on efficiency
14		opportunities available to tenants/landlords. The New Builder Construction –
15		Multi-family seeks to avoid the split incentive barrier that has traditionally
16		negatively impacted efforts to reach renters in multi-family properties by
17		providing incentives to property managers and landlords to install efficiency on
18		the front-end that will allow the energy savings to be realized by the renter
19		population over time.
20		

PROGRAMS	MEASURE COUNT		
EXISTING	**EXISTING/KEEP**	**NEW**	**DROP**
Business Energy Check	3		
Home Energy Check	13	1	
Low Income Weatherization	15	1	4
Neighborhood Energy Saver	18	3	3
Residential Incentive Program	14	3	3
Residential Load Management	3	2	
Smart $aver Business	13	17	9
Smart $aver Custom	2		
	81	27	19
ADDITIONAL	**EXISTING/KEEP**	**NEW**	**DROP**
New Builder Construction-MF	2	2	0
TOTAL	**83**	**29**	**19**

Additionally, DEF is proposing changes to the Interruptible General Service (IS) credit rate for IS-2 and IST-2 rate schedules, the Curtailable General Service (CS) credit rate for the CS-2, CS-3, CST-2 and CST-3 rate schedules, and the Standby Generation General Service (SBG) credit rate for the GSLM-2 rate schedule. These changes will allow DEF to maintain the cost-effectiveness results for the offerings that were included in the 2019 DSM goals docket filing.

CONCLUSION

Q. What are the proposed Recommended DSM goals that are reasonably achievable during the 2025-2034 period?

DUKE ENERGY FLORIDA - PROPOSED RECOMMENDED GOALS 2025-2034			
	Winter Peak MWs	Summer Peak MWs	GWH's
Residential	320	207	506
Non-Residential	42	84	55
Total	362	291	561

Q. Have these goals been determined through a sound and reasonable process?

A. Yes. These Recommended goals were determined after a comprehensive analysis of the TP of all available demand-side and supply-side conservation and efficiency measures, including demand-side renewable energy systems, pursuant to Section 366.82.

Q. Should Duke Energy Florida's proposed goals for 2025-2034 be approved?

A. Yes. Duke Energy Florida's Recommended goals were developed consistent with the requirements of both the rules and the statute, are cost-effective, and are reasonably achievable.

Q. Does this conclude your testimony?

A. Yes, this concludes my testimony.

DUKE ENERGY FLORIDA'S
RESIDENTIAL AND NON-RESIDENTIAL ANNUAL POTENTIAL
RIM PORTFOLIO EVALUATION FOR 2025-2034 AT THE GENERATOR

2025-2034 Annual Goals									
RIM Annual Goals (values at the generator)									
	Residential			Non-Residential			Total		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S
2025	20	11	26	4	7	5	24	19	31
2026	21	11	26	3	7	5	24	18	31
2027	21	11	26	4	9	6	25	20	32
2028	21	11	26	4	9	6	25	20	33
2029	22	12	26	4	10	7	26	21	33
2030	20	11	25	4	9	6	24	20	32
2031	20	11	25	4	8	6	24	19	30
2032	19	11	24	5	8	5	24	19	29
2033	19	11	24	5	8	4	24	19	29
2034	19	11	24	5	8	4	24	18	28
TOTAL	203	111	252	42	84	55	245	195	307

RIM ANNUAL GOALS EE AND DR @ Generator																		
	RES EE			RES DR			RES TOTAL			NON-RES EE			NON-RES DR			NON-RES TOTAL		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S
2025	15	8	26	5	4	0	20	11	26	0	4	5	3	4	0	4	7	5
2026	15	8	26	5	4	0	21	11	26	0	4	5	3	3	0	3	7	5
2027	16	8	26	5	4	0	21	11	26	0	4	6	4	5	0	4	9	6
2028	16	8	26	5	4	0	21	11	26	0	5	6	4	4	0	4	9	6
2029	16	8	26	5	4	0	22	12	26	0	5	7	4	5	0	4	10	7
2030	15	7	25	5	4	0	20	11	25	0	4	6	4	5	0	4	9	6
2031	14	7	25	5	4	0	20	11	25	0	4	6	4	5	0	4	8	6
2032	14	7	24	5	4	0	19	11	24	0	3	5	4	5	0	5	8	5
2033	14	7	24	5	4	0	19	11	24	0	3	4	4	5	0	5	8	4
2034	14	7	24	5	4	0	19	11	24	0	2	4	4	5	0	5	8	4
TOTAL	149	74	252	53	37	0	203	111	252	3	39	55	39	46	0	42	84	55

DUKE ENERGY FLORIDA'S
RESIDENTIAL AND NON-RESIDENTIAL ANNUAL POTENTIAL
TRC PORTFOLIO EVALUATION FOR 2025-2034 AT THE GENERATOR

	2025-2034 Annual Goals								
	TRC Annual Goals (values at the generator)								
	Residential			Non-Residential			Total		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S
2025	32	16	40	7	11	17	39	27	57
2026	35	17	43	7	11	17	41	27	59
2027	37	18	45	8	12	17	45	30	62
2028	39	19	48	7	12	18	47	31	65
2029	42	20	51	8	13	18	50	33	69
2030	45	21	54	7	13	18	53	34	72
2031	47	22	57	7	12	17	54	34	74
2032	49	23	59	8	13	17	57	35	76
2033	49	23	60	8	12	17	57	35	77
2034	49	23	59	8	12	17	57	35	77
TOTAL	425	200	516	74	122	173	499	322	689

	TRC ANNUAL GOALS EE AND DR																	
	RES EE			RES DR			RES TOTAL			NON-RES EE			NON-RES DR			NON-RES TOTAL		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WKW	SKW	GWH'S
2025	27	12	40	5	4	0	32	16	40	4	7	17	3	4	0	7	11	17
2026	29	13	43	5	4	0	35	17	43	4	7	17	3	3	0	7	11	17
2027	32	14	45	5	4	0	37	18	45	4	8	17	4	5	0	8	12	17
2028	34	15	48	5	4	0	39	19	48	4	8	18	4	4	0	7	12	18
2029	37	16	51	5	4	0	42	20	51	4	8	18	4	5	0	8	13	18
2030	40	17	54	5	4	0	45	21	54	3	8	18	4	5	0	7	13	18
2031	42	18	57	5	4	0	47	22	57	3	8	17	4	5	0	7	12	17
2032	43	19	59	5	4	0	49	23	59	3	7	17	4	5	0	8	13	17
2033	44	19	60	5	4	0	49	23	60	3	7	17	4	5	0	8	12	17
2034	43	19	59	5	4	0	48	23	59	3	7	17	4	5	0	8	12	17
TOTAL	370	163	516	53	37	0	424	200	516	35	76	173	39	46	0	74	122	173

DUKE ENERGY FLORIDA
RESIDENTIAL AND NON-RESIDENTIAL ANNUAL POTENTIAL RECOMMENDED PORTFOLIO EVALUATION FOR 2025-2034 AT THE GENERATOR

2025-2034 Annual Goals								
Recommended Annual Goals (values at the generator)								
	Residential			Non-Residential			Total		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S
2025	31	20	48	4	7	5	34	27	53
2026	31	20	49	3	7	5	34	27	54
2027	32	21	50	4	9	6	37	30	56
2028	33	21	51	4	9	6	37	30	57
2029	33	21	51	4	10	7	38	31	58
2030	32	21	51	4	9	6	36	30	57
2031	32	21	51	4	8	6	36	29	57
2032	32	21	51	5	8	5	37	29	56
2033	32	21	52	5	8	4	37	29	56
2034	32	21	52	5	8	4	37	29	56
TOTAL	320	207	506	42	84	55	362	291	561

RECOMMENDED ANNUAL GOALS EE AND DR (values at generator)																	
	RES EE			RES DR			RES TOTAL			NON-RES EE			NON-RES DR			NON-RES TOTAL		
	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WMW	SMW	GWH'S	WKW	SKW	GWH'S
2025	26	16	48	5	4	0	31	20	48	0	4	5	3	4	0	4	7	5
2026	26	17	49	5	4	0	31	20	49	0	4	5	3	3	0	3	7	5
2027	27	17	50	5	4	0	32	21	50	0	4	6	4	5	0	4	9	6
2028	27	17	51	5	4	0	33	21	51	0	5	6	4	4	0	4	9	6
2029	28	17	51	5	4	0	33	21	51	0	5	7	4	5	0	4	10	7
2030	27	17	51	5	4	0	32	21	51	0	4	6	4	5	0	4	9	6
2031	27	17	51	5	4	0	32	21	51	0	4	6	4	5	0	4	8	6
2032	27	17	51	5	4	0	32	21	51	0	3	5	4	5	0	5	8	5
2033	27	17	52	5	4	0	32	21	52	0	3	4	4	5	0	5	8	4
2034	27	17	52	5	4	0	32	21	52	0	2	4	4	5	0	5	8	4
TOTAL	267	170	506	53	37	0	320	207	506	3	39	55	39	46	0	42	84	55

DUKE ENERGY FLORIDA'S
AVOIDED GENERATION ASSUMPTIONS

GT Brownfield- COMBUSTION TURBINE		Unit 1
(1) Base Year		2023
(2) In Service Year for Avoided Generation Unit		1-Jun-2029
(3) Winter Capacity	MW	234.6
(4) Base Year Avoided Generating Unit Cost (including transmission upgrade cost)	$/KW	735.2
(5) Generator Cost Escalation Rate - 2023 to 2032		-1.09%
(5) Generator Cost Escalation Rate - 2033 to 2042		1.78%
(6) Generator Fixed O&M Cost (including non-escalating gas pipeline reservation cost)	$/kw-year	77.3
(7) Generator Fixed O&M Cost Escalation Rate		2.50%
(8) Avoided Gen Unit Variable O&M Cost	¢/Kwh	0.45
(9) Generator Variable O&M Cost Escalation Rate		2.50%
(10) Generator Capacity Factor		2.32%
(11) Avoided Generating Unit Fuel Cost	¢/Kwh	5.82
(12) Avoided Generating Unit Fuel Escalation Rate		0.60%

GT Brownfield- COMBUSTION TURBINE		Unit 2
(1) Base Year		2023
(2) In Service Year for Avoided Generation Unit		1-Jun-2032
(3) Winter Capacity	MW	234.6
(4) Base Year Avoided Generating Unit Cost (including transmission upgrade cost)	$/KW	735.2
(5) Generator Cost Escalation Rate - 2023 to 2032		-1.09%
(5) Generator Cost Escalation Rate - 2033 to 2042		1.78%
(6) Generator Fixed O&M Cost (including non-escalating gas pipeline reservation cost)	$/kw-year	83.3
(7) Generator Fixed O&M Cost Escalation Rate		2.50%
(8) Avoided Gen Unit Variable O&M Cost	¢/Kwh	0.48
(9) Generator Variable O&M Cost Escalation Rate		2.50%
(10) Generator Capacity Factor		2.32%
(11) Avoided Generating Unit Fuel Cost	¢/Kwh	5.87
(12) Avoided Generating Unit Fuel Escalation Rate		0.60%

GT Avg- COMBUSTION TURBINE		Units 3 and 4
(1) Base Year		2023
(2) In Service Year for Avoided Generation Unit		1-Jun-2034
(3) Winter Capacity	MW	234.6
(4) Base Year Avoided Generating Unit Cost (including transmission upgrade cost)	$/KW	949.4
(5) Generator Cost Escalation Rate - 2023 to 2032		-1.09%
(5) Generator Cost Escalation Rate - 2033 to 2042		1.78%
(6) Generator Fixed O&M Cost (including non-escalating gas pipeline reservation cost)	$/kw-year	89.5
(7) Generator Fixed O&M Cost Escalation Rate		2.50%
(8) Avoided Gen Unit Variable O&M Cost	¢/Kwh	0.52
(9) Generator Variable O&M Cost Escalation Rate		2.50%
(10) Generator Capacity Factor		2.32%
(11) Avoided Generating Unit Fuel Cost	¢/Kwh	6.22
(12) Avoided Generating Unit Fuel Escalation Rate		0.60%

__Note: all the fixed cost, variable and fuel costs are nominal dollar value in the first year when Unit is in service__

4

DUKE ENERGY FLORIDA'S
PROJECTED TOTAL PORTFOLIO COSTS AND
RESIDENTIAL RATE IMPACTS

PROJECTED TOTAL PORTFOLIO COSTS AND RESIDENTIAL RATE IMPACTS - RIM, TRC, RECOMMENDED											
					$/Millions						
	TOTAL	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
RIM Projected Total Costs	$ 1,242.7	$ 120.0	$ 121.1	$ 122.8	$ 123.6	$ 125.1	$ 124.8	$ 125.3	$ 125.9	$ 126.6	$ 127.4
Residential Rate $/1000 kWh	-	$ 3.30	$ 3.34	$ 3.39	$ 3.38	$ 3.40	$ 3.36	$ 3.34	$ 3.31	$ 3.29	$ 3.26
TRC Projected Total Costs	$ 1,399.0	$ 128.2	$ 131.9	$ 134.5	$ 137.1	$ 140.0	$ 141.7	$ 144.0	$ 146.2	$ 147.5	$ 147.9
Residential Rate $/1000 kWh	-	$ 3.52	$ 3.64	$ 3.71	$ 3.75	$ 3.80	$ 3.81	$ 3.83	$ 3.84	$ 3.83	$ 3.78
Difference in Total Costs	$ 156.3	$ 8.1	$ 10.8	$ 11.7	$ 13.5	$ 14.9	$ 16.9	$ 18.7	$ 20.3	$ 20.9	$ 20.5
Difference in Res Rate $/1000 kWh		0.22	0.30	0.32	0.37	0.40	0.46	0.50	0.53	0.54	0.52
Percent Difference TRC vs RIM	13%	7%	9%	9%	11%	12%	14%	15%	16%	16%	16%
RECOMMENDED Projected Total Costs	$ 1,302.0	$ 125.3	$ 126.4	$ 128.0	$ 129.4	$ 130.9	$ 130.8	$ 131.5	$ 132.3	$ 133.2	$ 134.1
Residential Rate $/1000 kWh		$ 3.44	$ 3.49	$ 3.53	$ 3.54	$ 3.56	$ 3.52	$ 3.50	$ 3.48	$ 3.46	$ 3.43
Difference in Total Costs	$ 59.3	$ 5.3	$ 5.3	$ 5.2	$ 5.7	$ 5.8	$ 6.0	$ 6.2	$ 6.4	$ 6.6	$ 6.8
Difference in Res Rate $/1000 kWh		0.14	0.15	0.14	0.16	0.16	0.16	0.17	0.17	0.17	0.17
Percent Difference RECOMMENDED vs RIM	5%	4%	4%	4%	5%	5%	5%	5%	5%	5%	5%
Difference in Total Costs	$ 97.0	$ 2.9	$ 5.5	$ 6.5	$ 7.7	$ 9.0	$ 10.9	$ 12.5	$ 13.9	$ 14.3	$ 13.8
Difference in Res Rate $/1000 kWh		0.08	0.15	0.18	0.21	0.25	0.29	0.33	0.36	0.37	0.35
Percent Difference TRC vs RECOMMENDED	7%	2%	4%	5%	6%	7%	8%	10%	11%	11%	10%

RIM, TRC & PARTICIPANT TESTS BENEFITS & COST ANALYSIS FOR ALL PROGRAMS FOR ALL PORTFOLIOS

PROGRAM: Residential Incentive Program			RIP					

Rate Impact Measure (RIM) Test

	BENEFITS					COSTS				
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED			UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL		PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS		COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)	$(000)	$(000)
2025	570	1,504	0	2,074		1,831	5,874	1,719	9,424	-7,351
2026	1,165	3,172	0	4,337		1,944	6,050	3,569	11,564	-7,227
2027	1,779	5,012	0	6,790		2,056	6,229	5,489	13,774	-6,984
2028	2,561	7,029	0	9,590		2,162	6,398	7,708	16,268	-6,678
2029	3,229	9,268	11,019	23,516		2,336	6,628	10,089	19,053	4,462
2030	3,794	11,363	13,164	28,320		2,248	5,717	12,398	20,363	7,957
2031	4,345	13,553	15,301	33,199		2,324	5,566	14,892	22,783	10,417
2032	4,916	15,844	15,726	36,486		2,404	5,428	17,644	25,476	11,010
2033	5,862	18,245	17,810	41,917		2,487	5,301	20,609	28,398	13,520
2034	6,953	20,763	23,245	50,961		2,573	5,186	23,599	31,358	19,604
2035	7,368	21,282	23,461	52,111		0	0	23,907	23,907	28,204
2036	7,900	21,814	23,681	53,394		0	0	24,573	24,573	28,822
2037	8,239	22,360	23,904	54,503		0	0	25,417	25,417	29,087
2038	8,642	22,919	24,132	55,693		0	0	25,811	25,811	29,882
2039	9,130	23,491	24,364	56,986		0	0	26,438	26,438	30,548
2040	9,229	24,072	24,593	57,895		0	0	26,892	26,892	31,002
2041	9,108	23,682	23,836	56,625		0	0	27,134	27,134	29,491
2042	9,501	23,212	23,017	55,730		0	0	27,523	27,523	28,207
2043	9,665	22,650	22,130	54,445		0	0	27,709	27,709	26,736
2044	9,826	21,999	21,180	53,006		0	0	27,882	27,882	25,124
2045	9,567	20,373	19,329	49,269		0	0	26,870	26,870	22,399
2046	9,260	18,834	17,610	45,704		0	0	25,746	25,746	19,959
2047	8,880	17,177	15,829	41,886		0	0	24,440	24,440	17,445
2048	8,420	15,394	13,983	37,797		0	0	22,943	22,943	14,853
2049	7,832	13,420	12,016	33,268		0	0	21,130	21,130	12,138
2050	7,185	11,459	10,113	28,757		0	0	19,193	19,193	9,564
2051	6,561	10,277	8,940	25,778		0	0	17,352	17,352	8,426
2052	5,805	8,945	7,669	22,419		0	0	15,201	15,201	7,217
2053	4,910	7,459	6,303	18,672		0	0	12,730	12,730	5,942
2054	3,858	5,801	4,831	14,490		0	0	9,904	9,904	4,586
2055	3,585	5,332	4,377	13,294		0	0	9,111	9,111	4,183
2056	3,273	4,816	3,898	11,987		0	0	8,237	8,237	3,750
2057	2,922	4,254	3,394	10,570		0	0	7,281	7,281	3,289
2058	2,535	3,651	2,871	9,056		0	0	6,252	6,252	2,804
2059	2,111	3,008	2,332	7,451		0	0	5,155	5,155	2,296
2060	1,704	2,402	1,836	5,941		0	0	4,119	4,119	1,822
2061	1,289	1,798	1,355	4,442		0	0	3,087	3,087	1,356
2062	868	1,197	889	2,954		0	0	2,057	2,057	897
2063	438	598	438	1,473		0	0	1,028	1,028	446
2064	0	0	0	0		0	0	0	0	0
NOMINAL	214,784	489,427	468,575	1,172,786		22,366	58,377	622,839	703,582	469,204
NPV	75,329	190,777	181,196	447,302		16,598	44,589	227,910	289,097	158,204

	Utility Discount Rate = 6.83%	
	Benefit Cost Ratio = 1.547	

PROGRAM:	**Residential Incentive Program**		**RIP**					
	Total Resource Cost (TRC) Test							
		BENEFITS				**COSTS**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	PARTICIPANT'S	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	COST	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	570	1,504	0	2,074	1,831	11,167	12,998	-10,925
2026	1,165	3,172	0	4,337	1,944	11,484	13,428	-9,091
2027	1,779	5,012	0	6,790	2,056	11,811	13,868	-7,077
2028	2,561	7,029	0	9,590	2,162	12,135	14,297	-4,707
2029	3,229	9,268	11,019	23,516	2,336	12,624	14,960	8,556
2030	3,794	11,363	13,164	28,320	2,248	11,160	13,408	14,912
2031	4,345	13,553	15,301	33,199	2,324	11,001	13,325	19,874
2032	4,916	15,844	15,726	36,486	2,404	10,864	13,268	23,218
2033	5,862	18,245	17,810	41,917	2,487	10,748	13,236	28,682
2034	6,953	20,763	23,245	50,961	2,573	10,654	13,227	37,735
2035	7,368	21,282	23,461	52,111	0	0	0	52,111
2036	7,900	21,814	23,681	53,394	0	0	0	53,394
2037	8,239	22,360	23,904	54,503	0	0	0	54,503
2038	8,642	22,919	24,132	55,693	0	0	0	55,693
2039	9,130	23,491	24,364	56,986	0	0	0	56,986
2040	9,229	24,072	24,593	57,895	0	0	0	57,895
2041	9,108	23,682	23,836	56,625	0	0	0	56,625
2042	9,501	23,212	23,017	55,730	0	0	0	55,730
2043	9,665	22,650	22,130	54,445	0	0	0	54,445
2044	9,826	21,999	21,180	53,006	0	0	0	53,006
2045	9,567	20,373	19,329	49,269	0	0	0	49,269
2046	9,260	18,834	17,610	45,704	0	0	0	45,704
2047	8,880	17,177	15,829	41,886	0	0	0	41,886
2048	8,420	15,394	13,983	37,797	0	0	0	37,797
2049	7,832	13,420	12,016	33,268	0	0	0	33,268
2050	7,185	11,459	10,113	28,757	0	0	0	28,757
2051	6,561	10,277	8,940	25,778	0	0	0	25,778
2052	5,805	8,945	7,669	22,419	0	0	0	22,419
2053	4,910	7,459	6,303	18,672	0	0	0	18,672
2054	3,858	5,801	4,831	14,490	0	0	0	14,490
2055	3,585	5,332	4,377	13,294	0	0	0	13,294
2056	3,273	4,816	3,898	11,987	0	0	0	11,987
2057	2,922	4,254	3,394	10,570	0	0	0	10,570
2058	2,535	3,651	2,871	9,056	0	0	0	9,056
2059	2,111	3,008	2,332	7,451	0	0	0	7,451
2060	1,704	2,402	1,836	5,941	0	0	0	5,941
2061	1,289	1,798	1,355	4,442	0	0	0	4,442
2062	868	1,197	889	2,954	0	0	0	2,954
2063	438	598	438	1,473	0	0	0	1,473
2064	0	0	0	0	0	0	0	0
NOMINAL	214,784	489,427	468,575	1,172,786	22,366	113,648	136,014	1,036,772
NPV	75,329	190,777	181,196	447,302	16,598	86,388	102,986	344,315

Utility Discount Rate = 6.83%
Benefit Cost Ratio = 4.343

PROGRAM:	Residential Incentive Program				RIP			
				Participant Test				
			BENEFITS			COSTS		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS		PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)
2025	1,719	5,874	0	7,593		11,167	11,167	-3,574
2026	3,569	6,050	0	9,619		11,484	11,484	-1,865
2027	5,489	6,229	0	11,718		11,811	11,811	-93
2028	7,708	6,398	0	14,107		12,135	12,135	1,972
2029	10,089	6,628	0	16,717		12,624	12,624	4,093
2030	12,398	5,717	0	18,115		11,160	11,160	6,955
2031	14,892	5,566	0	20,458		11,001	11,001	9,457
2032	17,644	5,428	0	23,072		10,864	10,864	12,208
2033	20,609	5,301	0	25,910		10,748	10,748	15,162
2034	23,599	5,186	0	28,785		10,654	10,654	18,131
2035	23,907	0	0	23,907		0	0	23,907
2036	24,573	0	0	24,573		0	0	24,573
2037	25,417	0	0	25,417		0	0	25,417
2038	25,811	0	0	25,811		0	0	25,811
2039	26,438	0	0	26,438		0	0	26,438
2040	26,892	0	0	26,892		0	0	26,892
2041	27,134	0	0	27,134		0	0	27,134
2042	27,523	0	0	27,523		0	0	27,523
2043	27,709	0	0	27,709		0	0	27,709
2044	27,882	0	0	27,882		0	0	27,882
2045	26,870	0	0	26,870		0	0	26,870
2046	25,746	0	0	25,746		0	0	25,746
2047	24,440	0	0	24,440		0	0	24,440
2048	22,943	0	0	22,943		0	0	22,943
2049	21,130	0	0	21,130		0	0	21,130
2050	19,193	0	0	19,193		0	0	19,193
2051	17,352	0	0	17,352		0	0	17,352
2052	15,201	0	0	15,201		0	0	15,201
2053	12,730	0	0	12,730		0	0	12,730
2054	9,904	0	0	9,904		0	0	9,904
2055	9,111	0	0	9,111		0	0	9,111
2056	8,237	0	0	8,237		0	0	8,237
2057	7,281	0	0	7,281		0	0	7,281
2058	6,252	0	0	6,252		0	0	6,252
2059	5,155	0	0	5,155		0	0	5,155
2060	4,119	0	0	4,119		0	0	4,119
2061	3,087	0	0	3,087		0	0	3,087
2062	2,057	0	0	2,057		0	0	2,057
2063	1,028	0	0	1,028		0	0	1,028
2064	0	0	0	0		0	0	0
NOMINAL	622,839	58,377	0	681,216		113,648	113,648	567,568
NPV	227,910	44,589	0	272,499		86,388	86,388	186,111

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 3.154

PROGRAM:	Neighborhood Energy Saver		NES						

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED		UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL	PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS	COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	954	1,786	0	2,740	839	3,709	2,879	7,427	-4,687
2026	1,892	3,662	0	5,554	839	3,709	5,799	10,347	-4,793
2027	2,848	5,718	0	8,567	878	3,870	8,792	13,540	-4,974
2028	3,942	7,734	0	11,676	878	3,870	11,870	16,618	-4,942
2029	4,774	9,847	11,702	26,323	878	3,870	14,921	19,669	6,654
2030	5,485	12,045	13,948	31,478	878	3,871	17,933	22,681	8,797
2031	6,153	14,346	16,190	36,689	878	3,871	21,093	25,841	10,848
2032	6,805	16,747	16,614	40,165	878	3,871	24,428	29,177	10,989
2033	7,939	19,258	18,791	45,988	878	3,871	27,919	32,668	13,320
2034	9,221	21,885	24,491	55,597	878	3,871	31,303	36,052	19,545
2035	9,518	22,042	24,288	55,849	0	0	30,892	30,892	24,957
2036	9,918	22,140	24,025	56,083	0	0	30,859	30,859	25,225
2037	10,037	22,218	23,743	55,998	0	0	30,968	30,968	25,030
2038	10,297	22,465	23,645	56,407	0	0	30,759	30,759	25,648
2039	10,634	22,711	23,545	56,890	0	0	30,800	30,800	26,090
2040	10,520	22,962	23,449	56,932	0	0	30,660	30,660	26,272
2041	10,318	23,212	23,352	56,882	0	0	30,748	30,748	26,134
2042	10,723	23,468	23,262	57,453	0	0	31,070	31,070	26,383
2043	10,873	23,723	23,169	57,765	0	0	31,178	31,178	26,587
2044	11,019	23,977	23,074	58,070	0	0	31,274	31,274	26,796
2045	10,961	23,279	22,077	56,317	0	0	30,791	30,791	25,526
2046	10,909	22,603	21,125	54,637	0	0	30,334	30,334	24,303
2047	10,817	21,817	20,097	52,731	0	0	29,777	29,777	22,954
2048	10,705	20,978	19,046	50,729	0	0	29,173	29,173	21,556
2049	10,570	20,083	17,973	48,626	0	0	28,521	28,521	20,106
2050	10,433	19,147	16,891	46,471	0	0	27,872	27,872	18,599
2051	10,273	18,152	15,784	44,209	0	0	27,171	27,171	17,038
2052	10,087	17,095	14,653	41,835	0	0	26,415	26,415	15,420
2053	9,874	15,974	13,496	39,344	0	0	25,601	25,601	13,743
2054	9,633	14,787	12,313	36,732	0	0	24,728	24,728	12,004
2055	9,021	13,699	11,245	33,965	0	0	22,929	22,929	11,037
2056	8,353	12,548	10,154	31,055	0	0	21,020	21,020	10,035
2057	7,573	11,254	8,978	27,804	0	0	18,868	18,868	8,936
2058	6,726	9,887	7,775	24,389	0	0	16,591	16,591	7,797
2059	5,808	8,445	6,547	20,800	0	0	14,184	14,184	6,616
2060	4,814	6,925	5,292	17,032	0	0	11,641	11,641	5,391
2061	3,741	5,324	4,011	13,076	0	0	8,957	8,957	4,119
2062	2,584	3,638	2,702	8,924	0	0	6,126	6,126	2,798
2063	1,339	1,864	1,365	4,568	0	0	3,142	3,142	1,426
2064	0	0	0	0	0	0	0	0	0
NOMINAL	308,090	609,447	568,813	1,486,351	8,700	38,384	879,983	927,067	559,284
NPV	101,472	214,022	200,159	515,652	6,563	28,959	305,692	341,214	174,439

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 1.511

PROGRAM:	Neighborhood Energy Saver		NES					
	Total Resource Cost (TRC) Test							
	BENEFITS				**COSTS**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	PARTICIPANT'S	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	COST	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	954	1,786	0	2,740	839	9,982	10,821	-8,081
2026	1,892	3,662	0	5,554	839	9,982	10,821	-5,267
2027	2,848	5,718	0	8,567	878	10,451	11,329	-2,762
2028	3,942	7,734	0	11,676	878	10,451	11,329	347
2029	4,774	9,847	11,702	26,323	878	10,451	11,329	14,994
2030	5,485	12,045	13,948	31,478	878	10,451	11,329	20,149
2031	6,153	14,346	16,190	36,689	878	10,451	11,329	25,360
2032	6,805	16,747	16,614	40,165	878	10,452	11,329	28,836
2033	7,939	19,258	18,791	45,988	878	10,452	11,330	34,659
2034	9,221	21,885	24,491	55,597	878	10,452	11,330	44,267
2035	9,518	22,042	24,288	55,849	0	0	0	55,849
2036	9,918	22,140	24,025	56,083	0	0	0	56,083
2037	10,037	22,218	23,743	55,998	0	0	0	55,998
2038	10,297	22,465	23,645	56,407	0	0	0	56,407
2039	10,634	22,711	23,545	56,890	0	0	0	56,890
2040	10,520	22,962	23,449	56,932	0	0	0	56,932
2041	10,318	23,212	23,352	56,882	0	0	0	56,882
2042	10,723	23,468	23,262	57,453	0	0	0	57,453
2043	10,873	23,723	23,169	57,765	0	0	0	57,765
2044	11,019	23,977	23,074	58,070	0	0	0	58,070
2045	10,961	23,279	22,077	56,317	0	0	0	56,317
2046	10,909	22,603	21,125	54,637	0	0	0	54,637
2047	10,817	21,817	20,097	52,731	0	0	0	52,731
2048	10,705	20,978	19,046	50,729	0	0	0	50,729
2049	10,570	20,083	17,973	48,626	0	0	0	48,626
2050	10,433	19,147	16,891	46,471	0	0	0	46,471
2051	10,273	18,152	15,784	44,209	0	0	0	44,209
2052	10,087	17,095	14,653	41,835	0	0	0	41,835
2053	9,874	15,974	13,496	39,344	0	0	0	39,344
2054	9,633	14,787	12,313	36,732	0	0	0	36,732
2055	9,021	13,699	11,245	33,965	0	0	0	33,965
2056	8,353	12,548	10,154	31,055	0	0	0	31,055
2057	7,573	11,254	8,978	27,804	0	0	0	27,804
2058	6,726	9,887	7,775	24,389	0	0	0	24,389
2059	5,808	8,445	6,547	20,800	0	0	0	20,800
2060	4,814	6,925	5,292	17,032	0	0	0	17,032
2061	3,741	5,324	4,011	13,076	0	0	0	13,076
2062	2,584	3,638	2,702	8,924	0	0	0	8,924
2063	1,339	1,864	1,365	4,568	0	0	0	4,568
2064	0	0	0	0	0	0	0	0
NOMINAL	308,090	609,447	568,813	1,486,351	8,700	103,575	112,275	1,374,076
NPV	101,472	214,022	200,159	515,652	6,563	78,130	84,693	430,959
				Utility Discount Rate = 6.83%				
				Benefit Cost Ratio = 6.088				

PROGRAM: Neighborhood Energy Saver			NES				
			Participant Test				
	BENEFITS				**COSTS**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS	PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	2,879	3,709	0	6,588	9,982	9,982	-3,394
2026	5,799	3,709	0	9,508	9,982	9,982	-474
2027	8,792	3,870	0	12,663	10,451	10,451	2,212
2028	11,870	3,870	0	15,740	10,451	10,451	5,289
2029	14,921	3,870	0	18,792	10,451	10,451	8,341
2030	17,933	3,871	0	21,803	10,451	10,451	11,352
2031	21,093	3,871	0	24,963	10,451	10,451	14,512
2032	24,428	3,871	0	28,299	10,452	10,452	17,848
2033	27,919	3,871	0	31,791	10,452	10,452	21,339
2034	31,303	3,871	0	35,174	10,452	10,452	24,722
2035	30,892	0	0	30,892	0	0	30,892
2036	30,859	0	0	30,859	0	0	30,859
2037	30,968	0	0	30,968	0	0	30,968
2038	30,759	0	0	30,759	0	0	30,759
2039	30,800	0	0	30,800	0	0	30,800
2040	30,660	0	0	30,660	0	0	30,660
2041	30,748	0	0	30,748	0	0	30,748
2042	31,070	0	0	31,070	0	0	31,070
2043	31,178	0	0	31,178	0	0	31,178
2044	31,274	0	0	31,274	0	0	31,274
2045	30,791	0	0	30,791	0	0	30,791
2046	30,334	0	0	30,334	0	0	30,334
2047	29,777	0	0	29,777	0	0	29,777
2048	29,173	0	0	29,173	0	0	29,173
2049	28,521	0	0	28,521	0	0	28,521
2050	27,872	0	0	27,872	0	0	27,872
2051	27,171	0	0	27,171	0	0	27,171
2052	26,415	0	0	26,415	0	0	26,415
2053	25,601	0	0	25,601	0	0	25,601
2054	24,728	0	0	24,728	0	0	24,728
2055	22,929	0	0	22,929	0	0	22,929
2056	21,020	0	0	21,020	0	0	21,020
2057	18,868	0	0	18,868	0	0	18,868
2058	16,591	0	0	16,591	0	0	16,591
2059	14,184	0	0	14,184	0	0	14,184
2060	11,641	0	0	11,641	0	0	11,641
2061	8,957	0	0	8,957	0	0	8,957
2062	6,126	0	0	6,126	0	0	6,126
2063	3,142	0	0	3,142	0	0	3,142
2064	0	0	0	0	0	0	0
NOMINAL	879,983	38,384	0	918,367	103,575	103,575	814,792
NPV	305,692	28,959	0	334,651	78,130	78,130	256,520

Utility Discount Rate = 6.83%
Benefit Cost Ratio = 4.283

PROGRAM:	Low Income Weatherization Assistance				LIWAP				
			Rate Impact Measure (RIM) Test						
		BENEFITS				**COSTS**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED		UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	INCENTIVE	REVENUE	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	PAYMENTS	LOSSES	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	82	130	0	213	162	267	248	677	-464
2026	163	267	0	431	162	267	500	929	-498
2027	243	412	0	655	163	268	749	1,181	-526
2028	337	558	0	895	163	268	1,015	1,446	-551
2029	409	711	845	1,966	163	268	1,278	1,710	256
2030	472	871	1,008	2,352	164	279	1,542	1,985	367
2031	531	1,039	1,172	2,741	164	279	1,818	2,261	480
2032	589	1,214	1,203	3,006	164	279	2,112	2,555	451
2033	684	1,382	1,347	3,413	155	263	2,405	2,823	590
2034	792	1,557	1,741	4,090	155	263	2,688	3,107	984
2035	828	1,583	1,743	4,154	0	0	2,686	2,686	1,468
2036	876	1,610	1,745	4,231	0	0	2,723	2,723	1,507
2037	900	1,636	1,747	4,282	0	0	2,776	2,776	1,506
2038	934	1,669	1,755	4,358	0	0	2,789	2,789	1,569
2039	976	1,703	1,764	4,443	0	0	2,826	2,826	1,617
2040	976	1,737	1,773	4,486	0	0	2,844	2,844	1,642
2041	968	1,772	1,781	4,522	0	0	2,884	2,884	1,637
2042	1,017	1,808	1,791	4,615	0	0	2,946	2,946	1,670
2043	1,042	1,845	1,800	4,687	0	0	2,988	2,988	1,699
2044	1,068	1,882	1,810	4,760	0	0	3,031	3,031	1,728
2045	1,098	1,907	1,807	4,811	0	0	3,083	3,083	1,728
2046	1,128	1,932	1,804	4,863	0	0	3,136	3,136	1,728
2047	1,158	1,956	1,801	4,915	0	0	3,187	3,187	1,727
2048	1,189	1,981	1,797	4,967	0	0	3,240	3,240	1,727
2049	1,220	2,005	1,794	5,019	0	0	3,293	3,293	1,726
2050	1,255	2,032	1,791	5,078	0	0	3,353	3,353	1,725
2051	1,291	2,058	1,789	5,138	0	0	3,414	3,414	1,723
2052	1,329	2,085	1,786	5,200	0	0	3,479	3,479	1,721
2053	1,377	2,137	1,805	5,319	0	0	3,569	3,569	1,749
2054	1,426	2,190	1,824	5,440	0	0	3,661	3,661	1,779
2055	1,330	2,021	1,659	5,009	0	0	3,381	3,381	1,629
2056	1,225	1,841	1,490	4,556	0	0	3,083	3,083	1,473
2057	1,111	1,651	1,317	4,079	0	0	2,767	2,767	1,312
2058	986	1,451	1,141	3,578	0	0	2,433	2,433	1,145
2059	852	1,239	961	3,051	0	0	2,080	2,080	971
2060	706	1,016	777	2,499	0	0	1,707	1,707	791
2061	549	781	588	1,918	0	0	1,314	1,314	605
2062	379	534	396	1,309	0	0	898	898	411
2063	196	274	200	670	0	0	461	461	209
2064	0	0	0	0	0	0	0	0	0
NOMINAL	33,690	56,476	51,552	141,719	1,618	2,701	94,390	98,709	43,010
NPV	9,961	17,486	16,199	43,646	1,226	2,041	29,574	32,841	10,805
			Utility Discount Rate = 6.83%						
			Benefit Cost Ratio = 1.329						

PROGRAM:	Low Income Weatherization Assistance				LIWAP				
			Total Resource Cost (TRC) Test						
	BENEFITS				**COSTS**				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL	PROGRAM	PARTICIPANT'S	TOTAL		NET
	SAVINGS	COSTS	COSTS	BENEFITS	COSTS	COST	COSTS		BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)		$(000)
2025	82	130	0	213	162	577	739		-526
2026	163	267	0	431	162	577	739		-308
2027	243	412	0	655	163	581	744		-89
2028	337	558	0	895	163	581	744		151
2029	409	711	845	1,966	163	581	744		1,221
2030	472	871	1,008	2,352	164	591	756		1,596
2031	531	1,039	1,172	2,741	164	591	756		1,986
2032	589	1,214	1,203	3,006	164	591	756		2,250
2033	684	1,382	1,347	3,413	155	529	685		2,728
2034	792	1,557	1,741	4,090	155	529	685		3,405
2035	828	1,583	1,743	4,154	0	0	0		4,154
2036	876	1,610	1,745	4,231	0	0	0		4,231
2037	900	1,636	1,747	4,282	0	0	0		4,282
2038	934	1,669	1,755	4,358	0	0	0		4,358
2039	976	1,703	1,764	4,443	0	0	0		4,443
2040	976	1,737	1,773	4,486	0	0	0		4,486
2041	968	1,772	1,781	4,522	0	0	0		4,522
2042	1,017	1,808	1,791	4,615	0	0	0		4,615
2043	1,042	1,845	1,800	4,687	0	0	0		4,687
2044	1,068	1,882	1,810	4,760	0	0	0		4,760
2045	1,098	1,907	1,807	4,811	0	0	0		4,811
2046	1,128	1,932	1,804	4,863	0	0	0		4,863
2047	1,158	1,956	1,801	4,915	0	0	0		4,915
2048	1,189	1,981	1,797	4,967	0	0	0		4,967
2049	1,220	2,005	1,794	5,019	0	0	0		5,019
2050	1,255	2,032	1,791	5,078	0	0	0		5,078
2051	1,291	2,058	1,789	5,138	0	0	0		5,138
2052	1,329	2,085	1,786	5,200	0	0	0		5,200
2053	1,377	2,137	1,805	5,319	0	0	0		5,319
2054	1,426	2,190	1,824	5,440	0	0	0		5,440
2055	1,330	2,021	1,659	5,009	0	0	0		5,009
2056	1,225	1,841	1,490	4,556	0	0	0		4,556
2057	1,111	1,651	1,317	4,079	0	0	0		4,079
2058	986	1,451	1,141	3,578	0	0	0		3,578
2059	852	1,239	961	3,051	0	0	0		3,051
2060	706	1,016	777	2,499	0	0	0		2,499
2061	549	781	588	1,918	0	0	0		1,918
2062	379	534	396	1,309	0	0	0		1,309
2063	196	274	200	670	0	0	0		670
2064	0	0	0	0	0	0	0		0
NOMINAL	33,690	56,476	51,552	141,719	1,618	5,728	7,346		134,372
NPV	9,961	17,486	16,199	43,646	1,226	4,346	5,573		38,073

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 7.832

PROGRAM: Low Income Weatherization Assistance					LIWAP		
Participant Test							
	BENEFITS				**COSTS**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS	PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	248	267	0	515	577	577	-61
2026	500	267	0	767	577	577	190
2027	749	268	0	1,017	581	581	437
2028	1,015	268	0	1,283	581	581	702
2029	1,278	268	0	1,546	581	581	966
2030	1,542	279	0	1,821	591	591	1,229
2031	1,818	279	0	2,097	591	591	1,506
2032	2,112	279	0	2,391	591	591	1,800
2033	2,405	263	0	2,668	529	529	2,139
2034	2,688	263	0	2,951	529	529	2,422
2035	2,686	0	0	2,686	0	0	2,686
2036	2,723	0	0	2,723	0	0	2,723
2037	2,776	0	0	2,776	0	0	2,776
2038	2,789	0	0	2,789	0	0	2,789
2039	2,826	0	0	2,826	0	0	2,826
2040	2,844	0	0	2,844	0	0	2,844
2041	2,884	0	0	2,884	0	0	2,884
2042	2,946	0	0	2,946	0	0	2,946
2043	2,988	0	0	2,988	0	0	2,988
2044	3,031	0	0	3,031	0	0	3,031
2045	3,083	0	0	3,083	0	0	3,083
2046	3,136	0	0	3,136	0	0	3,136
2047	3,187	0	0	3,187	0	0	3,187
2048	3,240	0	0	3,240	0	0	3,240
2049	3,293	0	0	3,293	0	0	3,293
2050	3,353	0	0	3,353	0	0	3,353
2051	3,414	0	0	3,414	0	0	3,414
2052	3,479	0	0	3,479	0	0	3,479
2053	3,569	0	0	3,569	0	0	3,569
2054	3,661	0	0	3,661	0	0	3,661
2055	3,381	0	0	3,381	0	0	3,381
2056	3,083	0	0	3,083	0	0	3,083
2057	2,767	0	0	2,767	0	0	2,767
2058	2,433	0	0	2,433	0	0	2,433
2059	2,080	0	0	2,080	0	0	2,080
2060	1,707	0	0	1,707	0	0	1,707
2061	1,314	0	0	1,314	0	0	1,314
2062	898	0	0	898	0	0	898
2063	461	0	0	461	0	0	461
2064	0	0	0	0	0	0	0
NOMINAL	94,390	2,701	0	97,091	5,728	5,728	91,363
NPV	29,574	2,041	0	31,615	4,346	4,346	27,268
Utility Discount Rate = 6.83%							
Benefit Cost Ratio = 7.274							

PROGRAM:	Better Business			BB					

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED		UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL	PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS	COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	208	518	0	726	1,234	577	560	2,370	-1,645
2026	431	1,110	0	1,541	1,338	594	1,168	3,099	-1,558
2027	667	1,787	0	2,454	1,455	615	1,816	3,886	-1,432
2028	976	2,560	0	3,537	1,585	642	2,574	4,801	-1,264
2029	1,247	3,442	4,087	8,776	1,729	674	3,374	5,777	2,999
2030	1,467	4,245	4,911	10,623	1,603	641	4,098	6,341	4,281
2031	1,640	4,955	5,587	12,182	1,390	606	4,746	6,741	5,440
2032	1,786	5,594	5,545	12,925	1,215	572	5,362	7,149	5,775
2033	2,036	6,177	6,022	14,235	1,071	542	5,929	7,543	6,692
2034	2,299	6,718	7,511	16,528	952	519	6,382	7,852	8,676
2035	2,345	6,451	7,101	15,897	0	0	6,137	6,137	9,759
2036	2,408	6,123	6,638	15,170	0	0	5,994	5,994	9,176
2037	2,392	5,727	6,115	14,234	0	0	5,870	5,870	8,364
2038	2,372	5,254	5,525	13,151	0	0	5,557	5,557	7,594
2039	2,349	4,692	4,860	11,902	0	0	5,278	5,278	6,624
2040	2,101	4,029	4,111	10,240	0	0	4,685	4,685	5,555
2041	1,846	3,442	3,459	8,747	0	0	4,169	4,169	4,578
2042	1,687	2,901	2,872	7,460	0	0	3,680	3,680	3,780
2043	1,465	2,381	2,324	6,170	0	0	3,130	3,130	3,040
2044	1,218	1,865	1,793	4,877	0	0	2,550	2,550	2,327
2045	991	1,501	1,422	3,913	0	0	2,034	2,034	1,879
2046	770	1,155	1,078	3,003	0	0	1,551	1,551	1,452
2047	554	824	758	2,136	0	0	1,094	1,094	1,042
2048	332	491	446	1,269	0	0	643	643	627
2049	113	169	151	433	0	0	211	211	222
2050	103	153	135	390	0	0	189	189	202
2051	90	134	116	341	0	0	163	163	178
2052	76	112	96	283	0	0	134	134	149
2053	62	90	76	228	0	0	107	107	121
2054	47	69	58	174	0	0	81	81	93
2055	32	48	39	119	0	0	54	54	65
2056	17	26	21	64	0	0	29	29	36
2057	2	4	4	10	0	0	3	3	7
2058	2	4	3	9	0	0	3	3	6
2059	1	4	3	8	0	0	2	2	5
2060	1	3	2	7	0	0	2	2	5
2061	1	3	2	6	0	0	1	1	4
2062	1	2	2	5	0	0	1	1	4
2063	0	2	1	4	0	0	0	0	3
2064	0	0	0	0	0	0	0	0	0
NOMINAL	36,133	84,766	82,874	203,773	13,571	5,982	89,359	108,912	94,861
NPV	17,617	44,115	41,452	103,183	10,397	4,550	45,210	60,157	43,026

Utility Discount Rate = 6.83%
Benefit Cost Ratio = 1.715

PROGRAM:	Better Business		BB					
			Total Resource Cost (TRC) Test					
		BENEFITS				**COSTS**		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED			UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL		PROGRAM	PARTICIPANT'S	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS		COSTS	COST	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)	$(000)
2025	208	518	0	726		1,234	4,190	5,423	-4,697
2026	431	1,110	0	1,541		1,338	4,477	5,815	-4,274
2027	667	1,787	0	2,454		1,455	4,803	6,258	-3,804
2028	976	2,560	0	3,537		1,585	5,172	6,757	-3,220
2029	1,247	3,442	4,087	8,776		1,729	5,589	7,318	1,458
2030	1,467	4,245	4,911	10,623		1,603	5,800	7,403	3,219
2031	1,640	4,955	5,587	12,182		1,390	5,316	6,706	5,476
2032	1,786	5,594	5,545	12,925		1,215	4,877	6,092	6,832
2033	2,036	6,177	6,022	14,235		1,071	4,479	5,550	8,684
2034	2,299	6,718	7,511	16,528		952	4,126	5,078	11,450
2035	2,345	6,451	7,101	15,897		0	0	0	15,897
2036	2,408	6,123	6,638	15,170		0	0	0	15,170
2037	2,392	5,727	6,115	14,234		0	0	0	14,234
2038	2,372	5,254	5,525	13,151		0	0	0	13,151
2039	2,349	4,692	4,860	11,902		0	0	0	11,902
2040	2,101	4,029	4,111	10,240		0	0	0	10,240
2041	1,846	3,442	3,459	8,747		0	0	0	8,747
2042	1,687	2,901	2,872	7,460		0	0	0	7,460
2043	1,465	2,381	2,324	6,170		0	0	0	6,170
2044	1,218	1,865	1,793	4,877		0	0	0	4,877
2045	991	1,501	1,422	3,913		0	0	0	3,913
2046	770	1,155	1,078	3,003		0	0	0	3,003
2047	554	824	758	2,136		0	0	0	2,136
2048	332	491	446	1,269		0	0	0	1,269
2049	113	169	151	433		0	0	0	433
2050	103	153	135	390		0	0	0	390
2051	90	134	116	341		0	0	0	341
2052	76	112	96	283		0	0	0	283
2053	62	90	76	228		0	0	0	228
2054	47	69	58	174		0	0	0	174
2055	32	48	39	119		0	0	0	119
2056	17	26	21	64		0	0	0	64
2057	2	4	4	10		0	0	0	10
2058	2	4	3	9		0	0	0	9
2059	1	4	3	8		0	0	0	8
2060	1	3	2	7		0	0	0	7
2061	1	3	2	6		0	0	0	6
2062	1	2	2	5		0	0	0	5
2063	0	2	1	4		0	0	0	4
2064	0	0	0	0		0	0	0	0
NOMINAL	36,133	84,766	82,874	203,773		13,571	48,829	62,400	141,373
NPV	17,617	44,115	41,452	103,183		10,397	36,855	47,252	55,931

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 2.184

PROGRAM:	**Better Business**				**BB**			
				Participant Test				
		BENEFITS				**COSTS**		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)
	SAVINGS IN		OTHER					
	PARTICIPANT'S	INCENTIVE	PARTICIPANT'S	**TOTAL**		PARTICIPANT'S	**TOTAL**	**NET**
	BILL	PAYMENTS	BENEFITS	**BENEFITS**		COST	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)
2025	560	577	0	1,137		4,190	4,190	-3,053
2026	1,168	594	0	1,761		4,477	4,477	-2,716
2027	1,816	615	0	2,431		4,803	4,803	-2,372
2028	2,574	642	0	3,216		5,172	5,172	-1,956
2029	3,374	674	0	4,048		5,589	5,589	-1,541
2030	4,098	641	0	4,739		5,800	5,800	-1,062
2031	4,746	606	0	5,352		5,316	5,316	35
2032	5,362	572	0	5,934		4,877	4,877	1,057
2033	5,929	542	0	6,471		4,479	4,479	1,992
2034	6,382	519	0	6,901		4,126	4,126	2,774
2035	6,137	0	0	6,137		0	0	6,137
2036	5,994	0	0	5,994		0	0	5,994
2037	5,870	0	0	5,870		0	0	5,870
2038	5,557	0	0	5,557		0	0	5,557
2039	5,278	0	0	5,278		0	0	5,278
2040	4,685	0	0	4,685		0	0	4,685
2041	4,169	0	0	4,169		0	0	4,169
2042	3,680	0	0	3,680		0	0	3,680
2043	3,130	0	0	3,130		0	0	3,130
2044	2,550	0	0	2,550		0	0	2,550
2045	2,034	0	0	2,034		0	0	2,034
2046	1,551	0	0	1,551		0	0	1,551
2047	1,094	0	0	1,094		0	0	1,094
2048	643	0	0	643		0	0	643
2049	211	0	0	211		0	0	211
2050	189	0	0	189		0	0	189
2051	163	0	0	163		0	0	163
2052	134	0	0	134		0	0	134
2053	107	0	0	107		0	0	107
2054	81	0	0	81		0	0	81
2055	54	0	0	54		0	0	54
2056	29	0	0	29		0	0	29
2057	3	0	0	3		0	0	3
2058	3	0	0	3		0	0	3
2059	2	0	0	2		0	0	2
2060	2	0	0	2		0	0	2
2061	1	0	0	1		0	0	1
2062	1	0	0	1		0	0	1
2063	0	0	0	0		0	0	0
2064	0	0	0	0		0	0	0
NOMINAL	89,359	5,982	0	95,341		48,829	48,829	46,512
NPV	45,210	4,550	0	49,760		36,855	36,855	12,905
			Utility Discount Rate = 6.83%					
			Benefit Cost Ratio = 1.350					

PROGRAM: Residential Load Management					EWH				
			Rate Impact Measure (RIM) Test						
		BENEFITS				COSTS			
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED			UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL		PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS		COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0		739	182	0	922	-922
2026	0	0	0	0		1,023	365	0	1,388	-1,388
2027	0	0	0	0		1,321	547	0	1,868	-1,868
2028	0	0	0	0		1,633	729	0	2,362	-2,362
2029	0	0	5,338	5,338		1,960	911	0	2,871	2,467
2030	0	0	6,398	6,398		2,302	1,094	0	3,396	3,003
2031	0	0	7,456	7,456		2,660	1,276	0	3,936	3,520
2032	0	0	7,678	7,678		3,034	1,458	0	4,493	3,186
2033	0	0	8,708	8,708		3,426	1,641	0	5,066	3,642
2034	0	0	11,375	11,375		3,835	1,823	0	5,658	5,717
2035	0	0	11,480	11,480		3,316	1,823	0	5,139	6,341
2036	0	0	11,588	11,588		3,399	1,823	0	5,222	6,366
2037	0	0	11,697	11,697		3,484	1,823	0	5,307	6,390
2038	0	0	11,809	11,809		3,571	1,823	0	5,394	6,415
2039	0	0	11,922	11,922		3,661	1,823	0	5,483	6,439
2040	0	0	12,038	12,038		3,752	1,823	0	5,575	6,463
2041	0	0	12,156	12,156		3,846	1,823	0	5,669	6,487
2042	0	0	12,276	12,276		3,942	1,823	0	5,765	6,511
2043	0	0	12,398	12,398		4,041	1,823	0	5,863	6,534
2044	0	0	12,522	12,522		4,142	1,823	0	5,964	6,558
2045	0	0	12,649	12,649		4,245	1,823	0	6,068	6,581
2046	0	0	12,778	12,778		4,351	1,823	0	6,174	6,604
2047	0	0	12,909	12,909		4,460	1,823	0	6,283	6,626
2048	0	0	13,043	13,043		4,572	1,823	0	6,394	6,649
2049	0	0	13,179	13,179		4,686	1,823	0	6,509	6,671
2050	0	0	11,985	11,985		4,323	1,641	0	5,963	6,022
2051	0	0	10,765	10,765		3,938	1,458	0	5,397	5,368
2052	0	0	9,518	9,518		3,532	1,276	0	4,808	4,709
2053	0	0	8,243	8,243		3,103	1,094	0	4,197	4,046
2054	0	0	6,941	6,941		2,651	911	0	3,562	3,379
2055	0	0	5,611	5,611		2,174	729	0	2,903	2,708
2056	0	0	4,252	4,252		1,671	547	0	2,218	2,034
2057	0	0	2,864	2,864		1,142	365	0	1,506	1,358
2058	0	0	1,447	1,447		585	182	0	767	680
2059	0	0	0	0		0	0	0	0	0
2060	0	0	0	0		0	0	0	0	0
2061	0	0	0	0		0	0	0	0	0
2062	0	0	0	0		0	0	0	0	0
2063	0	0	0	0		0	0	0	0	0
2064	0	0	0	0		0	0	0	0	0
NOMINAL	0	0	293,024	293,024		104,521	45,571	0	150,093	142,931
NPV	0	0	101,654	101,654		38,456	17,428	0	55,884	45,770
			Utility Discount Rate = 6.83%							
			Benefit Cost Ratio = 1.819							

PROGRAM: Residential Load Management					EWH			

Total Resource Cost (TRC) Test

	BENEFITS				COSTS			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL	PROGRAM	PARTICIPANT'S	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS	COSTS	COST	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0	739	0	739	-739
2026	0	0	0	0	1,023	0	1,023	-1,023
2027	0	0	0	0	1,321	0	1,321	-1,321
2028	0	0	0	0	1,633	0	1,633	-1,633
2029	0	0	5,338	5,338	1,960	0	1,960	3,378
2030	0	0	6,398	6,398	2,302	0	2,302	4,096
2031	0	0	7,456	7,456	2,660	0	2,660	4,796
2032	0	0	7,678	7,678	3,034	0	3,034	4,644
2033	0	0	8,708	8,708	3,426	0	3,426	5,282
2034	0	0	11,375	11,375	3,835	0	3,835	7,539
2035	0	0	11,480	11,480	3,316	0	3,316	8,164
2036	0	0	11,588	11,588	3,399	0	3,399	8,188
2037	0	0	11,697	11,697	3,484	0	3,484	8,213
2038	0	0	11,809	11,809	3,571	0	3,571	8,237
2039	0	0	11,922	11,922	3,661	0	3,661	8,262
2040	0	0	12,038	12,038	3,752	0	3,752	8,286
2041	0	0	12,156	12,156	3,846	0	3,846	8,310
2042	0	0	12,276	12,276	3,942	0	3,942	8,334
2043	0	0	12,398	12,398	4,041	0	4,041	8,357
2044	0	0	12,522	12,522	4,142	0	4,142	8,380
2045	0	0	12,649	12,649	4,245	0	4,245	8,404
2046	0	0	12,778	12,778	4,351	0	4,351	8,427
2047	0	0	12,909	12,909	4,460	0	4,460	8,449
2048	0	0	13,043	13,043	4,572	0	4,572	8,471
2049	0	0	13,179	13,179	4,686	0	4,686	8,493
2050	0	0	11,985	11,985	4,323	0	4,323	7,663
2051	0	0	10,765	10,765	3,938	0	3,938	6,826
2052	0	0	9,518	9,518	3,532	0	3,532	5,985
2053	0	0	8,243	8,243	3,103	0	3,103	5,140
2054	0	0	6,941	6,941	2,651	0	2,651	4,290
2055	0	0	5,611	5,611	2,174	0	2,174	3,437
2056	0	0	4,252	4,252	1,671	0	1,671	2,581
2057	0	0	2,864	2,864	1,142	0	1,142	1,723
2058	0	0	1,447	1,447	585	0	585	862
2059	0	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
NOMINAL	0	0	293,024	293,024	104,521	0	104,521	188,503
NPV	0	0	101,654	101,654	38,456	0	38,456	63,198

Utility Discount Rate = 6.83%
Benefit Cost Ratio = 2.643

PROGRAM:	Residential Load Management				EWH		
			Participant Test				
		BENEFITS			**COSTS**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS	PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	182	0	182	0	0	182
2026	0	365	0	365	0	0	365
2027	0	547	0	547	0	0	547
2028	0	729	0	729	0	0	729
2029	0	911	0	911	0	0	911
2030	0	1,094	0	1,094	0	0	1,094
2031	0	1,276	0	1,276	0	0	1,276
2032	0	1,458	0	1,458	0	0	1,458
2033	0	1,641	0	1,641	0	0	1,641
2034	0	1,823	0	1,823	0	0	1,823
2035	0	1,823	0	1,823	0	0	1,823
2036	0	1,823	0	1,823	0	0	1,823
2037	0	1,823	0	1,823	0	0	1,823
2038	0	1,823	0	1,823	0	0	1,823
2039	0	1,823	0	1,823	0	0	1,823
2040	0	1,823	0	1,823	0	0	1,823
2041	0	1,823	0	1,823	0	0	1,823
2042	0	1,823	0	1,823	0	0	1,823
2043	0	1,823	0	1,823	0	0	1,823
2044	0	1,823	0	1,823	0	0	1,823
2045	0	1,823	0	1,823	0	0	1,823
2046	0	1,823	0	1,823	0	0	1,823
2047	0	1,823	0	1,823	0	0	1,823
2048	0	1,823	0	1,823	0	0	1,823
2049	0	1,823	0	1,823	0	0	1,823
2050	0	1,641	0	1,641	0	0	1,641
2051	0	1,458	0	1,458	0	0	1,458
2052	0	1,276	0	1,276	0	0	1,276
2053	0	1,094	0	1,094	0	0	1,094
2054	0	911	0	911	0	0	911
2055	0	729	0	729	0	0	729
2056	0	547	0	547	0	0	547
2057	0	365	0	365	0	0	365
2058	0	182	0	182	0	0	182
2059	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0
NOMINAL	0	45,571	0	45,571	0	0	45,571
NPV	0	17,428	0	17,428	0	0	17,428

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 9999

PROGRAM:	Interruptible Service DR			IS					
	Rate Impact Measure (RIM) Test								
		BENEFITS				**COSTS**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED		UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	INCENTIVE	REVENUE	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	PAYMENTS	LOSSES	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0	37	147	0	184	-184
2026	0	0	0	0	46	294	0	340	-340
2027	0	0	0	0	55	441	0	496	-496
2028	0	0	0	0	65	588	0	653	-653
2029	0	0	1,115	1,115	76	734	0	810	305
2030	0	0	1,337	1,337	87	881	0	968	369
2031	0	0	1,558	1,558	98	1,028	0	1,126	431
2032	0	0	1,604	1,604	110	1,175	0	1,285	319
2033	0	0	1,819	1,819	122	1,322	0	1,445	375
2034	0	0	2,376	2,376	135	1,469	0	1,604	772
2035	0	0	2,398	2,398	102	1,469	0	1,571	827
2036	0	0	2,421	2,421	105	1,469	0	1,574	847
2037	0	0	2,444	2,444	107	1,469	0	1,576	867
2038	0	0	2,467	2,467	110	1,469	0	1,579	888
2039	0	0	2,491	2,491	113	1,469	0	1,582	909
2040	0	0	2,515	2,515	116	1,469	0	1,585	930
2041	0	0	2,539	2,539	118	1,469	0	1,587	952
2042	0	0	2,564	2,564	121	1,469	0	1,590	974
2043	0	0	2,590	2,590	124	1,469	0	1,593	997
2044	0	0	2,616	2,616	128	1,469	0	1,596	1,019
2045	0	0	2,642	2,642	131	1,469	0	1,600	1,043
2046	0	0	2,669	2,669	134	1,469	0	1,603	1,066
2047	0	0	2,697	2,697	137	1,469	0	1,606	1,090
2048	0	0	2,725	2,725	141	1,469	0	1,610	1,115
2049	0	0	2,753	2,753	144	1,469	0	1,613	1,140
2050	0	0	2,504	2,504	133	1,322	0	1,455	1,049
2051	0	0	2,249	2,249	121	1,175	0	1,296	952
2052	0	0	1,988	1,988	109	1,028	0	1,137	851
2053	0	0	1,722	1,722	96	881	0	977	745
2054	0	0	1,450	1,450	82	734	0	816	634
2055	0	0	1,172	1,172	67	588	0	655	518
2056	0	0	888	888	51	441	0	492	396
2057	0	0	598	598	35	294	0	329	269
2058	0	0	302	302	18	147	0	165	137
2059	0	0	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0	0
NOMINAL	0	0	61,214	61,214	3,374	36,725	0	40,098	21,115
NPV	0	0	21,236	21,236	1,300	14,045	0	15,345	5,891
				Utility Discount Rate = 6.83%					
				Benefit Cost Ratio = 1.384					

PROGRAM:	Interruptible Service DR			IS				

Total Resource Cost (TRC) Test

	BENEFITS				COSTS			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	TOTAL BENEFITS	UTILITY PROGRAM COSTS	PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0	37	0	37	-37
2026	0	0	0	0	46	0	46	-46
2027	0	0	0	0	55	0	55	-55
2028	0	0	0	0	65	0	65	-65
2029	0	0	1,115	1,115	76	0	76	1,039
2030	0	0	1,337	1,337	87	0	87	1,250
2031	0	0	1,558	1,558	98	0	98	1,460
2032	0	0	1,604	1,604	110	0	110	1,494
2033	0	0	1,819	1,819	122	0	122	1,697
2034	0	0	2,376	2,376	135	0	135	2,241
2035	0	0	2,398	2,398	102	0	102	2,296
2036	0	0	2,421	2,421	105	0	105	2,316
2037	0	0	2,444	2,444	107	0	107	2,336
2038	0	0	2,467	2,467	110	0	110	2,357
2039	0	0	2,491	2,491	113	0	113	2,378
2040	0	0	2,515	2,515	116	0	116	2,399
2041	0	0	2,539	2,539	118	0	118	2,421
2042	0	0	2,564	2,564	121	0	121	2,443
2043	0	0	2,590	2,590	124	0	124	2,466
2044	0	0	2,616	2,616	128	0	128	2,488
2045	0	0	2,642	2,642	131	0	131	2,512
2046	0	0	2,669	2,669	134	0	134	2,535
2047	0	0	2,697	2,697	137	0	137	2,559
2048	0	0	2,725	2,725	141	0	141	2,584
2049	0	0	2,753	2,753	144	0	144	2,609
2050	0	0	2,504	2,504	133	0	133	2,371
2051	0	0	2,249	2,249	121	0	121	2,128
2052	0	0	1,988	1,988	109	0	109	1,880
2053	0	0	1,722	1,722	96	0	96	1,627
2054	0	0	1,450	1,450	82	0	82	1,368
2055	0	0	1,172	1,172	67	0	67	1,105
2056	0	0	888	888	51	0	51	837
2057	0	0	598	598	35	0	35	563
2058	0	0	302	302	18	0	18	284
2059	0	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
NOMINAL	0	0	61,214	61,214	3,374	0	3,374	57,840
NPV	0	0	21,236	21,236	1,300	0	1,300	19,936

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 16.332

		BENEFITS				COSTS		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS		PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)
2025	0	147	0	147		0	0	147
2026	0	294	0	294		0	0	294
2027	0	441	0	441		0	0	441
2028	0	588	0	588		0	0	588
2029	0	734	0	734		0	0	734
2030	0	881	0	881		0	0	881
2031	0	1,028	0	1,028		0	0	1,028
2032	0	1,175	0	1,175		0	0	1,175
2033	0	1,322	0	1,322		0	0	1,322
2034	0	1,469	0	1,469		0	0	1,469
2035	0	1,469	0	1,469		0	0	1,469
2036	0	1,469	0	1,469		0	0	1,469
2037	0	1,469	0	1,469		0	0	1,469
2038	0	1,469	0	1,469		0	0	1,469
2039	0	1,469	0	1,469		0	0	1,469
2040	0	1,469	0	1,469		0	0	1,469
2041	0	1,469	0	1,469		0	0	1,469
2042	0	1,469	0	1,469		0	0	1,469
2043	0	1,469	0	1,469		0	0	1,469
2044	0	1,469	0	1,469		0	0	1,469
2045	0	1,469	0	1,469		0	0	1,469
2046	0	1,469	0	1,469		0	0	1,469
2047	0	1,469	0	1,469		0	0	1,469
2048	0	1,469	0	1,469		0	0	1,469
2049	0	1,469	0	1,469		0	0	1,469
2050	0	1,322	0	1,322		0	0	1,322
2051	0	1,175	0	1,175		0	0	1,175
2052	0	1,028	0	1,028		0	0	1,028
2053	0	881	0	881		0	0	881
2054	0	734	0	734		0	0	734
2055	0	588	0	588		0	0	588
2056	0	441	0	441		0	0	441
2057	0	294	0	294		0	0	294
2058	0	147	0	147		0	0	147
2059	0	0	0	0		0	0	0
2060	0	0	0	0		0	0	0
2061	0	0	0	0		0	0	0
2062	0	0	0	0		0	0	0
2063	0	0	0	0		0	0	0
2064	0	0	0	0		0	0	0
NOMINAL	0	36,725	0	36,725		0	0	36,725
NPV	0	14,045	0	14,045		0	0	14,045

Utility Discount Rate = 6.83%

Benefit Cost Ratio: 9999

PROGRAM:	Curtailable Service DR			CS					
			Rate Impact Measure (RIM) Test						
	BENEFITS					COSTS			
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED			UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL		PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS		COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0		3	44	0	47	-47
2026	0	0	0	0		2	44	0	46	-46
2027	0	0	0	0		6	88	0	93	-93
2028	0	0	0	0		5	88	0	92	-92
2029	0	0	335	335		8	131	0	139	195
2030	0	0	334	334		7	131	0	138	196
2031	0	0	334	334		7	131	0	139	195
2032	0	0	301	301		8	131	0	139	162
2033	0	0	303	303		8	131	0	139	164
2034	0	0	356	356		8	131	0	139	217
2035	0	0	360	360		8	131	0	139	220
2036	0	0	363	363		8	131	0	140	224
2037	0	0	367	367		9	131	0	140	227
2038	0	0	370	370		9	131	0	140	230
2039	0	0	374	374		9	131	0	140	233
2040	0	0	377	377		9	131	0	140	237
2041	0	0	381	381		9	131	0	141	240
2042	0	0	385	385		10	131	0	141	244
2043	0	0	388	388		10	131	0	141	247
2044	0	0	392	392		10	131	0	141	251
2045	0	0	396	396		10	131	0	142	255
2046	0	0	400	400		11	131	0	142	258
2047	0	0	405	405		11	131	0	142	262
2048	0	0	409	409		11	131	0	142	266
2049	0	0	413	413		11	131	0	143	270
2050	0	0	278	278		8	88	0	95	183
2051	0	0	281	281		8	88	0	96	186
2052	0	0	142	142		4	44	0	48	94
2053	0	0	144	144		4	44	0	48	96
2054	0	0	0	0		0	0	0	0	0
2055	0	0	0	0		0	0	0	0	0
2056	0	0	0	0		0	0	0	0	0
2057	0	0	0	0		0	0	0	0	0
2058	0	0	0	0		0	0	0	0	0
2059	0	0	0	0		0	0	0	0	0
2060	0	0	0	0		0	0	0	0	0
2061	0	0	0	0		0	0	0	0	0
2062	0	0	0	0		0	0	0	0	0
2063	0	0	0	0		0	0	0	0	0
2064	0	0	0	0		0	0	0	0	0
NOMINAL	0	0	8,587	8,587		231	3,281	0	3,513	5,075
NPV	0	0	3,371	3,371		96	1,463	0	1,558	1,812

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 2.163

PROGRAM:	Curtailable Service DR			CS				
	Total Resource Cost (TRC) Test							
	BENEFITS				**COSTS**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	PARTICIPANT'S	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	COST	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0	3	0	3	-3
2026	0	0	0	0	2	0	2	-2
2027	0	0	0	0	6	0	6	-6
2028	0	0	0	0	5	0	5	-5
2029	0	0	335	335	8	0	8	326
2030	0	0	334	334	7	0	7	327
2031	0	0	334	334	7	0	7	326
2032	0	0	301	301	8	0	8	293
2033	0	0	303	303	8	0	8	295
2034	0	0	356	356	8	0	8	349
2035	0	0	360	360	8	0	8	352
2036	0	0	363	363	8	0	8	355
2037	0	0	367	367	9	0	9	358
2038	0	0	370	370	9	0	9	361
2039	0	0	374	374	9	0	9	365
2040	0	0	377	377	9	0	9	368
2041	0	0	381	381	9	0	9	371
2042	0	0	385	385	10	0	10	375
2043	0	0	388	388	10	0	10	379
2044	0	0	392	392	10	0	10	382
2045	0	0	396	396	10	0	10	386
2046	0	0	400	400	11	0	11	390
2047	0	0	405	405	11	0	11	394
2048	0	0	409	409	11	0	11	398
2049	0	0	413	413	11	0	11	402
2050	0	0	278	278	8	0	8	270
2051	0	0	281	281	8	0	8	273
2052	0	0	142	142	4	0	4	138
2053	0	0	144	144	4	0	4	139
2054	0	0	0	0	0	0	0	0
2055	0	0	0	0	0	0	0	0
2056	0	0	0	0	0	0	0	0
2057	0	0	0	0	0	0	0	0
2058	0	0	0	0	0	0	0	0
2059	0	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
NOMINAL	0	0	8,587	8,587	231	0	231	8,356
NPV	0	0	3,371	3,371	96	0	96	3,275
	Utility Discount Rate = 6.83%							
	Benefit Cost Ratio = 35.120							

PROGRAM:	Curtailable Service DR			CS			
			Participant Test				
		BENEFITS			COSTS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT'S BENEFITS	TOTAL BENEFITS	PARTICIPANT'S COST	TOTAL COSTS	NET BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	44	0	44	0	0	44
2026	0	44	0	44	0	0	44
2027	0	88	0	88	0	0	88
2028	0	88	0	88	0	0	88
2029	0	131	0	131	0	0	131
2030	0	131	0	131	0	0	131
2031	0	131	0	131	0	0	131
2032	0	131	0	131	0	0	131
2033	0	131	0	131	0	0	131
2034	0	131	0	131	0	0	131
2035	0	131	0	131	0	0	131
2036	0	131	0	131	0	0	131
2037	0	131	0	131	0	0	131
2038	0	131	0	131	0	0	131
2039	0	131	0	131	0	0	131
2040	0	131	0	131	0	0	131
2041	0	131	0	131	0	0	131
2042	0	131	0	131	0	0	131
2043	0	131	0	131	0	0	131
2044	0	131	0	131	0	0	131
2045	0	131	0	131	0	0	131
2046	0	131	0	131	0	0	131
2047	0	131	0	131	0	0	131
2048	0	131	0	131	0	0	131
2049	0	131	0	131	0	0	131
2050	0	88	0	88	0	0	88
2051	0	88	0	88	0	0	88
2052	0	44	0	44	0	0	44
2053	0	44	0	44	0	0	44
2054	0	0	0	0	0	0	0
2055	0	0	0	0	0	0	0
2056	0	0	0	0	0	0	0
2057	0	0	0	0	0	0	0
2058	0	0	0	0	0	0	0
2059	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0
NOMINAL	0	3,281	0	3,281	0	0	3,281
NPV	0	1,463	0	1,463	0	0	1,463
			Utility Discount Rate = 6.83%				
			Benefit Cost Ratio: 9999				

PROGRAM:	Standby Generation DR			SBG					
				Rate Impact Measure (RIM) Test					
		BENEFITS				COSTS			
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)
	TOTAL	AVOIDED	AVOIDED			UTILITY				
	FUEL & O&M	T&D CAP.	GEN. CAP.	TOTAL		PROGRAM	INCENTIVE	REVENUE	TOTAL	NET
	SAVINGS	COSTS	COSTS	BENEFITS		COSTS	PAYMENTS	LOSSES	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)		$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0		39	131	0	170	-170
2026	0	0	0	0		54	262	0	316	-316
2027	0	0	0	0		90	459	0	549	-549
2028	0	0	0	0		114	655	0	770	-770
2029	0	0	2,899	2,899		139	852	0	992	1,908
2030	0	0	3,676	3,676		177	1,081	0	1,259	2,417
2031	0	0	4,450	4,450		209	1,311	0	1,520	2,931
2032	0	0	4,812	4,812		254	1,573	0	1,827	2,985
2033	0	0	5,660	5,660		293	1,835	0	2,128	3,531
2034	0	0	7,604	7,604		334	2,097	0	2,432	5,172
2035	0	0	7,674	7,674		277	2,097	0	2,375	5,300
2036	0	0	7,746	7,746		284	2,097	0	2,381	5,365
2037	0	0	7,819	7,819		291	2,097	0	2,389	5,431
2038	0	0	7,894	7,894		298	2,097	0	2,396	5,498
2039	0	0	7,970	7,970		306	2,097	0	2,403	5,567
2040	0	0	8,047	8,047		313	2,097	0	2,411	5,636
2041	0	0	8,126	8,126		321	2,097	0	2,419	5,707
2042	0	0	8,206	8,206		329	2,097	0	2,427	5,779
2043	0	0	8,288	8,288		338	2,097	0	2,435	5,853
2044	0	0	8,371	8,371		346	2,097	0	2,443	5,927
2045	0	0	8,456	8,456		355	2,097	0	2,452	6,004
2046	0	0	8,542	8,542		364	2,097	0	2,461	6,081
2047	0	0	8,630	8,630		373	2,097	0	2,470	6,160
2048	0	0	8,719	8,719		382	2,097	0	2,479	6,240
2049	0	0	8,810	8,810		391	2,097	0	2,489	6,321
2050	0	0	8,346	8,346		376	1,966	0	2,343	6,003
2051	0	0	7,871	7,871		360	1,835	0	2,195	5,676
2052	0	0	7,101	7,101		329	1,639	0	1,968	5,133
2053	0	0	6,314	6,314		297	1,442	0	1,739	4,575
2054	0	0	5,510	5,510		263	1,245	0	1,508	4,002
2055	0	0	4,542	4,542		220	1,016	0	1,236	3,306
2056	0	0	3,553	3,553		175	787	0	961	2,592
2057	0	0	2,394	2,394		119	524	0	644	1,750
2058	0	0	1,209	1,209		61	262	0	323	886
2059	0	0	0	0		0	0	0	0	0
2060	0	0	0	0		0	0	0	0	0
2061	0	0	0	0		0	0	0	0	0
2062	0	0	0	0		0	0	0	0	0
2063	0	0	0	0		0	0	0	0	0
2064	0	0	0	0		0	0	0	0	0
NOMINAL	0	0	199,240	199,240		8,873	52,436	0	61,309	137,931
NPV	0	0	67,202	67,202		3,139	19,240	0	22,379	44,823

Utility Discount Rate = 6.83%
Benefit Cost Ratio = 3.003

PROGRAM:	Standby Generation DR		SBG					
Total Resource Cost (TRC) Test								
	BENEFITS				**COSTS**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	TOTAL	AVOIDED	AVOIDED		UTILITY			
	FUEL & O&M	T&D CAP.	GEN. CAP.	**TOTAL**	PROGRAM	PARTICIPANT'S	**TOTAL**	**NET**
	SAVINGS	COSTS	COSTS	**BENEFITS**	COSTS	COST	**COSTS**	**BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	0	0	0	39	0	39	-39
2026	0	0	0	0	54	0	54	-54
2027	0	0	0	0	90	0	90	-90
2028	0	0	0	0	114	0	114	-114
2029	0	0	2,899	2,899	139	0	139	2,760
2030	0	0	3,676	3,676	177	0	177	3,499
2031	0	0	4,450	4,450	209	0	209	4,242
2032	0	0	4,812	4,812	254	0	254	4,558
2033	0	0	5,660	5,660	293	0	293	5,366
2034	0	0	7,604	7,604	334	0	334	7,269
2035	0	0	7,674	7,674	277	0	277	7,397
2036	0	0	7,746	7,746	284	0	284	7,462
2037	0	0	7,819	7,819	291	0	291	7,528
2038	0	0	7,894	7,894	298	0	298	7,596
2039	0	0	7,970	7,970	306	0	306	7,664
2040	0	0	8,047	8,047	313	0	313	7,734
2041	0	0	8,126	8,126	321	0	321	7,805
2042	0	0	8,206	8,206	329	0	329	7,877
2043	0	0	8,288	8,288	338	0	338	7,950
2044	0	0	8,371	8,371	346	0	346	8,025
2045	0	0	8,456	8,456	355	0	355	8,101
2046	0	0	8,542	8,542	364	0	364	8,178
2047	0	0	8,630	8,630	373	0	373	8,257
2048	0	0	8,719	8,719	382	0	382	8,337
2049	0	0	8,810	8,810	391	0	391	8,419
2050	0	0	8,346	8,346	376	0	376	7,970
2051	0	0	7,871	7,871	360	0	360	7,511
2052	0	0	7,101	7,101	329	0	329	6,772
2053	0	0	6,314	6,314	297	0	297	6,017
2054	0	0	5,510	5,510	263	0	263	5,247
2055	0	0	4,542	4,542	220	0	220	4,322
2056	0	0	3,553	3,553	175	0	175	3,379
2057	0	0	2,394	2,394	119	0	119	2,274
2058	0	0	1,209	1,209	61	0	61	1,148
2059	0	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
NOMINAL	0	0	199,240	199,240	8,873	0	8,873	190,367
NPV	0	0	67,202	67,202	3,139	0	3,139	64,063

Utility Discount Rate = 6.83%

Benefit Cost Ratio = 21.412

PROGRAM:	**Standby Generation DR**				**SBG**		
				Participant Test			
		BENEFITS				**COSTS**	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SAVINGS IN		OTHER				
	PARTICIPANT'S	INCENTIVE	PARTICIPANT'S	TOTAL	PARTICIPANT'S	TOTAL	NET
	BILL	PAYMENTS	BENEFITS	BENEFITS	COST	COSTS	BENEFITS
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2025	0	131	0	131	0	0	131
2026	0	262	0	262	0	0	262
2027	0	459	0	459	0	0	459
2028	0	655	0	655	0	0	655
2029	0	852	0	852	0	0	852
2030	0	1,081	0	1,081	0	0	1,081
2031	0	1,311	0	1,311	0	0	1,311
2032	0	1,573	0	1,573	0	0	1,573
2033	0	1,835	0	1,835	0	0	1,835
2034	0	2,097	0	2,097	0	0	2,097
2035	0	2,097	0	2,097	0	0	2,097
2036	0	2,097	0	2,097	0	0	2,097
2037	0	2,097	0	2,097	0	0	2,097
2038	0	2,097	0	2,097	0	0	2,097
2039	0	2,097	0	2,097	0	0	2,097
2040	0	2,097	0	2,097	0	0	2,097
2041	0	2,097	0	2,097	0	0	2,097
2042	0	2,097	0	2,097	0	0	2,097
2043	0	2,097	0	2,097	0	0	2,097
2044	0	2,097	0	2,097	0	0	2,097
2045	0	2,097	0	2,097	0	0	2,097
2046	0	2,097	0	2,097	0	0	2,097
2047	0	2,097	0	2,097	0	0	2,097
2048	0	2,097	0	2,097	0	0	2,097
2049	0	2,097	0	2,097	0	0	2,097
2050	0	1,966	0	1,966	0	0	1,966
2051	0	1,835	0	1,835	0	0	1,835
2052	0	1,639	0	1,639	0	0	1,639
2053	0	1,442	0	1,442	0	0	1,442
2054	0	1,245	0	1,245	0	0	1,245
2055	0	1,016	0	1,016	0	0	1,016
2056	0	787	0	787	0	0	787
2057	0	524	0	524	0	0	524
2058	0	262	0	262	0	0	262
2059	0	0	0	0	0	0	0
2060	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0
NOMINAL	0	52,436	0	52,436	0	0	52,436
NPV	0	19,240	0	19,240	0	0	19,240

Utility Discount Rate = 6.83%
Benefit Cost Ratio: 9999

DUKE ENERGY FLORIDA'S
COST-EFFECTIVENESS TESTS FOR ALL DSM PROGRAMS
IN RIM PORTFOLIO

Residential Incentive Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$366,600,652	$221,003,445	$145,597,208	1.66
Participant	$206,449,246	$75,878,734	$130,570,512	2.72
Total Resource Cost	$366,600,652	$90,432,933	$276,167,719	4.05

Smart $aver Better Business Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$103,079,064	$60,004,416	$43,074,648	1.72
Participant	$49,595,225	$36,811,802	$12,783,423	1.35
Total Resource Cost	$103,079,064	$47,220,993	$55,858,071	2.18

Residential Load Management Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$101,654,332	$55,884,408	$45,769,925	1.82
Participant	$17,428,322	$0	$17,428,322	9999
Total Resource Cost	$101,654,332	$38,456,086	$63,198,246	2.64

Interruptible Services Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$21,235,988	$15,345,339	$5,890,649	1.38
Participant	$14,045,051	$0	$14,045,051	9999
Total Resource Cost	$21,235,988	$1,300,288	$19,935,700	16.33

Curtailable Services Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$3,370,558	$1,558,491	$1,812,068	2.16
Participant	$1,462,519	$0	$1,462,519	9999
Total Resource Cost	$3,370,558	$95,972	$3,274,587	35.12

Standby Generation Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$67,201,940	$22,378,727	$44,823,212	3.00
Participant	$19,240,156	$0	$19,240,156	9999.00
Total Resource Cost	$67,201,940	$3,138,571	$64,063,369	21.41

DUKE ENERGY FLORIDA'S
COST-EFFECTIVENESS TESTS FOR ALL DSM PROGRAMS
IN TRC PORTFOLIO

Residential Incentive Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$1,193,781,719	$655,437,228	$538,344,491	1.82
Participant	$634,379,530	$234,677,022	$399,702,508	2.70
Total Resource Cost	$1,193,781,719	$255,734,719	$938,047,000	4.67

Smart $aver Better Business Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$273,459,792	$196,965,099	$76,494,693	1.39
Participant	$187,239,274	$97,734,689	$89,504,585	1.92
Total Resource Cost	$273,459,792	$107,460,514	$165,999,278	2.54

Residential Load Management Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$101,654,332	$55,884,408	$45,769,925	1.82
Participant	$17,428,322	$0	$17,428,322	9999
Total Resource Cost	$101,654,332	$38,456,086	$63,198,246	2.64

Interruptible Services Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$21,235,988	$15,345,339	$5,890,649	1.38
Participant	$14,045,051	$0	$14,045,051	9999
Total Resource Cost	$21,235,988	$1,300,288	$19,935,700	16.33

Curtailable Services Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$3,370,558	$1,558,491	$1,812,068	2.16
Participant	$1,462,519	$0	$1,462,519	9999
Total Resource Cost	$3,370,558	$95,972	$3,274,587	35.12

Standby Generation Program:

Cost Effectiveness Tests				
Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$67,201,940	$22,378,727	$44,823,212	3.00
Participant	$19,240,156	$0	$19,240,156	9999.00
Total Resource Cost	$67,201,940	$3,138,571	$64,063,369	21.41