Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL

April 22, 2020

VIA ELECTRONIC FILING

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

Re: *Duke Energy Florida, LLC's Petition for Approval of Proposed Demand-Side Management Plan;* Docket No. 20200054-EG

Dear Mr. Teitzman:

Enclosed for filing in the above-referenced Docket is Revised Attachment A of the Demand-Side Management Program Plan. DEF originally submitted two tables under the LIWAP Program which contained errors that DEF has corrected in the Revised Attachment A. The two corrected tables can be found on page 23.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Sincerely,

/s/ Matthew R. Bernier

Matthew R. Bernier

MRB/cmw
Enclosure

cc: James W. Brew
Charles Murphy
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Attachment A

REVISED

2020 – 2024

DEMAND SIDE MANAGEMENT

PROGRAM PLAN

TABLE OF CONTENTS

I. PROGRAM OVERVIEW

In accordance with Rule 25-17.0021(4), Florida Administrative Code, Duke Energy Florida (DEF) is submitting this Demand Side Management (DSM) Plan to the Florida Public Service Commission (FPSC or Commission) for approval. DEF's proposed plan is designed to meet the demand side management goals for 2020-2024 established by the Commission in Order No. PSC-2019-0509-FOF-EG. Through this collection of programs and measures, DEF will continue to offer meaningful energy saving opportunities to customers. The cost-effective programs presented in this plan are responsive to the Commission's directive to promote education and awareness of energy saving measures to all customer groups.

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

Over the five-year period, DEF expects to educate and empower approximately 125,000 residential customers to become more efficient through its Home Energy Check program. This program will inform customers about low-cost and short-payback measures as well as behavioral modifications that can provide energy savings. DEF also plans to provide energy saving information to approximately 2,000 commercial customers over the next five-year period through its Business Energy Check program.

DEF will continue to provide information about energy efficiency techniques and energy efficiency measures to low income customers through the Neighborhood Energy Saver (NES) and the Low Income Weatherization Assistance Program (LIWAP). Along with direct installation of a number of energy conservation measures in customer homes, these programs will also provide one-on-one education about behavioral changes that can assist customers control their energy usage. The Plan includes increased savings opportunities for low income customers through an increase in the number of targeted homes in the NES program, from 4500 to 5000 annually, and the addition of incentives for high efficiency heat pumps coupled with load management for low income new construction projects through the LIWAP.

The measures included in each of these programs reflect the impacts of changes to codes and standards and the projected energy and demand savings for the measures are based on the results of the technical potential study that supported DEF's proposed goals in Docket 20190018-EI.

II. PROGRAM SUMMARY

DEF has developed a comprehensive portfolio of DSM programs designed to achieve the goals established in Order No. PSC-2019-0509-FOF-EG. DEF's proposed plan includes a combination of demand response and energy efficiency programs designed to meet both the residential and commercial goals.

A. Residential Programs

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

TABLE 1

Residential Market Sector Demand and Energy Data (at the Generator)									
Year	Projected Summer Demand Savings (MW)		Commission Approved Summer MW Goal (Cumulative)	Projected Winter Demand Savings (MW)		Commission Approved Winter MW Goal (Cumulative)	Projected Annual Energy Savings (GWH)		Commission Approved Annual GMH Goal (Cumulative)
	Incremental	Cumulative		Incremental	Cumulative		Incremental	Cumulative	
2020	22.4	22.4	15.5	34.1	34.1	32.2	56.6	56.6	9.3
2021	20.9	43.3	29.2	31.8	66.0	60.0	53.0	109.6	15.5
2022	20.6	63.9	41.4	31.4	97.4	84.5	52.4	162.0	19.3
2023	20.4	84.2	52.7	31.1	128.5	106.8	51.8	213.8	21.5
2024	20.1	104.3	63.4	30.7	159.2	127.7	51.2	265.0	22.7

The following provides an overview of each Residential Program:

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

Residential Incentive Program – This program will provide incentives on a variety of cost-effective measures designed to provide energy savings. This program will primarily be comprised of measures that target heating and cooling load such as high efficiency heat pumps, duct repair, insulation, energy efficient windows, and home energy management systems.

Neighborhood Energy Saver – This program is designed to provide energy saving education and assistance to low income customers. DEF will utilize U.S. census block data to identify target neighborhoods with average incomes below 200% of the federal poverty guidelines. DEF plans to increase the number of targeted homes from 4,500 to 5,000 annually. In addition to direct installation of energy saving measures, a primary focus of this program will be to provide information and education about energy efficiency

including information about savings that can be achieved through behavioral changes and low cost/no cost measures. DEF also plans to continue to provide high impact measures such as ceiling insulation and duct repair through this program. This program is cost-effective under the Rate Impact Measure (RIM) test and is expected to contribute significant savings toward achieving the established goals.

Low Income Weatherization Assistance Program – DEF plans to continue to partner with local weatherization agencies and other types of organizations that provide assistance to low income communities through this program. This program will provide information and education about energy efficiency, as well as funding for installation of weatherization measures and high efficiency appliances. Additions to this program include a new construction high-efficiency heat pump measure coupled with participation in DEF's residential demand response program. This program is also projected to be cost effective under the Rate Impact Measure (RIM) test.

Residential Load Management – DEF will continue to support this residential demand response program. Currently, approximately 440,000 of DEFs residential customers already participate in this program, providing 711 MWs of winter and 396 MWs of summer load control. DEF's Plan assumes the addition of 2500 new participants annually from 2020 through 2024, which is expected to provide an additional 25 winter MWs and an additional 17 summer MWs of load control.

B. Commercial Programs

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

TABLE 2

Year	Projected Summer Demand Savings (MW)		Commission Approved Summer MW Goal (Cumulative)	Projected Winter Demand Savings (MW)		Commission Approved Winter MW Goal (Cumulative)	Projected Annual Energy Savings (GWH)		Commission Approved Annual GMH Goal (Cumulative)
	Incremental	Cumulative		Incremental	Cumulative		Incremental	Cumulative	
2020	68.4	68.4	8.2	68.8	68.8	5.2	9.2	9.2	5.9
2021	9.6	78.0	15.1	9.9	78.7	10.0	8.8	18.0	9.8
2022	8.2	86.2	21.1	7.8	86.5	14.7	8.5	26.5	12.2
2023	8.4	94.5	26.7	7.6	94.0	19.7	8.1	34.6	13.6
2024	10.2	104.7	31.7	9.1	103.1	24.3	7.8	42.4	14.4

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

Business Energy Check – This program is available to all commercial customers and will provide education and information about energy savings opportunities specific to their business and operation. This program will also inform customers about rebates and incentives available through DEF's commercial energy efficiency and load management programs. DEF currently provides walk-through audits and phone assisted audits for commercial businesses through this program and is planning to add online audits in the future.

Better Business – This program provides incentives to commercial customers on a variety of high efficiency cost-effective measures that provide energy savings in excess of the requirements of codes and standards. The measures included in this program primarily target commercial cooling load through high efficiency chillers and direct expansion air conditioning systems.

Smart $aver Custom Incentive – This program provides customized incentives for specific innovative projects that provide energy savings not otherwise addressed through DEF's other commercial programs. This program is intended to encourage commercial customers to make capital investments for the installation of energy efficiency measures

that reduce energy and peak demand.

C. Demand Response Programs

Interruptible Service – This program will continue to be available to non-residential customers who are willing to have their power interrupted at times of capacity shortage during peak or emergency conditions. This program provides peak demand savings through direct load control of the customer's service. Customers will be eligible for bill credits through this program based on the specific eligibility requirements and terms of the applicable interruptible tariff. DEF currently has 350 MW's of load control through this program and projects to add approximately 72 MW's over the next five-year period.

Curtailable Service - This is an indirect load control program that will continue to be available to commercial customers who agree to reduce demand at times of capacity shortage during peak of emergency conditions. Program participants will receive monthly demand credits per the terms of the specific curtailable tariff under which they take service.

Standby Generation - This program is a load control program that provides demand savings through control of customers' back-up generators. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to allow remote activation of their on-site generation during capacity emergencies. The customers receive monthly bill credits per the terms of the specific stand-by tariff under which they take service.

D. Technology Development – This program is used to fund the research and testing of new energy efficiency and demand response equipment and technologies. The results of these studies are used to inform and support the development of new energy efficiency and demand response programs.

E. Qualifying Facilities – This program is used to manage the purchase of as-available energy and firm energy and capacity from qualifying facilities pursuant to standard offer

and negotiated contracts. Under this program DEF develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.

III. SUMMARY OF PORTFOLIO COSTS AND PROJECTED CUSTOMER BILL IMPACTS

The total costs of the portfolio over the five-year period are projected to be approximately $527 million. All programs are designed to be cost effective based on the Rate Impact Measure (RIM) test. Approximately 70% of the total costs over the five-year period represent incentives to customers. The cost of the low income programs makes up approximately 6% of the total overall costs, while providing approximately 32% of the total energy savings. Table 3 depicts the total projected cost of the commercial and residential portfolio and the projected residential rate impact/1200 kWh's annually for the five-year period. The decreases in annual costs and customer rates beginning in 2022 are driven by assumed decreases in billing credits for the commercial load management programs upon expiration of the term of the 2017 Settlement Agreement.

TABLE 3

	Total	2020	2021	2022	2023	2024
Total Costs - $ Millions	$ 526.8	117.3	117.1	96.8	97.4	98.2
Residential Rate - $/1200 kwh's		$ 3.93	$ 3.89	$ 3.20	$ 3.19	$ 3.21

IV. COST-EFFECTIVENESS TESTS

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

V. COST-RECOVERY

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

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

VI. RESIDENTIAL CONSERVATION PROGRAMS

A. HOME ENERGY CHECK PROGRAM

Program Start Date: 1995

Program Description

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

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

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

Policies and Procedures

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

Program Participation

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

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	1,647,440	1,647,440	25,000	1.52%	1.52%
2021	1,673,995	1,648,995	25,000	3.03%	1.52%
2022	1,700,215	1,675,215	25,000	4.48%	1.49%
2023	1,726,425	1,701,425	25,000	5.88%	1.47%
2024	1,752,362	1,727,362	25,000	7.24%	1.45%

1. The total number of customers is the forecast of residential customers in DEF's 2019 Ten Year Site Plan.
2. The entire residential class is eligible for participation.
3. Number of participants represents the customers that DEF expects to participate through this program annually.
4. Cumulative penetration is the ratio of cumulative measure participating customers to the eligible customer pool.

Savings Estimates

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

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	784	0.30	0.18	19,587,523	7,515	4,571
2021	784	0.30	0.18	19,587,523	7,515	4,571
2022	784	0.30	0.18	19,587,523	7,515	4,571
2023	784	0.30	0.18	19,587,523	7,515	4,571
2024	784	0.30	0.18	19,587,523	7,515	4,571
TOTAL				97,937,613	37,576	22,856

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	829	0.32	0.19	20,733,805	7,955	4,839
2021	829	0.32	0.19	20,733,805	7,955	4,839
2022	829	0.32	0.19	20,733,805	7,955	4,839
2023	829	0.32	0.19	20,733,805	7,955	4,839
2024	829	0.32	0.19	20,733,805	7,955	4,839
TOTAL				103,669,027	39,775	24,194

Impact Evaluation Plan

The individual measure impacts are based on the most recent market potential study that supported the 2019 goals filing. These estimates are based on analysis of engineering simulations, statistical billing analysis, and end use studies, and include the consideration of the interactive effects of multiple measures. DEF will monitor how future changes to building codes and appliance standards impact the cost effectiveness of measures included in this program.

B. RESIDENTIAL INCENTIVE PROGRAM

Program Start Date: **1995**

Program modified in 2000, 2006, 2007, 2012, and 2015

Program Description

The Residential Incentive Program is designed to provide incentives to residential customers for energy efficiency improvements for existing homes. The Residential Incentive Program builds on customer awareness through the Home Energy Check program, trade-ally support, and communication and marketing efforts designed to educate customers on cost-effective measures for their residences.

The program seeks to meet the following overall goals:

- Provide a cost-effective portfolio of measures.
- Provide customer energy savings and demand reduction through the installation of energy efficient equipment and building envelope upgrades.
- Educate the residential market regarding best practices, innovative technologies and opportunities for rebates for energy efficiency measures that provide savings above the requirements of codes and standards.

Policies and Procedures

Program participation is influenced through the home energy audits and other educational efforts. The program provides incentives for high efficiency heating and cooling equipment, duct repair, attic insulation upgrades, high performance windows, and home energy management systems for residentially metered customers in DEF's service territory.

DEF inspects the installation of measures and equipment as required by Rule 25-17.003(10) (b), Florida Administrative Code, prior to issuing any incentive payments.

The Residential Incentive Program will include the following measures:

High Efficiency HVAC Systems

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

Duct Repair

The Duct Repair measure promotes energy efficiency through incentives to customers for a portion of the costs of duct repairs and duct sealing.

Attic Insulation Upgrade

The Attic Insulation Upgrade measure provides an incentive to encourage customers to upgrade their attic insulation over conditioned space.

Replacement Windows

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

Home Energy Management System

DEF will offer an incentive for the installation and configuration of home energy management technologies.

Program Participation

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

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	1,647,440	1,647,440	17,350	1.05%	1.05%
2021	1,673,995	1,673,995	15,933	1.99%	0.95%
2022	1,700,215	1,700,215	15,136	2.85%	0.89%
2023	1,726,425	1,726,425	14,379	3.64%	0.83%
2024	1,752,362	1,752,362	13,660	4.36%	0.78%

1. The total number of customers is the forecast of residential customers in DEF's 2019 Ten Year Site Plan.
2. The entire residential class is eligible for participation in this program.
3. Number of program participants represents the number of individual measure participants.
4. Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the savings for each individual measure. The KW and KWH savings for each individual measure were based on the results of the market potential study that supported the 2019 goals filing. The KW and KWH savings were multiplied by the estimated participation for each measure to calculate the annual savings by measure. The annual program savings are based on the sum of the annual savings for each individual measure.

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	762	0.48	0.31	13,222,563	8,341	5,450
2021	677	0.42	0.28	10,781,635	6,771	4,397
2022	677	0.42	0.28	10,242,553	6,432	4,177
2023	677	0.42	0.28	9,730,425	6,111	3,968
2024	677	0.42	0.28	9,243,904	5,805	3,770
TOTAL				53,221,080	33,461	21,761

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	807	0.51	0.33	13,996,361	8,829	5,769
2021	716	0.45	0.29	11,412,588	7,167	4,654
2022	716	0.45	0.29	10,841,958	6,809	4,421
2023	716	0.45	0.29	10,299,860	6,468	4,200
2024	716	0.45	0.29	9,784,867	6,145	3,990
TOTAL				56,335,635	35,419	23,034

Impact Evaluation Plan

The Residential Incentive Program provides incentives for the installation of various types of measures. The individual measure impacts are based on the most recent market potential study that supported the 2019 goals filing. These estimates are based on analysis of engineering simulations, statistical billing analysis, and end use studies, and include the consideration of the interactive effects of multiple measures. DEF will monitor how future changes to building codes and appliance standards impact the cost effectiveness of measures included in this program.

Cost-Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$103,003	$102,837	$166	1.00
Participant	$94,337	$35,954	$58,383	2.62
Total Resource Cost	$103,003	$44,454	$58,549	2.32

C. NEIGHBORHOOD ENERGY SAVER PROGRAM

Program Start Date: 2007 and 2015

Program Description

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

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

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

Policies and Procedures:

DEF's Neighborhood Energy Saver program targets neighborhoods where approximately 50% of the households have incomes equal to or less than 200% of the poverty level established by the U.S. Government.

Incentive levels and specific eligibility requirements for each measure promoted in this program

will be presented in the Program Participation Standards.

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

- Energy Efficient Lighting
- Air Sealing-Infiltration Control
- Water Heater Insulation Wrap and Hot Water Pipe Insulation
- Water Conservation Shower Heads and Faucet Aerators
- HVAC filters
- Indoor Wall Thermometer
- Ceiling Insulation Upgrade
- HVAC Maintenance/ Tune up
- Duct Repair
- Smart Power Strips
- High Efficiency Heat Pumps
- High Efficiency Room Air Conditioners
- High Efficiency Central Air Conditioning

Program Participation

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

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	1,647,440	443,161	5,000	1.13%	1.13%
2021	1,673,995	450,305	5,000	2.22%	1.11%
2022	1,700,215	457,358	5,000	3.28%	1.09%
2023	1,726,425	464,408	5,000	4.31%	1.08%
2024	1,752,362	471,385	5,000	5.30%	1.06%

1. The total number of customers is the forecast of residential customers in DEF's 2019 Ten Year Site Plan.
2. Eligible customers represent the estimated homes in DEF's service territory that are at or below program qualifying income levels based on the 2010 US Census block data with a 2% growth rate per year.
3. Number of participants represents the customers that DEF expects to reach through direct offerings in each year.
4. Cumulative penetration is the ratio of cumulative participants to the remaining eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on the estimated KW and KWH savings and annual projected participation for each measure. The KW and KWH impacts for each measure are based on the results of the most recent market potential study that supported the 2019 goals filing. The total projected program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	3,540	1.91	1.31	17,700,669	9,542	6,536
2021	3,540	1.91	1.31	17,700,669	9,542	6,536
2022	3,540	1.91	1.31	17,700,669	9,542	6,536
2023	3,540	1.91	1.31	17,700,669	9,542	6,536
2024	3,540	1.91	1.31	17,700,669	9,542	6,536
TOTAL				88,503,346	47,711	32,682

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	3,747	2.02	1.38	18,736,531	10,101	6,919
2021	3,747	2.02	1.38	18,736,531	10,101	6,919
2022	3,747	2.02	1.38	18,736,531	10,101	6,919
2023	3,747	2.02	1.38	18,736,531	10,101	6,919
2024	3,747	2.02	1.38	18,736,531	10,101	6,919
TOTAL				93,682,657	50,504	34,595

Impact Evaluation Plan

The Neighborhood Energy Saver Program provides incentives for the installation of various types of measures. The individual measure impacts are based on the most recent market potential study that supported the 2019 goals filing. These estimates are based on analysis of engineering simulations, statistical billing analysis, and end use studies, and include the consideration of the interactive effects of multiple measures. DEF will monitor how future changes to building codes and appliance standards impact the cost effectiveness of measures included in this program.

Cost Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$138,063	$137,801	$262	1.00
Participant	$135,091	$32,578	$102,514	4.15
Total Resource Cost	$138,063	$35,287	$102,776	3.91

D. LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM

Program Start Date: 2000

Program modified in 2006, 2015, 2017 and 2018

Program Description

The Low Income Weatherization Assistance program is designed to leverage working relationships with weatherization providers and local agencies to provide demand-side management and energy efficiency measures to low income customers. The Low Income Weatherization Assistance program combines weatherization provider partnerships with energy education and energy efficiency improvements to benefit low-income families.

The program seeks to meet the following goals:

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

Policies and Procedures

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

The following measures will be included in this program:

- Energy Efficient Lighting
- Air Sealing-Infiltration Control
- Water Heater Insulation Wrap and Hot Water Pipe Insulation

- Water Conservation Shower Heads and Faucet Aerators
- HVAC filters
- Indoor Wall Thermometer
- Ceiling Insulation Upgrade
- HVAC Maintenance/ Tune up
- Duct Repair
- Smart Power Strips
- High Efficiency Heat Pumps
- High Efficiency Room Air Conditioners
- High Efficiency Central Air Conditioning
- High Efficiency Refrigerators
- High Efficiency Heat Pumps–New Construction coupled with residential load management

Program Participation

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

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	1,647,440	443,161	244	0.06%	0.06%
2021	1,673,995	450,305	244	0.11%	0.05%
2022	1,700,215	457,358	244	0.16%	0.05%
2023	1,726,425	464,408	244	0.21%	0.05%
2024	1,752,362	471,385	244	0.26%	0.05%

1. The total number of customers is the forecast of residential customers in DEF's 2019 Ten Year Site Plan.
2. Eligible customers represent the count of homes in DEF service territory that are at or below program qualifying income levels based on the 2010 US Census block data with a 2% growth rate per year.
3. Number of participants represents the eligible customers that DEF expects to reach via partnership local agencies
4. Cumulative penetration is the ratio of cumulative participants to the accumulated eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual

measure based on the estimated KW and KWH savings measure and annual projected participation for each measure. The KW and KWH impacts for each measure are based on the results of the most recent market potential study that supported the 2019 goals filing. The total projected program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	7,447	4.59	3.06	1,818,148	1,121	747
2021	3,802	2.23	1.46	928,248	544	357
2022	3,802	2.23	1.46	928,248	544	357
2023	3,802	2.23	1.46	928,248	544	357
2024	3,802	2.23	1.46	928,248	544	357

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	7,883	4.86	3.24	1,924,548	1,186	791
2021	4,025	2.36	1.55	982,570	576	377
2022	4,025	2.36	1.55	982,570	576	377
2023	4,025	2.36	1.55	982,570	576	377
2024	4,025	2.36	1.55	982,570	576	377

Impact Evaluation Plan

This program provides incentives for the installation of various types of measures. The individual measure impacts are based on the most recent market potential study that supported the 2019 goals filing. These estimates are based on analysis of engineering simulations and statistical billing analysis and include the consideration of the interactive effects of multiple measures. The program measures and measure impacts will be modified consistent with future changes to codes and standards.

Cost-Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$9,705	$9,668	$37	1.00
Participant	$9,273	$2,228	$7,045	4.16
Total Resource Cost	$9,705	$2,623	$7,082	3.70

E. RESIDENTIAL LOAD MANAGEMENT PROGRAM`

Program Start Date: 1981

Program Modified in 1995, 2000, 2007 and 2015

Program Description

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

Policies and Procedures: DEF will continue to offer this program to residential customers. Customers will have to the opportunity to participate in this program through either the Residential Year-Round Energy Management (RSL-1) or the Winter Only (RSL-2) Rate Schedules. The addition of new customers to this program will increase the summer and winter load control capabilities.

This program has grown to be one of the largest direct load control programs in the nation today. DEF will continue to incorporate improvements in technologies and the associated communication networks designed to decrease program costs, increase load shed capabilities, manage sustainability, and improve resource operability.

Program Participation

Annual program new participation estimates for 2020 through 2024 are shown in the table below:

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	1,647,440	1,208,538	2,500	0.21%	0.21%
2021	1,673,995	1,232,593	2,500	0.41%	0.20%
2022	1,700,215	1,256,313	2,500	0.60%	0.20%
2023	1,726,425	1,280,023	2,500	0.78%	0.20%
2024	1,752,362	1,303,460	2,500	0.96%	0.19%

1. The total number of customers is based on DEF's 2019 Ten Year Site Plan projections.
2. Estimate of the eligible customers are based on customers that are not presently on Energy Management and have electric heat.
3. New participants of winter only or year-round Energy Management Schedule.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

Savings Estimates

The total program savings shown in the following tables reflect the expected average demand savings associated with new program participants. The per participant savings are based on the data and analysis that supported the 2019 goals filing.

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	1.92	1.35	0	4,800	3,370
2021	0	1.92	1.35	0	4,800	3,370
2022	0	1.92	1.35	0	4,800	3,370
2023	0	1.92	1.35	0	4,800	3,370
2024	0	1.92	1.35	0	4,800	3,370
TOTAL				0	24,000	16,850

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	2.03	1.43	0	5,081	3,567
2021	0	2.03	1.43	0	5,081	3,567
2022	0	2.03	1.43	0	5,081	3,567
2023	0	2.03	1.43	0	5,081	3,567
2024	0	2.03	1.43	0	5,081	3,567
TOTAL				0	25,405	17,836

Impact Evaluation Plan

Appliance level and duty-cycle impacts of the residential load control program may be evaluated in a number of ways including analysis of metering data, engineering analysis, analysis of the impacts of load control events, and end use studies.

Cost-Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$38,752	$19,183	$19,569	2.02
Participant	$9,030	$0	$9,030	9999
Total Resource Cost	$38,752	$10,153	$28,599	3.82

VII. COMMERCIAL/INDUSTRIAL AND DEMAND RESPONSE CONSERVATION PROGRAMS

A. BUSINESS ENERGY CHECK PROGRAM

Program Start Date: 1995

Program Description

The Business Energy Check Program is an energy audit/education program offered to commercial customers to assist customers in understanding their energy use and provide information and recommendations on how they can better manage their energy usage make their operations more energy efficient. The audit focuses on educating and encouraging customers to implement energy-saving practices and measures. The audit also provides the opportunity to promote cost-effective measures in customers' facilities and serves as the foundation for other commercial energy efficiency and demand side management programs.

The Business Energy Check provides education brochures to commercial customers while also providing free walk-through and phone-assisted audits. DEF is also working to develop an online audit tool for commercial customers.

Policies and Procedures

All commercial, industrial, and governmental customers are eligible to receive any of the above-mentioned audits on commercially metered buildings located in DEF's service territory. DEF may engage external agencies and/or companies as an extension of internal resources. The specific details and procedures for each type of audit or educational information provided through this program will be presented in the Program Participation Standards.

Customers participating in these audits will be provided with examples of energy saving measures that can be easily installed and behavioral changes that may reduce energy consumption. The program promotes continued customer involvement by demonstrating sustainable and measurable reduction in energy consumption through the implementation of low-cost energy conservation measures.

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

Program Participation

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

Year	Total Number of Customers [1]	Total Number of Measure Eligible Customers [2]	Annual Number of Program Measure Participants [3]	Cumulative Penetration Level (%) [4]	Annual Participation Level (%)
2020	178,557	178,557	400	0.22%	0.22%
2021	181,015	180,615	400	0.44%	0.22%
2022	183,346	183,346	400	0.65%	0.22%
2023	185,608	185,608	400	0.86%	0.22%
2024	187,771	187,771	400	1.07%	0.21%

1. The total number of customers is the forecast of commercial/industrial (C/I) customers in DEF's 2019 Ten Year Site Plan.
2. The measure eligible customers are the total C/I customers less customers who have participated in the two prior years.
3. Number of program participants represents the participants projected.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

Savings Estimates

Program savings are based on measures included in the energy efficiency kits provided to program participants. Program savings were computed as the sum of the individual measure savings, and are shown in the following tables:

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	690	0.06	0.12	276,159	23	50
2021	690	0.06	0.12	276,159	23	50
2022	690	0.06	0.12	276,159	23	50
2023	690	0.06	0.12	276,159	23	50
2024	690	0.06	0.12	276,159	23	50
TOTAL				1,380,794	117	248

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	731	0.06	0.13	292,320	25	52
2021	731	0.06	0.13	292,320	25	52
2022	731	0.06	0.13	292,320	25	52
2023	731	0.06	0.13	292,320	25	52
2024	731	0.06	0.13	292,320	25	52
TOTAL				1,461,600	124	262

Impact Evaluation Plan

The demand and energy savings for the measures included in the commercial energy kits were based on the results of the most recent market potential study. These impacts included in this study were estimated based on engineering analysis and analysis of billing data and considered the interactive effects of measures. Savings will also result from the implementation of both technological and behavioral recommendations provided as part of the commercial audit and educational information provided to program participants.

B. BETTER BUSINESS PROGRAM

Program Start Date: 1995

Program modified 2000, 2005, 2006, 2007, 2015, 2016 and 2018

Program Description

The Better Business program is designed to promote high efficiency measures and equipment to Commercial, Industrial, and Governmental customers. All business customers are eligible for this program. The Better Business program builds on customer awareness generated through the commercial audit program, educational materials provided to customers, and trade allies.

The program seeks to meet the following overall goals:

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

Policies and Procedures

The general eligibility requirements are as follows:

- The facility must be a commercially metered customer in DEF's service territory, including commercially metered multi-family residential facilities.
- DEF inspects the installation of measures and equipment as required by Rule 25-17.003(10) (b), Florida Administrative Code.
- Incentive levels and specific eligibility requirements for each measure promoted in this program will be provided in the Program Participation Standards.

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

HVAC Equipment

This program will promote HVAC load reduction measures. DEF will provide information to customers about high efficiency HVAC measures and will provide incentives for the purchase of cost effective high efficiency equipment including unitary heat pumps and air conditioners, package terminal heat pumps, package terminal air conditioners, water-cooled chillers and air-cooled chillers, and energy recovery ventilation units.

Duct Leakage Test and Repair/Duct Seal

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

Ceiling Insulation Upgrade

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

Wall Insulation

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

Program Participation

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

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)	Annual Participation Level (%)
2020	178,557	178,557	2,589	1.45%	1.45%
2021	181,015	181,015	2,459	2.79%	1.36%
2022	183,346	183,346	2,336	4.03%	1.27%
2023	185,608	185,608	2,219	5.17%	1.20%
2024	187,771	187,771	2,109	6.24%	1.12%

1) The total of customers in the forecast of Commercial/Industrial customers in DEF's 2019 Ten Year Site Plan.
2) All Commercial, Industrial and Governmental rate classes are eligible to participate.
3) Number of Program Measure Participants represents the participants projected.
4) Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

Savings Estimates

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

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	2787	1.11	0.61	7,213,765	2,885	1,569
2021	2787	1.11	0.61	6,853,076	2,740	1,491
2022	2787	1.24	0.73	6,510,423	2,903	1,716
2023	2787	1.11	0.61	6,184,901	2,473	1,346
2024	2787	1.26	0.75	5,875,656	2,650	1,578
TOTAL				32,637,822	13,651	7,700

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	2950	1.18	0.64	7,635,922	3,053	1,661
2021	2950	1.18	0.64	7,254,126	2,901	1,578
2022	2950	1.32	0.78	6,891,420	3,073	1,817
2023	2950	1.18	0.64	6,546,849	2,618	1,424
2024	2950	1.33	0.79	6,219,506	2,805	1,671
TOTAL				34,547,822	14,450	8,151

Impact Evaluation Plan

The Better Business Program provides incentives for the installation of various types of measures. The individual measure impacts are based on the most recent market potential study that supported the 2019 goals filing. These estimates are based on analysis of engineering simulations, statistical billing analysis, and end use studies, and include the consideration of the interactive effects of multiple measures. DEF will monitor how future changes to building codes and appliance standards impact the cost effectiveness of measures included in this program.

Cost-effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$40,886	$40,775	$111	1.00
Participant	$35,902	$14,529	$21,373	2.47
Total Resource Cost	$40,886	$19,402	$21,484	2.11

C. SMART $AVER CUSTOM INCENTIVE PROGRAM

Program Start Date: 1992
Program modified in 1995 and 2016

Program Description

The objective of the Smart $aver Custom Incentive Program (f/k/a Florida Custom Incentive Program) is to encourage customers to make capital investments for installation of high efficiency technologies not covered by DEF's other commercial programs. Projects may include, but are not limited to, high efficiency equipment and machinery, whole-building construction or renovation projects, and other technologies specific to a particular industry or business process.

Policies and Procedures

The timeline for a project in this program varies depending on the project. The program process steps include application, data collection, analysis of data, monitoring, inspection, and incentives to the customer.

Program eligibility requirements to qualify for participation are as follows:

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

Specific eligibility requirements for this program will be presented in the Program Participation Standards.

DEF will perform a cost-effectiveness analysis for each project being considered under the program, using the Commission-approved cost-effectiveness tests described in Rule 25-17.008, Florida Administrative Code. Only projects that pass both the Participant Cost Test (PCT) and the Rate Impact Measure (RIM) test will be considered for incentives. Incentives will not exceed

50% of the total project cost or reduce the payback to less than two years. The maximum incentive for a single project is $500,000. Incentives may be paid in stages based on comparative performance metrics when there is uncertainty around the demand and energy reductions that will be achieved. Fifty percent (50%) of the approved incentive will be paid upon initial installation. The remaining incentive will be paid post-installation upon confirmation of the achieved impacts.

Program Participation

Annual participation estimates for the Smart $aver Custom Incentive program are shown in the following table.

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)	Annual Participation Level (%)
2020	178,557	178,557	200	0.11%	0.11%
2021	181,015	181,015	190	0.22%	0.10%
2022	183,346	183,346	181	0.31%	0.10%
2023	185,608	185,608	172	0.40%	0.09%
2024	187,771	187,771	163	0.48%	0.09%

1. The total number of customers is the forecast of Commercial/Industrial customers in DEF's 2019 Ten Year Site Plan.
2. All commercial, industrial and governmental rate classes are eligible to participate.
3. The number of program participants represents the participants projected.
4. Cumulative penetration is the ratio of cumulative measure participating customers to the eligible customer pool.

Savings Estimates

Program savings will be calculated based on evaluation of the demand and energy savings for each individual project. DEF will inspect installations to verify operability of the technology and/or to obtain information needed to calculate the approved custom incentive amount. Annual saving estimates for the Smart $aver Custom Incentive program are shown in the following tables:

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	6,032	0.00	2.50	1,206,309	0	500
2021	6,349	0.00	2.63	1,206,309	0	500
2022	6,665	0.00	2.76	1,206,309	0	500
2023	7,013	0.00	2.91	1,206,309	0	500
2024	7,401	0.00	3.07	1,206,309	0	500
TOTAL				6,031,547	0	2,500

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	6,385	0.00	2.65	1,276,904	0	529
2021	6,721	0.00	2.79	1,276,904	0	529
2022	7,055	0.00	2.92	1,276,904	0	529
2023	7,424	0.00	3.08	1,276,904	0	529
2024	7,834	0.00	3.25	1,276,904	0	529
TOTAL				6,384,520	0	2,646

Impact Evaluation Plan

DEF will inspect installations to verify operability of the technology and to obtain information needed to determine the achieved project savings. Project savings will be verified through engineering and billing analysis based on customer-specific site performance and usage data.

Cost-effectiveness

Each individual project will be analyzed for cost-effectiveness at the time of project submittal to DEF, using the Commission-approved tests. Total program cost effectiveness will be determined based on the combined demand and energy savings of the individual projects.

D. STANDBY GENERATION PROGRAM

Program Start Date: 1993
Program modified in 1995 and 2007

Program Description

The Stand-by Generation program is a demand control program that utilizes customer sited equipment to reduce DEF's system demand. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to utilize their equipment to reduce DEF system demand when deemed necessary. The program is offered through DEF's Stand-By Generation tariffs.

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

The Stand-by Generation program participants receive a monthly bill credit based on the terms of the applicable tariff and the demonstrated capacity and kwh's produced by the customer's equipment. Bill credits are determined based on the provisions of the applicable Stand-By Generation tariffs.

Policies and Procedures

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

- Customer must be eligible for service under DEF's commercial rate schedules.
- Customer must have standby generation that will reduce utility system demand at the request of DEF.
- Customer's Standby Generation Capacity calculation must be at least 50 KW.

- Customer must be within the range of DEF's load management system.

Program Participation

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

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)	Annual Participation Level (%)
2020	178,557	178,557	10	0.01%	0.01%
2021	181,015	181,005	10	0.01%	0.01%
2022	183,346	183,326	15	0.02%	0.01%
2023	185,608	185,573	15	0.03%	0.01%
2024	187,771	187,721	15	0.03%	0.01%

1. Total Number of Customers is based on DEF's 2019 Ten Year Site Plan projections.
2. Eligible Customers is based upon tariff GSLM-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers.
4. Cumulative penetration is the ratio of cumulative measure participants to the eligible customer pool.

Savings Estimates

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

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	160.00	200.00	0	1,600	2,000
2021	0	160.00	200.00	0	1,600	2,000
2022	0	160.00	200.00	0	2,400	3,000
2023	0	160.00	200.00	0	2,400	3,000
2024	0	160.00	200.00	0	2,400	3,000
TOTAL				0	10,400	13,000

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	169.36	211.70	0	1,694	2,117
2021	0	169.36	211.70	0	1,694	2,117
2022	0	169.36	211.70	0	2,540	3,176
2023	0	169.36	211.70	0	2,540	3,176
2024	0	169.36	211.70	0	2,540	3,176
TOTAL				0	11,009	13,761

Impact Evaluation Plan

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

Cost-effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$22,067	$4,634	$17,433	4.76
Participant	$4,000	$0	$4,000	9999.00
Total Resource Cost	$22,067	$634	$21,433	34.81

E. INTERRUPTIBLE SERVICE PROGRAM

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

Program Description

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

Policies and Procedures

The program is available to non-residential customers throughout the DEF's entire service territory who are willing to have their service interrupted. The program is currently provided to customers through various tariffs. The specific eligibility requirements, bill credits amounts, and operational provisions are as defined in the specific tariffs. These tariffs are designed to support system operations and reliability. The provisions of these tariffs may be modified as appropriate to ensure that the program remains cost effective and provides system benefits. The IS-1 and IST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto those rates.

Under this program, DEF will have the ability to interrupt service to the customer. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit per the provisions of the applicable tariff.

Program Participation

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

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)	Annual Participation Level (%)
2020	178,557	697	16	2.30%	2.30%
2021	181,015	681	10	3.82%	1.47%
2022	183,346	671	4	4.47%	0.60%
2023	185,608	667	6	5.40%	0.90%
2024	187,771	661	8	6.66%	1.21%

1. Total Number of Customers is based on DEF's 2019 ten Year Site Plan projections.
2. Eligible Customers is based upon tariff IS-2 and IST-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers.
4. Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

Savings Estimates

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

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	3750.00	3750.00	0	60,000	60,000
2021	0	500.00	500.00	0	5,000	5,000
2022	0	375.00	500.00	0	1,500	2,000
2023	0	375.00	500.00	0	2,250	3,000
2024	0	375.00	500.00	0	3,000	4,000
TOTAL				0	71,750	74,000

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	3969.45	3969.45	0	63,511	63,511
2021	0	529.26	529.26	0	5,293	5,293
2022	0	396.95	529.26	0	1,588	2,117
2023	0	396.95	529.26	0	2,382	3,176
2024	0	396.95	529.26	0	3,176	4,234
TOTAL				0	75,949	78,331

Impact Evaluation Plan

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

Cost-Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$119,016	$45,547	$73,469	2.61
Participant	$40,187	$0	$40,187	9999
Total Resource Cost	$119,016	$5,360	$113,656	22.20

F. CURTAILABLE SERVICE PROGRAM

Program Start Date: 1996 for the CS-2 and CST-2 rate schedules

2004 for the CS-3 and CST-3 rate schedules.

Program Description

The Curtailable Service program is an indirect load control program designed to reduce DEF's demand at times of capacity shortage during peak or emergency conditions.

Policies and Procedures

The program is available throughout DEF's entire service territory to non-residential customers who agree to curtail demand. The program is currently provided to customers through various tariffs. The specific customer eligibility and curtailment requirements, bill credits amounts, and operational provisions are as defined in the applicable tariffs. These tariffs are designed to support system operations and reliability. The provisions of these tariffs may be modified as appropriate to ensure that the program remains cost effective and provides system benefits. The CS-1 and CST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Program Participation

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

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)	Annual Participation Level (%)
2020	178,557	697	1.0	0.14%	0.14%
2021	181,015	696	0.0	0.14%	0.00%
2022	183,346	696	1.0	0.29%	0.14%
2023	185,608	695	0.0	0.29%	0.00%
2024	187,771	695	1.0	0.43%	0.14%

1. Total Number of Customers is based on DEF's 2019 Ten Year Site Plan projections.
2. Eligible Customers is based upon tariff CS-2, CST-2, CS-3 and CST-3 Rate Schedules.
3. Annual number of program participants represents the projected number of customers.
4.Cumulative penetration is the ratio of cumulative participants to the eligible customer pool.

Savings Estimates

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

At the Meter:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	500	500	0	500	500
2021	0	-	-	0	0	0
2022	0	500	500	0	500	500
2023	0	-	-	0	0	0
2024	0	500	500	0	500	500
TOTAL				0	1,500	1,500

At the Generator:

Year	Per Customer KWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Total Annual KWh Reduction	Total Annual Winter KW Reduction	Total Annual Summer KW Reduction
2020	0	529.26	529.26	0	529	529
2021	0	0.00	0.00	0	0	0
2022	0	529.26	529.26	0	529	529
2023	0	0.00	0.00	0	0	0
2024	0	529.26	529.26	0	529	529
TOTAL				0	1,588	1,588

Impact Evaluation Plan

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

Cost-Effectiveness

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

Cost-Effectiveness Test	NPV Benefits $(000)	NPV Costs $ (000)	NPV Net Benefits $(000)	B/C Ratio
Rate Impact Measure	$2,528	$580	$1,948	4.36
Participant	$514	$0	$514	9999
Total Resource Cost	$2,528	$67	$2,461	37.93

VIII. TECHNOLOGY DEVELOPMENT PROGRAM

Program Start Date: 1995

Program Description

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

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

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

Eligible customers will be determined during the project research and design phase and will be dependent on the type of project proposed. Each project that is proposed and investigated is expected to meet one or more of the goals identified in Section 366.82(2), Florida Statutes, and Chapter 25-17, Florida Administrative Code.

Program Participation

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

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

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

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

Savings Estimates

The savings impacts will be derived from actual data obtained from field tests which will calibrate engineering analysis, model results and estimates. This data will provide estimates of the benefits and costs associated with these projects. The actual experience and knowledge gained on a small scale may be leveraged to facilitate the development of new measures.

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

Impact Evaluation Plan

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

Cost-Effectiveness

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

IX. QUALIFYING FACILITIES PROGRAM

Program Description

The purpose of this program is to meet the objectives and obligations established by the federal Public Utility Regulatory Policies Act, Section 366.051 of Florida Statutes, and the Commission's rules contained within Chapter 25-17, Florida Administrative Code. These policies pertain to the purchase of as-available energy and firm energy and capacity from qualifying facilities (QFs), including those that utilize renewable sources under Section 366.91, Florida Statutes, pursuant to DEF's agreement for purchase per the as-available energy tariff, standard offer contract tariff, or a negotiated QF purchased power contract on behalf of DEF customers.

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

X. BENEFITS & COST ANALYSIS – ALL PROGRAMS

A. RESIDENTIAL CONSERVATION PROGRAMS

PROGRAM: Residential Incentive Program SSHEI

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	382	1,029	0	1,411	2,361	4,558	1,591	8,510	-7,099
2021	678	1,900	0	2,578	1,950	3,890	2,905	8,745	-6,168
2022	964	2,762	0	3,726	1,853	3,696	4,277	9,826	-6,100
2023	1,259	3,624	0	4,883	1,760	3,511	5,652	10,923	-6,040
2024	1,685	4,487	0	6,173	1,672	3,335	7,046	12,054	-5,881
2025	2,028	4,588	0	6,616	0	0	7,456	7,456	-840
2026	2,225	4,694	0	6,919	0	0	7,893	7,893	-974
2027	2,518	4,808	5,929	13,255	0	0	8,297	8,297	4,958
2028	2,656	4,925	5,962	13,543	0	0	8,640	8,640	4,903
2029	2,805	5,044	7,998	15,847	0	0	9,008	9,008	6,839
2030	3,085	5,164	8,067	16,316	0	0	9,474	9,474	6,842
2031	3,097	5,009	7,716	15,823	0	0	9,365	9,365	6,458
2032	3,105	4,855	5,888	13,848	0	0	9,230	9,230	4,618
2033	3,142	4,704	6,066	13,912	0	0	9,100	9,100	4,812
2034	3,085	4,556	5,865	13,505	0	0	8,945	8,945	4,560
2035	2,561	4,036	6,291	12,888	0	0	7,813	7,813	5,075
2036	2,372	3,758	5,780	11,910	0	0	7,298	7,298	4,612
2037	2,305	3,484	4,461	10,250	0	0	6,894	6,894	3,356
2038	2,224	3,214	4,110	9,548	0	0	6,525	6,525	3,023
2039	2,149	2,949	3,712	8,810	0	0	6,125	6,125	2,685
2040	1,596	2,171	2,767	6,533	0	0	4,558	4,558	1,975
2041	1,205	1,620	2,062	4,887	0	0	3,434	3,434	1,453
2042	811	1,075	1,347	3,232	0	0	2,302	2,302	930
2043	409	535	679	1,623	0	0	1,158	1,158	465
2044	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	48,346	84,989	84,698	218,033	9,595	18,990	154,988	183,573	34,460
NPV	23,132	44,037	35,833	103,003	8,500	16,805	77,532	102,837	166

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 1.002

PROGRAM: **Residential Incentive Program** **SSHEI**

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)
2020	382	1,029	0	1,411	2,361	9,449	11,810	-10,399
2021	678	1,900	0	2,578	1,950	8,419	10,369	-7,791
2022	964	2,762	0	3,726	1,853	7,998	9,851	-6,125
2023	1,259	3,624	0	4,883	1,760	7,598	9,358	-4,475
2024	1,685	4,487	0	6,173	1,672	7,218	8,890	-2,718
2025	2,028	4,588	0	6,616	0	0	0	6,616
2026	2,225	4,694	0	6,919	0	0	0	6,919
2027	2,518	4,808	5,929	13,255	0	0	0	13,255
2028	2,656	4,925	5,962	13,543	0	0	0	13,543
2029	2,805	5,044	7,998	15,847	0	0	0	15,847
2030	3,085	5,164	8,067	16,316	0	0	0	16,316
2031	3,097	5,009	7,716	15,823	0	0	0	15,823
2032	3,105	4,855	5,888	13,848	0	0	0	13,848
2033	3,142	4,704	6,066	13,912	0	0	0	13,912
2034	3,085	4,556	5,865	13,505	0	0	0	13,505
2035	2,561	4,036	6,291	12,888	0	0	0	12,888
2036	2,372	3,758	5,780	11,910	0	0	0	11,910
2037	2,305	3,484	4,461	10,250	0	0	0	10,250
2038	2,224	3,214	4,110	9,548	0	0	0	9,548
2039	2,149	2,949	3,712	8,810	0	0	0	8,810
2040	1,596	2,171	2,767	6,533	0	0	0	6,533
2041	1,205	1,620	2,062	4,887	0	0	0	4,887
2042	811	1,075	1,347	3,232	0	0	0	3,232
2043	409	535	679	1,623	0	0	0	1,623
2044	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	48,346	84,989	84,698	218,033	9,595	40,683	50,278	167,755
NPV	23,132	44,037	35,833	103,003	8,500	35,954	44,454	58,549

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.317

PROGRAM: **Residential Incentive Program** **SSHEI**

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)
2020	1,591	4,558	0	6,149	9,449	9,449	-3,300
2021	2,905	3,890	0	6,795	8,419	8,419	-1,624
2022	4,277	3,696	0	7,973	7,998	7,998	-25
2023	5,652	3,511	0	9,163	7,598	7,598	1,565
2024	7,046	3,335	0	10,382	7,218	7,218	3,163
2025	7,456	0	0	7,456	0	0	7,456
2026	7,893	0	0	7,893	0	0	7,893
2027	8,297	0	0	8,297	0	0	8,297
2028	8,640	0	0	8,640	0	0	8,640
2029	9,008	0	0	9,008	0	0	9,008
2030	9,474	0	0	9,474	0	0	9,474
2031	9,365	0	0	9,365	0	0	9,365
2032	9,230	0	0	9,230	0	0	9,230
2033	9,100	0	0	9,100	0	0	9,100
2034	8,945	0	0	8,945	0	0	8,945
2035	7,813	0	0	7,813	0	0	7,813
2036	7,298	0	0	7,298	0	0	7,298
2037	6,894	0	0	6,894	0	0	6,894
2038	6,525	0	0	6,525	0	0	6,525
2039	6,125	0	0	6,125	0	0	6,125
2040	4,558	0	0	4,558	0	0	4,558
2041	3,434	0	0	3,434	0	0	3,434
2042	2,302	0	0	2,302	0	0	2,302
2043	1,158	0	0	1,158	0	0	1,158
2044	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	154,988	18,990	0	173,977	40,683	40,683	133,295
NPV	77,532	16,805	0	94,337	35,954	35,954	58,383

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.624

PROGRAM: Neighborhood Energy Saver HWLI

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	516	1,182	0	1,697	619	4,985	2,130	7,734	-6,037
2021	1,008	2,405	0	3,413	619	4,985	4,285	9,888	-6,475
2022	1,470	3,581	0	5,051	619	4,985	6,471	12,074	-7,023
2023	1,967	4,815	0	6,783	619	4,985	8,767	14,370	-7,588
2024	2,699	6,110	0	8,808	619	4,985	11,203	16,807	-7,998
2025	3,195	6,145	0	9,340	0	0	11,666	11,666	-2,326
2026	3,448	6,182	0	9,629	0	0	12,149	12,149	-2,520
2027	3,897	6,330	7,809	18,036	0	0	12,758	12,758	5,278
2028	4,107	6,483	7,850	18,440	0	0	13,273	13,273	5,167
2029	4,254	6,596	10,455	21,305	0	0	13,575	13,575	7,730
2030	4,520	6,676	10,426	21,622	0	0	13,794	13,794	7,828
2031	4,337	6,296	9,695	20,328	0	0	13,025	13,025	7,303
2032	4,112	5,892	7,147	17,150	0	0	12,137	12,137	5,013
2033	3,838	5,444	7,022	16,304	0	0	11,034	11,034	5,271
2034	3,510	5,020	6,464	14,994	0	0	10,100	10,100	4,894
2035	2,986	4,591	7,153	14,731	0	0	9,046	9,046	5,684
2036	2,974	4,648	7,147	14,769	0	0	9,098	9,098	5,671
2037	3,118	4,704	6,025	13,848	0	0	9,288	9,288	4,560
2038	3,313	4,784	6,117	14,214	0	0	9,699	9,699	4,515
2039	3,544	4,864	6,123	14,532	0	0	10,103	10,103	4,429
2040	2,923	3,976	5,069	11,969	0	0	8,351	8,351	3,618
2041	2,266	3,047	3,878	9,192	0	0	6,459	6,459	2,733
2042	1,565	2,076	2,600	6,241	0	0	4,445	4,445	1,796
2043	810	1,060	1,346	3,216	0	0	2,294	2,294	922
2044	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	70,377	112,908	112,325	295,611	3,093	24,925	225,150	253,168	42,442
NPV	33,808	57,632	46,624	138,063	2,709	21,832	113,259	137,801	262

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 1.002

PROGRAM: Neighborhood Energy Saver HWLI

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)
2020	516	1,182	0	1,697	619	7,439	8,057	-6,360
2021	1,008	2,405	0	3,413	619	7,439	8,057	-4,644
2022	1,470	3,581	0	5,051	619	7,439	8,057	-3,006
2023	1,967	4,815	0	6,783	619	7,439	8,057	-1,275
2024	2,699	6,110	0	8,808	619	7,439	8,057	751
2025	3,195	6,145	0	9,340	0	0	0	9,340
2026	3,448	6,182	0	9,629	0	0	0	9,629
2027	3,897	6,330	7,809	18,036	0	0	0	18,036
2028	4,107	6,483	7,850	18,440	0	0	0	18,440
2029	4,254	6,596	10,455	21,305	0	0	0	21,305
2030	4,520	6,676	10,426	21,622	0	0	0	21,622
2031	4,337	6,296	9,695	20,328	0	0	0	20,328
2032	4,112	5,892	7,147	17,150	0	0	0	17,150
2033	3,838	5,444	7,022	16,304	0	0	0	16,304
2034	3,510	5,020	6,464	14,994	0	0	0	14,994
2035	2,986	4,591	7,153	14,731	0	0	0	14,731
2036	2,974	4,648	7,147	14,769	0	0	0	14,769
2037	3,118	4,704	6,025	13,848	0	0	0	13,848
2038	3,313	4,784	6,117	14,214	0	0	0	14,214
2039	3,544	4,864	6,123	14,532	0	0	0	14,532
2040	2,923	3,976	5,069	11,969	0	0	0	11,969
2041	2,266	3,047	3,878	9,192	0	0	0	9,192
2042	1,565	2,076	2,600	6,241	0	0	0	6,241
2043	810	1,060	1,346	3,216	0	0	0	3,216
2044	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	70,377	112,908	112,325	295,611	3,093	37,193	40,286	255,325
NPV	33,808	57,632	46,624	138,063	2,709	32,578	35,287	102,776

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 3.913

PROGRAM: Neighborhood Energy Saver **HWLI**

Participant Test

	BENEFITS				COSTS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	SAVINGS IN PARTICIPANT'S BILL $(000)	INCENTIVE PAYMENTS $(000)	OTHER PARTICIPANT'S BENEFITS $(000)	**TOTAL BENEFITS** $(000)	PARTICIPANT'S COST $(000)	**TOTAL COSTS** $(000)	**NET BENEFITS** $(000)
2020	2,130	4,985	0	7,116	7,439	7,439	-323
2021	4,285	4,985	0	9,270	7,439	7,439	1,831
2022	6,471	4,985	0	11,456	7,439	7,439	4,017
2023	8,767	4,985	0	13,752	7,439	7,439	6,313
2024	11,203	4,985	0	16,188	7,439	7,439	8,750
2025	11,666	0	0	11,666	0	0	11,666
2026	12,149	0	0	12,149	0	0	12,149
2027	12,758	0	0	12,758	0	0	12,758
2028	13,273	0	0	13,273	0	0	13,273
2029	13,575	0	0	13,575	0	0	13,575
2030	13,794	0	0	13,794	0	0	13,794
2031	13,025	0	0	13,025	0	0	13,025
2032	12,137	0	0	12,137	0	0	12,137
2033	11,034	0	0	11,034	0	0	11,034
2034	10,100	0	0	10,100	0	0	10,100
2035	9,046	0	0	9,046	0	0	9,046
2036	9,098	0	0	9,098	0	0	9,098
2037	9,288	0	0	9,288	0	0	9,288
2038	9,699	0	0	9,699	0	0	9,699
2039	10,103	0	0	10,103	0	0	10,103
2040	8,351	0	0	8,351	0	0	8,351
2041	6,459	0	0	6,459	0	0	6,459
2042	4,445	0	0	4,445	0	0	4,445
2043	2,294	0	0	2,294	0	0	2,294
2044	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	225,150	24,925	0	250,075	37,193	37,193	212,882
NPV	113,259	21,832	0	135,091	32,578	32,578	102,514

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 4.147

PROGRAM: Low Income Weatherization Assistance **WZELEC**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	53	135	0	188	145	604	219	968	-779
2021	78	205	0	283	74	325	332	732	-448
2022	102	273	0	375	74	325	451	850	-475
2023	129	344	0	473	74	325	575	974	-502
2024	170	418	0	589	74	325	707	1,106	-518
2025	202	423	0	625	0	0	739	739	-114
2026	219	427	0	647	0	0	773	773	-126
2027	248	438	540	1,225	0	0	812	812	414
2028	261	448	543	1,252	0	0	844	844	408
2029	272	457	724	1,453	0	0	868	868	586
2030	291	464	725	1,480	0	0	889	889	591
2031	287	449	691	1,426	0	0	860	860	566
2032	280	432	524	1,236	0	0	826	826	410
2033	272	413	533	1,218	0	0	781	781	437
2034	259	396	510	1,164	0	0	744	744	420
2035	225	367	571	1,163	0	0	681	681	482
2036	221	361	555	1,137	0	0	677	677	461
2037	229	355	454	1,038	0	0	681	681	356
2038	238	349	446	1,034	0	0	698	698	336
2039	250	343	432	1,025	0	0	712	712	312
2040	143	194	247	584	0	0	408	408	177
2041	111	149	189	449	0	0	315	315	133
2042	76	101	127	305	0	0	217	217	88
2043	40	52	66	157	0	0	112	112	45
2044	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	4,656	7,992	7,878	20,527	441	1,904	14,922	17,268	3,259
NPV	2,255	4,151	3,299	9,705	395	1,703	7,570	9,668	37

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 1.004

PROGRAM: Low Income Weatherization Assistance **WZELEC**

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)
2020	53	135	0	188	145	724	869	-680
2021	78	205	0	283	74	445	519	-236
2022	102	273	0	375	74	445	519	-144
2023	129	344	0	473	74	445	519	-46
2024	170	418	0	589	74	445	519	70
2025	202	423	0	625	0	0	0	625
2026	219	427	0	647	0	0	0	647
2027	248	438	540	1,225	0	0	0	1,225
2028	261	448	543	1,252	0	0	0	1,252
2029	272	457	724	1,453	0	0	0	1,453
2030	291	464	725	1,480	0	0	0	1,480
2031	287	449	691	1,426	0	0	0	1,426
2032	280	432	524	1,236	0	0	0	1,236
2033	272	413	533	1,218	0	0	0	1,218
2034	259	396	510	1,164	0	0	0	1,164
2035	225	367	571	1,163	0	0	0	1,163
2036	221	361	555	1,137	0	0	0	1,137
2037	229	355	454	1,038	0	0	0	1,038
2038	238	349	446	1,034	0	0	0	1,034
2039	250	343	432	1,025	0	0	0	1,025
2040	143	194	247	584	0	0	0	584
2041	111	149	189	449	0	0	0	449
2042	76	101	127	305	0	0	0	305
2043	40	52	66	157	0	0	0	157
2044	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	4,656	7,992	7,878	20,527	441	2,504	2,945	17,582
NPV	2,255	4,151	3,299	9,705	395	2,228	2,623	7,082

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 3.700

PROGRAM: Low Income Weatherization Assistance **WZELEC**

Participant Test

	BENEFITS				COSTS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	SAVINGS IN PARTICIPANT'S BILL $(000)	INCENTIVE PAYMENTS $(000)	OTHER PARTICIPANT'S BENEFITS $(000)	**TOTAL BENEFITS** $(000)	PARTICIPANT'S COST $(000)	**TOTAL COSTS** $(000)	**NET BENEFITS** $(000)
2020	219	604	0	823	724	724	99
2021	332	325	0	658	445	445	213
2022	451	325	0	776	445	445	331
2023	575	325	0	900	445	445	455
2024	707	325	0	1,032	445	445	587
2025	739	0	0	739	0	0	739
2026	773	0	0	773	0	0	773
2027	812	0	0	812	0	0	812
2028	844	0	0	844	0	0	844
2029	868	0	0	868	0	0	868
2030	889	0	0	889	0	0	889
2031	860	0	0	860	0	0	860
2032	826	0	0	826	0	0	826
2033	781	0	0	781	0	0	781
2034	744	0	0	744	0	0	744
2035	681	0	0	681	0	0	681
2036	677	0	0	677	0	0	677
2037	681	0	0	681	0	0	681
2038	698	0	0	698	0	0	698
2039	712	0	0	712	0	0	712
2040	408	0	0	408	0	0	408
2041	315	0	0	315	0	0	315
2042	217	0	0	217	0	0	217
2043	112	0	0	112	0	0	112
2044	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	14,922	1,904	0	16,827	2,504	2,504	14,323
NPV	7,570	1,703	0	9,273	2,228	2,228	7,045

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 4.162

PROGRAM: Residential Load Management **PWRMGR**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	0	0	0	0	750	162	0	913	-913
2021	0	0	0	0	876	325	0	1,201	-1,201
2022	0	0	0	0	1,001	487	0	1,489	-1,489
2023	0	0	0	0	1,127	650	0	1,776	-1,776
2024	0	0	0	0	1,252	812	0	2,064	-2,064
2025	0	0	0	0	1,252	812	0	2,064	-2,064
2026	0	0	0	0	627	812	0	1,439	-1,439
2027	0	0	4,284	4,284	627	812	0	1,439	2,844
2028	0	0	4,307	4,307	627	812	0	1,439	2,868
2029	0	0	5,782	5,782	627	812	0	1,439	4,343
2030	0	0	5,832	5,832	627	812	0	1,439	4,393
2031	0	0	5,883	5,883	627	812	0	1,439	4,444
2032	0	0	4,731	4,731	627	812	0	1,439	3,292
2033	0	0	5,142	5,142	627	812	0	1,439	3,703
2034	0	0	5,245	5,245	627	812	0	1,439	3,805
2035	0	0	6,494	6,494	627	812	0	1,439	5,055
2036	0	0	6,549	6,549	627	812	0	1,439	5,110
2037	0	0	5,566	5,566	627	812	0	1,439	4,126
2038	0	0	5,678	5,678	627	812	0	1,439	4,238
2039	0	0	5,710	5,710	627	812	0	1,439	4,271
2040	0	0	5,909	5,909	627	812	0	1,439	4,469
2041	0	0	6,028	6,028	627	812	0	1,439	4,589
2042	0	0	6,062	6,062	627	812	0	1,439	4,623
2043	0	0	6,274	6,274	627	812	0	1,439	4,835
2044	0	0	6,494	6,494	627	812	0	1,439	5,055
2045	0	0	5,377	5,377	615	796	0	1,411	3,967
2046	0	0	4,174	4,174	602	780	0	1,382	2,793
2047	0	0	2,880	2,880	589	764	0	1,353	1,527
2048	0	0	1,491	1,491	577	747	0	1,324	166
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	115,895	115,895	20,557	21,768	0	42,325	73,570
NPV	0	0	38,752	38,752	10,153	9,030	0	19,183	19,569

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.020

PROGRAM: Residential Load Management **PWRMGR**

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)
2020	0	0	0	0	750	0	750	-750
2021	0	0	0	0	876	0	876	-876
2022	0	0	0	0	1,001	0	1,001	-1,001
2023	0	0	0	0	1,127	0	1,127	-1,127
2024	0	0	0	0	1,252	0	1,252	-1,252
2025	0	0	0	0	1,252	0	1,252	-1,252
2026	0	0	0	0	627	0	627	-627
2027	0	0	4,284	4,284	627	0	627	3,657
2028	0	0	4,307	4,307	627	0	627	3,680
2029	0	0	5,782	5,782	627	0	627	5,155
2030	0	0	5,832	5,832	627	0	627	5,205
2031	0	0	5,883	5,883	627	0	627	5,256
2032	0	0	4,731	4,731	627	0	627	4,104
2033	0	0	5,142	5,142	627	0	627	4,515
2034	0	0	5,245	5,245	627	0	627	4,617
2035	0	0	6,494	6,494	627	0	627	5,867
2036	0	0	6,549	6,549	627	0	627	5,922
2037	0	0	5,566	5,566	627	0	627	4,939
2038	0	0	5,678	5,678	627	0	627	5,050
2039	0	0	5,710	5,710	627	0	627	5,083
2040	0	0	5,909	5,909	627	0	627	5,281
2041	0	0	6,028	6,028	627	0	627	5,401
2042	0	0	6,062	6,062	627	0	627	5,435
2043	0	0	6,274	6,274	627	0	627	5,647
2044	0	0	6,494	6,494	627	0	627	5,867
2045	0	0	5,377	5,377	615	0	615	4,763
2046	0	0	4,174	4,174	602	0	602	3,572
2047	0	0	2,880	2,880	589	0	589	2,291
2048	0	0	1,491	1,491	577	0	577	914
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	115,895	115,895	20,557	0	20,557	95,338
NPV	0	0	38,752	38,752	10,153	0	10,153	28,599

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 3.817

PROGRAM: Residential Load Management **PWRMGR**

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)
2020	0	162	0	162	0	0	162
2021	0	325	0	325	0	0	325
2022	0	487	0	487	0	0	487
2023	0	650	0	650	0	0	650
2024	0	812	0	812	0	0	812
2025	0	812	0	812	0	0	812
2026	0	812	0	812	0	0	812
2027	0	812	0	812	0	0	812
2028	0	812	0	812	0	0	812
2029	0	812	0	812	0	0	812
2030	0	812	0	812	0	0	812
2031	0	812	0	812	0	0	812
2032	0	812	0	812	0	0	812
2033	0	812	0	812	0	0	812
2034	0	812	0	812	0	0	812
2035	0	812	0	812	0	0	812
2036	0	812	0	812	0	0	812
2037	0	812	0	812	0	0	812
2038	0	812	0	812	0	0	812
2039	0	812	0	812	0	0	812
2040	0	812	0	812	0	0	812
2041	0	812	0	812	0	0	812
2042	0	812	0	812	0	0	812
2043	0	812	0	812	0	0	812
2044	0	812	0	812	0	0	812
2045	0	796	0	796	0	0	796
2046	0	780	0	780	0	0	780
2047	0	764	0	764	0	0	764
2048	0	747	0	747	0	0	747
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	0	21,768	0	21,768	0	0	21,768
NPV	0	9,030	0	9,030	0	0	9,030

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 9999

B. COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS

PROGRAM: Better Business **NRBBUS**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	178	396	0	573	1,221	707	677	2,605	-2,031
2021	339	786	0	1,124	1,160	671	1,321	3,153	-2,029
2022	494	1,211	0	1,705	1,102	728	1,984	3,813	-2,108
2023	653	1,598	0	2,251	1,047	606	2,639	4,292	-2,041
2024	881	2,027	0	2,908	994	666	3,298	4,958	-2,050
2025	1,060	2,072	0	3,132	0	0	3,496	3,496	-364
2026	1,163	2,120	0	3,283	0	0	3,710	3,710	-426
2027	1,316	2,171	2,673	6,161	0	0	3,901	3,901	2,261
2028	1,388	2,224	2,688	6,301	0	0	4,053	4,053	2,248
2029	1,466	2,278	3,621	7,365	0	0	4,218	4,218	3,147
2030	1,451	2,044	3,202	6,698	0	0	3,995	3,995	2,703
2031	1,374	1,811	2,799	5,984	0	0	3,716	3,716	2,268
2032	1,290	1,579	1,910	4,779	0	0	3,419	3,419	1,360
2033	1,211	1,350	1,735	4,296	0	0	3,120	3,120	1,176
2034	1,092	1,123	1,439	3,654	0	0	2,806	2,806	848
2035	984	1,060	1,661	3,705	0	0	2,633	2,633	1,072
2036	941	997	1,542	3,480	0	0	2,526	2,526	954
2037	947	936	1,195	3,079	0	0	2,472	2,472	607
2038	950	876	1,118	2,944	0	0	2,440	2,440	504
2039	960	817	1,027	2,803	0	0	2,399	2,399	404
2040	771	677	861	2,309	0	0	1,923	1,923	386
2041	582	539	684	1,805	0	0	1,441	1,441	363
2042	391	339	423	1,153	0	0	962	962	191
2043	197	202	255	654	0	0	482	482	172
2044	0	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	22,081	31,234	28,834	82,148	5,524	3,377	63,632	72,533	9,615
NPV	10,872	17,213	12,801	40,886	4,872	2,967	32,935	40,775	111

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 1.003

PROGRAM: Better Business **NRBBUS**

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)
2020	178	396	0	573	1,221	3,027	4,248	-3,675
2021	339	786	0	1,124	1,160	2,876	4,036	-2,912
2022	494	1,211	0	1,705	1,102	4,232	5,334	-3,629
2023	653	1,598	0	2,251	1,047	2,596	3,642	-1,392
2024	881	2,027	0	2,908	994	3,966	4,960	-2,053
2025	1,060	2,072	0	3,132	0	0	0	3,132
2026	1,163	2,120	0	3,283	0	0	0	3,283
2027	1,316	2,171	2,673	6,161	0	0	0	6,161
2028	1,388	2,224	2,688	6,301	0	0	0	6,301
2029	1,466	2,278	3,621	7,365	0	0	0	7,365
2030	1,451	2,044	3,202	6,698	0	0	0	6,698
2031	1,374	1,811	2,799	5,984	0	0	0	5,984
2032	1,290	1,579	1,910	4,779	0	0	0	4,779
2033	1,211	1,350	1,735	4,296	0	0	0	4,296
2034	1,092	1,123	1,439	3,654	0	0	0	3,654
2035	984	1,060	1,661	3,705	0	0	0	3,705
2036	941	997	1,542	3,480	0	0	0	3,480
2037	947	936	1,195	3,079	0	0	0	3,079
2038	950	876	1,118	2,944	0	0	0	2,944
2039	960	817	1,027	2,803	0	0	0	2,803
2040	771	677	861	2,309	0	0	0	2,309
2041	582	539	684	1,805	0	0	0	1,805
2042	391	339	423	1,153	0	0	0	1,153
2043	197	202	255	654	0	0	0	654
2044	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	22,081	31,234	28,834	82,148	5,524	16,697	22,220	59,928
NPV	10,872	17,213	12,801	40,886	4,872	14,529	19,402	21,484

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.107

PROGRAM: Better Business **NRBBUS**

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)
2020	677	707	0	1,384	3,027	3,027	-1,643
2021	1,321	671	0	1,993	2,876	2,876	-883
2022	1,984	728	0	2,711	4,232	4,232	-1,521
2023	2,639	606	0	3,245	2,596	2,596	650
2024	3,298	666	0	3,963	3,966	3,966	-3
2025	3,496	0	0	3,496	0	0	3,496
2026	3,710	0	0	3,710	0	0	3,710
2027	3,901	0	0	3,901	0	0	3,901
2028	4,053	0	0	4,053	0	0	4,053
2029	4,218	0	0	4,218	0	0	4,218
2030	3,995	0	0	3,995	0	0	3,995
2031	3,716	0	0	3,716	0	0	3,716
2032	3,419	0	0	3,419	0	0	3,419
2033	3,120	0	0	3,120	0	0	3,120
2034	2,806	0	0	2,806	0	0	2,806
2035	2,633	0	0	2,633	0	0	2,633
2036	2,526	0	0	2,526	0	0	2,526
2037	2,472	0	0	2,472	0	0	2,472
2038	2,440	0	0	2,440	0	0	2,440
2039	2,399	0	0	2,399	0	0	2,399
2040	1,923	0	0	1,923	0	0	1,923
2041	1,441	0	0	1,441	0	0	1,441
2042	962	0	0	962	0	0	962
2043	482	0	0	482	0	0	482
2044	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	0
2046	0	0	0	0	0	0	0
2047	0	0	0	0	0	0	0
2048	0	0	0	0	0	0	0
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	63,632	3,377	0	67,009	16,697	16,697	50,313
NPV	32,935	2,967	0	35,902	14,529	14,529	21,373

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.471

PROGRAM: **Standby Generation DR** **STBGEN**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	0	0	0	0	32	116	0	148	-148
2021	0	0	0	0	39	232	0	272	-272
2022	0	0	0	0	62	193	0	256	-256
2023	0	0	0	0	73	276	0	349	-349
2024	0	0	0	0	84	359	0	443	-443
2025	0	0	0	0	46	359	0	405	-405
2026	0	0	0	0	46	359	0	405	-405
2027	0	0	2,399	2,399	46	359	0	405	1,994
2028	0	0	2,412	2,412	46	359	0	405	2,007
2029	0	0	3,333	3,333	46	359	0	405	2,928
2030	0	0	3,361	3,361	46	359	0	405	2,956
2031	0	0	3,391	3,391	46	359	0	405	2,986
2032	0	0	2,649	2,649	46	359	0	405	2,244
2033	0	0	2,879	2,879	46	359	0	405	2,474
2034	0	0	2,937	2,937	46	359	0	405	2,532
2035	0	0	3,743	3,743	46	359	0	405	3,338
2036	0	0	3,774	3,774	46	359	0	405	3,369
2037	0	0	3,117	3,117	46	359	0	405	2,711
2038	0	0	3,179	3,179	46	359	0	405	2,774
2039	0	0	3,198	3,198	46	359	0	405	2,792
2040	0	0	3,309	3,309	46	359	0	405	2,903
2041	0	0	3,375	3,375	46	359	0	405	2,970
2042	0	0	3,395	3,395	46	359	0	405	2,989
2043	0	0	3,513	3,513	46	359	0	405	3,108
2044	0	0	3,637	3,637	46	359	0	405	3,231
2045	0	0	3,185	3,185	39	304	0	343	2,842
2046	0	0	2,697	2,697	32	248	0	280	2,417
2047	0	0	1,861	1,861	21	166	0	187	1,674
2048	0	0	963	963	11	83	0	93	870
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	66,306	66,306	1,321	9,153	0	10,474	55,832
NPV	0	0	22,067	22,067	634	4,000	0	4,634	17,433

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 4.762

PROGRAM: **Standby Generation DR** **STBGEN**

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)
2020	0	0	0	0	32	0	32	-32
2021	0	0	0	0	39	0	39	-39
2022	0	0	0	0	62	0	62	-62
2023	0	0	0	0	73	0	73	-73
2024	0	0	0	0	84	0	84	-84
2025	0	0	0	0	46	0	46	-46
2026	0	0	0	0	46	0	46	-46
2027	0	0	2,399	2,399	46	0	46	2,352
2028	0	0	2,412	2,412	46	0	46	2,366
2029	0	0	3,333	3,333	46	0	46	3,286
2030	0	0	3,361	3,361	46	0	46	3,315
2031	0	0	3,391	3,391	46	0	46	3,344
2032	0	0	2,649	2,649	46	0	46	2,603
2033	0	0	2,879	2,879	46	0	46	2,833
2034	0	0	2,937	2,937	46	0	46	2,890
2035	0	0	3,743	3,743	46	0	46	3,696
2036	0	0	3,774	3,774	46	0	46	3,728
2037	0	0	3,117	3,117	46	0	46	3,070
2038	0	0	3,179	3,179	46	0	46	3,133
2039	0	0	3,198	3,198	46	0	46	3,151
2040	0	0	3,309	3,309	46	0	46	3,262
2041	0	0	3,375	3,375	46	0	46	3,329
2042	0	0	3,395	3,395	46	0	46	3,348
2043	0	0	3,513	3,513	46	0	46	3,467
2044	0	0	3,637	3,637	46	0	46	3,590
2045	0	0	3,185	3,185	39	0	39	3,146
2046	0	0	2,697	2,697	32	0	32	2,665
2047	0	0	1,861	1,861	21	0	21	1,840
2048	0	0	963	963	11	0	11	952
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	66,306	66,306	1,321	0	1,321	64,985
NPV	0	0	22,067	22,067	634	0	634	21,433

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 34.808

PROGRAM: **Standby Generation DR** **STBGEN**

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)
2020	0	116	0	116	0	0	116
2021	0	232	0	232	0	0	232
2022	0	193	0	193	0	0	193
2023	0	276	0	276	0	0	276
2024	0	359	0	359	0	0	359
2025	0	359	0	359	0	0	359
2026	0	359	0	359	0	0	359
2027	0	359	0	359	0	0	359
2028	0	359	0	359	0	0	359
2029	0	359	0	359	0	0	359
2030	0	359	0	359	0	0	359
2031	0	359	0	359	0	0	359
2032	0	359	0	359	0	0	359
2033	0	359	0	359	0	0	359
2034	0	359	0	359	0	0	359
2035	0	359	0	359	0	0	359
2036	0	359	0	359	0	0	359
2037	0	359	0	359	0	0	359
2038	0	359	0	359	0	0	359
2039	0	359	0	359	0	0	359
2040	0	359	0	359	0	0	359
2041	0	359	0	359	0	0	359
2042	0	359	0	359	0	0	359
2043	0	359	0	359	0	0	359
2044	0	359	0	359	0	0	359
2045	0	304	0	304	0	0	304
2046	0	248	0	248	0	0	248
2047	0	166	0	166	0	0	166
2048	0	83	0	83	0	0	83
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	0	9,153	0	9,153	0	0	9,153
NPV	0	4,000	0	4,000	0	0	4,000

Utility Discount Rate = 7.10%

Benefit Cost Ratio: 9999

PROGRAM: **Interruptible DR** **IRRSVC**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	0	0	0	0	589	4,802	0	5,391	-5,391
2021	0	0	0	0	489	5,202	0	5,691	-5,691
2022	0	0	0	0	371	2,661	0	3,032	-3,032
2023	0	0	0	0	440	2,780	0	3,221	-3,221
2024	0	0	0	0	517	2,939	0	3,457	-3,457
2025	0	0	0	0	331	2,939	0	3,270	-3,270
2026	0	0	0	0	339	2,939	0	3,279	-3,279
2027	0	0	13,654	13,654	348	2,939	0	3,287	10,367
2028	0	0	13,729	13,729	357	2,939	0	3,296	10,434
2029	0	0	18,970	18,970	365	2,939	0	3,305	15,666
2030	0	0	19,135	19,135	375	2,939	0	3,314	15,821
2031	0	0	19,301	19,301	384	2,939	0	3,323	15,978
2032	0	0	15,081	15,081	394	2,939	0	3,333	11,748
2033	0	0	16,390	16,390	403	2,939	0	3,343	13,047
2034	0	0	16,717	16,717	413	2,939	0	3,353	13,364
2035	0	0	21,305	21,305	424	2,939	0	3,363	17,942
2036	0	0	21,485	21,485	434	2,939	0	3,374	18,112
2037	0	0	17,741	17,741	445	2,939	0	3,385	14,356
2038	0	0	18,097	18,097	456	2,939	0	3,396	14,701
2039	0	0	18,201	18,201	468	2,939	0	3,407	14,794
2040	0	0	18,833	18,833	479	2,939	0	3,419	15,415
2041	0	0	19,214	19,214	491	2,939	0	3,431	15,783
2042	0	0	19,323	19,323	504	2,939	0	3,443	15,880
2043	0	0	20,000	20,000	516	2,939	0	3,456	16,544
2044	0	0	20,700	20,700	529	2,939	0	3,469	17,232
2045	0	0	4,053	4,053	103	556	0	659	3,395
2046	0	0	2,697	2,697	68	357	0	425	2,272
2047	0	0	2,171	2,171	54	278	0	332	1,839
2048	0	0	1,284	1,284	32	159	0	190	1,094
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	338,082	338,082	11,119	78,521	0	89,639	248,443
NPV	0	0	119,016	119,016	5,360	40,187	0	45,547	73,469

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 2.613

PROGRAM: **Interruptible DR** **IRRSVC**

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)
2020	0	0	0	0	589	0	589	-589
2021	0	0	0	0	489	0	489	-489
2022	0	0	0	0	371	0	371	-371
2023	0	0	0	0	440	0	440	-440
2024	0	0	0	0	517	0	517	-517
2025	0	0	0	0	331	0	331	-331
2026	0	0	0	0	339	0	339	-339
2027	0	0	13,654	13,654	348	0	348	13,306
2028	0	0	13,729	13,729	357	0	357	13,373
2029	0	0	18,970	18,970	365	0	365	18,605
2030	0	0	19,135	19,135	375	0	375	18,760
2031	0	0	19,301	19,301	384	0	384	18,918
2032	0	0	15,081	15,081	394	0	394	14,688
2033	0	0	16,390	16,390	403	0	403	15,986
2034	0	0	16,717	16,717	413	0	413	16,303
2035	0	0	21,305	21,305	424	0	424	20,881
2036	0	0	21,485	21,485	434	0	434	21,051
2037	0	0	17,741	17,741	445	0	445	17,295
2038	0	0	18,097	18,097	456	0	456	17,641
2039	0	0	18,201	18,201	468	0	468	17,734
2040	0	0	18,833	18,833	479	0	479	18,354
2041	0	0	19,214	19,214	491	0	491	18,722
2042	0	0	19,323	19,323	504	0	504	18,819
2043	0	0	20,000	20,000	516	0	516	19,483
2044	0	0	20,700	20,700	529	0	529	20,171
2045	0	0	4,053	4,053	103	0	103	3,951
2046	0	0	2,697	2,697	68	0	68	2,629
2047	0	0	2,171	2,171	54	0	54	2,117
2048	0	0	1,284	1,284	32	0	32	1,253
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	338,082	338,082	11,119	0	11,119	326,964
NPV	0	0	119,016	119,016	5,360	0	5,360	113,656

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 22.205

PROGRAM: **Interruptible DR** **IRRSVC**

Participant Test

	BENEFITS				COSTS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	SAVINGS IN PARTICIPANT'S BILL $(000)	INCENTIVE PAYMENTS $(000)	OTHER PARTICIPANT'S BENEFITS $(000)	**TOTAL BENEFITS** $(000)	PARTICIPANT'S COST $(000)	**TOTAL COSTS** $(000)	**NET BENEFITS** $(000)
2020	0	4,802	0	4,802	0	0	4,802
2021	0	5,202	0	5,202	0	0	5,202
2022	0	2,661	0	2,661	0	0	2,661
2023	0	2,780	0	2,780	0	0	2,780
2024	0	2,939	0	2,939	0	0	2,939
2025	0	2,939	0	2,939	0	0	2,939
2026	0	2,939	0	2,939	0	0	2,939
2027	0	2,939	0	2,939	0	0	2,939
2028	0	2,939	0	2,939	0	0	2,939
2029	0	2,939	0	2,939	0	0	2,939
2030	0	2,939	0	2,939	0	0	2,939
2031	0	2,939	0	2,939	0	0	2,939
2032	0	2,939	0	2,939	0	0	2,939
2033	0	2,939	0	2,939	0	0	2,939
2034	0	2,939	0	2,939	0	0	2,939
2035	0	2,939	0	2,939	0	0	2,939
2036	0	2,939	0	2,939	0	0	2,939
2037	0	2,939	0	2,939	0	0	2,939
2038	0	2,939	0	2,939	0	0	2,939
2039	0	2,939	0	2,939	0	0	2,939
2040	0	2,939	0	2,939	0	0	2,939
2041	0	2,939	0	2,939	0	0	2,939
2042	0	2,939	0	2,939	0	0	2,939
2043	0	2,939	0	2,939	0	0	2,939
2044	0	2,939	0	2,939	0	0	2,939
2045	0	556	0	556	0	0	556
2046	0	357	0	357	0	0	357
2047	0	278	0	278	0	0	278
2048	0	159	0	159	0	0	159
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	0	78,521	0	78,521	0	0	78,521
NPV	0	40,187	0	40,187	0	0	40,187

Utility Discount Rate = 7.10%

Benefit Cost Ratio: 9999

PROGRAM: **Curtailable DR** **PWRSHR**

Rate Impact Measure (RIM) Test

	BENEFITS				COSTS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D CAP. COSTS	AVOIDED GEN. CAP. COSTS	**TOTAL BENEFITS**	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	**TOTAL COSTS**	**NET BENEFITS**
YEAR	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)	$(000)
2020	0	0	0	0	2	30	0	32	-32
2021	0	0	0	0	2	30	0	32	-32
2022	0	0	0	0	4	30	0	34	-34
2023	0	0	0	0	4	30	0	34	-34
2024	0	0	0	0	6	45	0	51	-51
2025	0	0	0	0	6	45	0	51	-51
2026	0	0	0	0	6	45	0	51	-51
2027	0	0	277	277	6	45	0	51	226
2028	0	0	278	278	6	45	0	51	228
2029	0	0	385	385	6	45	0	51	334
2030	0	0	388	388	6	45	0	51	337
2031	0	0	391	391	6	45	0	51	340
2032	0	0	306	306	6	45	0	51	255
2033	0	0	332	332	6	45	0	51	281
2034	0	0	339	339	6	45	0	51	288
2035	0	0	432	432	6	45	0	51	381
2036	0	0	436	436	6	45	0	51	385
2037	0	0	360	360	6	45	0	51	309
2038	0	0	367	367	6	45	0	51	316
2039	0	0	369	369	6	45	0	51	318
2040	0	0	382	382	6	45	0	51	331
2041	0	0	389	389	6	45	0	51	339
2042	0	0	392	392	6	45	0	51	341
2043	0	0	405	405	6	45	0	51	355
2044	0	0	420	420	6	45	0	51	369
2045	0	0	290	290	4	30	0	34	256
2046	0	0	300	300	4	30	0	34	266
2047	0	0	155	155	2	15	0	17	138
2048	0	0	161	161	2	15	0	17	144
2049	0	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	7,551	7,551	154	1,146	0	1,300	6,251
NPV	0	0	2,528	2,528	67	514	0	580	1,948

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 4.357

PROGRAM: **Curtailable DR** **PWRSHR**

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)
2020	0	0	0	0	2	0	2	-2
2021	0	0	0	0	2	0	2	-2
2022	0	0	0	0	4	0	4	-4
2023	0	0	0	0	4	0	4	-4
2024	0	0	0	0	6	0	6	-6
2025	0	0	0	0	6	0	6	-6
2026	0	0	0	0	6	0	6	-6
2027	0	0	277	277	6	0	6	271
2028	0	0	278	278	6	0	6	272
2029	0	0	385	385	6	0	6	378
2030	0	0	388	388	6	0	6	382
2031	0	0	391	391	6	0	6	385
2032	0	0	306	306	6	0	6	300
2033	0	0	332	332	6	0	6	326
2034	0	0	339	339	6	0	6	333
2035	0	0	432	432	6	0	6	426
2036	0	0	436	436	6	0	6	429
2037	0	0	360	360	6	0	6	353
2038	0	0	367	367	6	0	6	361
2039	0	0	369	369	6	0	6	363
2040	0	0	382	382	6	0	6	376
2041	0	0	389	389	6	0	6	383
2042	0	0	392	392	6	0	6	386
2043	0	0	405	405	6	0	6	399
2044	0	0	420	420	6	0	6	413
2045	0	0	290	290	4	0	4	285
2046	0	0	300	300	4	0	4	296
2047	0	0	155	155	2	0	2	153
2048	0	0	161	161	2	0	2	158
2049	0	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0	0
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
NOMINAL	0	0	7,551	7,551	154	0	154	7,397
NPV	0	0	2,528	2,528	67	0	67	2,461

Utility Discount Rate = 7.10%

Benefit Cost Ratio = 37.928

PROGRAM: **Curtailable DR** **PWRSHR**

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)
2020	0	30	0	30	0	0	30
2021	0	30	0	30	0	0	30
2022	0	30	0	30	0	0	30
2023	0	30	0	30	0	0	30
2024	0	45	0	45	0	0	45
2025	0	45	0	45	0	0	45
2026	0	45	0	45	0	0	45
2027	0	45	0	45	0	0	45
2028	0	45	0	45	0	0	45
2029	0	45	0	45	0	0	45
2030	0	45	0	45	0	0	45
2031	0	45	0	45	0	0	45
2032	0	45	0	45	0	0	45
2033	0	45	0	45	0	0	45
2034	0	45	0	45	0	0	45
2035	0	45	0	45	0	0	45
2036	0	45	0	45	0	0	45
2037	0	45	0	45	0	0	45
2038	0	45	0	45	0	0	45
2039	0	45	0	45	0	0	45
2040	0	45	0	45	0	0	45
2041	0	45	0	45	0	0	45
2042	0	45	0	45	0	0	45
2043	0	45	0	45	0	0	45
2044	0	45	0	45	0	0	45
2045	0	30	0	30	0	0	30
2046	0	30	0	30	0	0	30
2047	0	15	0	15	0	0	15
2048	0	15	0	15	0	0	15
2049	0	0	0	0	0	0	0
2050	0	0	0	0	0	0	0
2051	0	0	0	0	0	0	0
2052	0	0	0	0	0	0	0
2053	0	0	0	0	0	0	0
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
NOMINAL	0	1,146	0	1,146	0	0	1,146
NPV	0	514	0	514	0	0	514

Utility Discount Rate = 7.10%

Benefit Cost Ratio: 9999