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August 6, 2021

**-VIA ELECTRONIC FILING-**

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

**RE: Docket No. 2021\_\_\_\_\_**  
**Petition of Florida Power & Light Company (“FPL”) for Approval to Integrate Demand-Side Management Plans and Approval of Regulatory Asset**

Dear Mr. Teitzman:

Please find attached Petition of FPL for Approval to Integrate Demand-Side Management (“DSM”) Plans and Approval of Regulatory Asset. Also attached are the following:

- Attachment A to the Petition – FPL Existing DSM Plan 2020-2024
- Attachment B to the Petition – Gulf Power Company Existing DSM Plan 2020-2024
- Attachment C to the Petition – Index of Existing and Proposed DSM Plans and Programs
- Attachment D to the Petition – FPL Integrated DSM Plan 2022-2024
  - Appendix A – Discontinued Programs
  - Appendix B – Program-Level Cost-Effectiveness Analyses
- Attachment E to the Petition – FPL Integrated DSM Plan 2022-2024 – Program Standards
  - Residential Air Conditioning
  - Residential Ceiling Insulation
  - Residential Low Income

If there are any questions, please contact me at (561) 304-5662.

Sincerely,

/s/ William P. Cox

William P. Cox  
Senior Attorney  
Fla. Bar No. 00093531

Enclosures  
Florida Power & Light Company

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

Petition of Florida Power & Light Company for Approval to Integrate Demand-Side Management Plans and Approval of Regulatory Asset

Docket No. 2021\_\_\_\_\_-EI

Filed: August 6, 2021

**PETITION OF FLORIDA POWER & LIGHT COMPANY  
FOR APPROVAL TO INTEGRATE 2020-2024 DEMAND-SIDE MANAGEMENT  
PLANS AND APPROVAL OF REGULATORY ASSET**

**I. INTRODUCTION**

Florida Power & Light Company (“FPL”), on behalf of FPL and Florida Power & Light Company d/b/a/ Gulf Power Company (“Gulf”),<sup>1</sup> hereby files this petition (the “Petition”) requesting approval (1) to combine and integrate the existing FPL 2020-2024 Demand-Side Management (“DSM”) Plan (“FPL DSM Plan”) and Gulf 2020-2024 DSM Plan (“Gulf DSM Plan”), as provided in Attachments A and B, into a single DSM plan (“Integrated DSM Plan”), effective January 1, 2022, as provided in Attachment D, (2) to create a regulatory asset associated with Gulf’s Energy Select DSM program, and (3) to make minor modifications to the current FPL DSM Plan and Standards in order to meet the ongoing needs of current Gulf system customers consistent with the integration of the FPL and Gulf DSM plans into a single plan. This request is made subject to and contingent upon the Florida Public Service Commission’s (“Commission”) approval of FPL’s pending request in Docket No. 20210015-EI to consolidate and unify the base rates of FPL and Gulf. Concurrent with this Petition, FPL separately is seeking Commission

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<sup>1</sup> The terms “FPL” and “Gulf” will be used throughout this document. Unless otherwise specifically stated or dictated by context, those references will mean the following:

- In discussing operations or time periods prior to NextEra Energy’s January 1, 2019 acquisition of Gulf, “FPL” and “Gulf” will refer to their pre-acquisition status, when they were legally and operationally separate companies.
- In discussing operations or time periods between the January 1, 2019 acquisition and January 1, 2022 (when consolidation will be essentially complete), “FPL” and “Gulf” will refer to their status as separate ratemaking entities, recognizing that they were merged legally on January 1, 2021 and that consolidation proceeded throughout this period.
- In discussing operations and time periods after January 1, 2022, most references will be only to “FPL” because Gulf will be consolidated into FPL, in the former FPL and Gulf service areas.

approval for a unified Energy Conservation Cost Recovery (“ECCR”) through FPL’s August 6, 2021 ECCR filing. Specifically, FPL is requesting approval of cost recovery for a single Integrated DSM Plan, effective January 1, 2022, covering all FPL and former Gulf utility system areas. Through this request, FPL is not seeking to re-open, re-litigate, or otherwise modify any aspect of the 2019 DSM Goals proceeding in Docket Nos. 20190015-EG and 20190016-EG. Rather, FPL herein seeks to integrate the FPL and Gulf DSM Plans if and when the Commission approves the unification of FPL and Gulf’s base rates. This Integrated DSM Plan meets the combined FPL and Gulf 2022-2024 Goals (additive) through the incorporation of the Gulf Goals into the current FPL DSM Plan, the elimination and sunseting of the current Gulf DSM Plan, and relevant modifications of the current FPL DSM Plan to reflect a single Integrated DSM Plan. An index is provided in Attachment C that lists the location of each program in the existing Gulf and FPL DSM Plans and proposed Integrated DSM Plan as well as any changes in the programs, as applicable. In support of this Petition, FPL states as follows:

1. The Petitioner is:

Florida Power & Light Company  
700 Universe Boulevard  
Juno Beach, FL 33408

2. FPL is a corporation organized and existing under the laws of the State of Florida and is an electric utility as defined in Sections 366.02(2) and 366.96, Florida Statutes (“F.S.”). On January 1, 2021, FPL and Gulf were legally merged with FPL being the surviving legal entity. Although legally merged, FPL and Gulf are currently separate ratemaking entities.

3. All pleadings, motions, notices, orders or other documents required to be served upon the Petitioner or filed by any party to this proceeding should be served upon the following individuals:

Kenneth A. Hoffman  
Vice President, Regulatory Affairs  
Florida Power & Light Company  
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4. This Petition is being filed consistent with Rule 28-106.201, Florida Administrative Code (“F.A.C.”). The agency affected is the Commission, located at 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399. This case does not involve reversal or modification of an agency decision or an agency’s proposed action. Therefore, subparagraph (c) and portions of subparagraphs (b), (e), (f) and (g) of subsection (2) of Rule 28-106.201, F.A.C., are not applicable to this Petition. In compliance with subparagraph (d) of Rule 28-106.201, F.A.C., FPL states that it is not known which, if any, of the issues of material fact set forth in the body of this Petition may be disputed by any others who may plan to participate in this proceeding. The discussion below demonstrates how the Petitioner’s substantial interests will be affected by the agency determination.

## **II. BACKGROUND AND OVERVIEW**

5. Rule 25-17.0021, F.A.C., requires each utility to file for Commission approval a demand-side management plan designed to meet the utility’s approved goals, and any modification to such a plan can only be done on a prospective basis. Section 366.82(7), Fla. Stat., requires Commission approval of any modification or discontinuance of a plan for a utility previously approved by the Commission.

6. On August 28, 2020, the Commission approved separate DSM Plans for FPL and Gulf (Order No. PSC-2020-0291-CO-EG) to meet their respective 2020-2024 combined Summer

MW, Winter MW and GWh Goals for the Residential and Business sectors established by the Commission (Order No. PSC-2019-0509-FOF-EG).

7. On January 1, 2021, Gulf was legally merged with and into FPL, with FPL being the surviving entity. All of Gulf's existing obligations, rights, privileges, immunities, powers, and purposes continue and, by operation of law, are vested in FPL.<sup>2</sup>

8. Although legally merged, FPL and Gulf currently remain separate ratemaking entities and continue to maintain separate books and records. Essentially, FPL and Gulf will be operationally and functionally integrated by January 2022.

9. Consistent with the consolidation of the FPL and Gulf operations, on March 12, 2021, FPL filed a petition for a base rate increase that reflects a consolidated cost of service and provides for unified rates that apply to all customers throughout the former FPL and Gulf service areas. FPL's request for unified rates is currently pending before the Commission in Docket No. 20210015-EI. If approved, FPL and Gulf will be fully merged with and into FPL from a state regulatory perspective, and Gulf will cease to exist as a separate operational and ratemaking entity.

10. As a result of FPL and Gulf's legal merger on January 1, 2021, and FPL's pending petition for approval to unify FPL and Gulf rates effective January 1, 2022, FPL is submitting this Integrated DSM Plan to implement the approved 2022-2024 Goals on a combined basis, effective January 1, 2022, by modifying the current FPL DSM plan and discontinuing the current Gulf DSM Plan and sunsetting certain Gulf DSM programs.

11. By Order No. PSC-2019-0509-FOF-EG, the Commission established FPL and Gulf's 2020-2024 DSM Goals ordering the continuation of those Goals approved in the 2014 Goals

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<sup>2</sup> Pursuant to Section 605.1026(1)(e), F.S., except as otherwise provided by law or the plan of merger, all the rights, privileges, immunities, powers, and purposes of the merging entity vest in the surviving entity.

proceeding (Order No. PSC-14-0696-FOF-EU). The goals set in that 2014 proceeding were based on FPL and Gulf's full Achievable Potential projection (*i.e.*, not limited by FPL or Gulf's actual resource needs) comprised of measures that were cost-effective in 2014 pursuant to the Rate Impact Measure ("RIM") and Participant cost-effectiveness screening tests, but not necessarily cost-effective in 2019. Subsequently, in 2020, the Commission approved DSM Plans for FPL and Gulf implementing those goals. See Order No. PSC-2020-0274-PAA-EG, issued August 3, 2020. The Integrated DSM Plan proposed here meets the combined FPL and Gulf 2022-2024 Goals by merging the two DSM Plans and integrating or consolidating the FPL and Gulf programs into one set of DSM programs that would apply throughout the FPL and former Gulf service areas, continuing most of the existing programs with some minor modifications.

12. The Integrated DSM Plan represents a comprehensive portfolio of 16 DSM programs offering a wide variety of programs for FPL customers. It includes six Residential programs, eight Business programs, a Conservation Research and Development (CRD) program for evaluating new technologies, and a Cogeneration and Small Power Production program.

13. The Integrated DSM Plan includes FPL's Residential Energy Survey and Business Energy Evaluation education programs which have been foundational components of FPL and Gulf's DSM portfolio for decades with over 4 million surveys having been performed since inception. The surveys are offered through online, phone and in-person channels and provide education on actions customers can take to reduce their electricity cost by participating in DSM programs and also by taking actions and implementing measures, many at low or no cost. FPL has recently launched new industry-leading versions of both residential and business surveys which leverage customers' hourly meter data and specialized algorithms to provide enhanced individually tailored savings suggestions.

14. The Integrated DSM Plan, provided in Attachment D to this Petition, contains three Sections and two Appendices: (1) Section I – Overview of the Integrated DSM Plan summarizing how the Plan will achieve FPL and Gulf’s combined Goals, the programs and measures, and program cost-effectiveness; (2) Section II – Detailed description of the DSM Programs; (3) Section III – Projections for the 2022-2024 Goals period of customers, incremental participation and penetration, and kW and kWh savings at the meter and the generator; (4) Appendix A – Discontinued programs of Gulf that would be eliminated or sunset upon Commission approval of the Integrated DSM Plan; and (5) Appendix B – Program-level cost-effectiveness analyses.

### **III. DSM PLAN INTEGRATION**

15. Consistent with the consolidation of the FPL and Gulf operations and request for unified rates, FPL requests to integrate the current FPL and Gulf DSM Plans into a single integrated FPL DSM Plan with relevant modifications and discontinue the current Gulf DSM Plan.

16. The integrated FPL DSM Plan, if approved, would align most Gulf programs with FPL with minor modifications to accommodate differences in local baseline standards for Northwest Florida and to expand customer availability. First, the Residential Air Conditioning program (and associated standard) is modified to include heat pump, electric-driven air conditioning units in addition to straight-cool, electric-driven units and expand availability beyond single family detached premises. Heat pump units are widely used in Florida’s northern regions, and FPL would like to continue the provision of these units in the Gulf utility system area as Gulf has done historically. Second, the Residential Ceiling Insulation program is modified to simplify customer qualification. Finally, the Residential Low Income program is modified to accommodate continuation of the model by which this program is currently delivered in the Gulf area. The modified standards for these programs are found in Attachment E. The Integrated DSM Plan

brings new programs to customers in the Gulf area. FPL's Residential Buildsmart<sup>®</sup>, Commercial Demand Response ("CDR") and Business Lighting programs will be expanded to customers in the Gulf area. And the Business HVAC program will offer the Thermal Energy Storage ("TES") measure to former Gulf customers. FPL's integrated DSM Plan would sunset two existing Gulf programs. Gulf's legacy Energy Select and Residential Pool Pump programs would be eliminated in the Integrated DSM Plan. The Integrated Plan is designed to achieve the combined Residential Summer and Winter KW savings through FPL's Residential On Call program. The Pool pump program is being eliminated due to recent changes in U.S. Department of Energy ("DOE") pool pump efficiency standards that effectively change the baseline to a higher efficiency pump motor. Gulf's legacy Energy Select program is being eliminated for the reasons discussed below in Section IV of this Petition.

17. Recognizing that the Commission's disposition of unified FPL base rates is currently pending, FPL respectfully requests that the Commission approve the Integrated DSM Plan, as set forth in Attachment D, subject to and contingent upon the Commission's approval of FPL's pending request for unified rates in Docket No. 20210015-EI. If FPL's request for unified rates is approved, the Integrated DSM Plan would become effective upon the effective date of the Commission-approved unified rates. In the event the Commission declines to approve unified rates, the existing FPL DSM Plan and Gulf DSM Plan would remain effective until the next DSM Plans are submitted and approved by the Commission.

#### **IV. PROPOSED REGULATORY ACCOUNTING TREATMENT FOR RETIRED ENERGY SELECT PROGRAM ASSETS**

18. Gulf's legacy residential price responsive load management DSM program, Energy Select, is being discontinued as a part of the Integrated DSM Plan due to limited equipment availability, decreasing customer interest, and to more cost-effectively achieve the integrated



residential DSM goals.

19. Gulf has offered the Energy Select program in its DSM Plan since 2000. When initially launched, the availability of in-home energy management equipment like programmable thermostats was very limited, and Energy Select (also previously known as Good Cents Select) offered customers a new technology to help them save energy. As other innovations in home energy management equipment like smart thermostats and voice-controlled appliances have become more widely adopted, customer interest in Energy Select has decreased. In order to keep the program viable through other changes, such as reduced use of landline telephones (which were initially required for participation in the program), Gulf adopted newer technology platforms that relied on customers' wired internet service. Gulf has implemented new devices and in home wireless technologies as these markets have evolved, but each new device or technology platform adoption has required extensive development and integration work to seamlessly incorporate the applicable 4-tiered Residential Service Variable Pricing ("RSVP") rate that is associated with the program. The currently utilized programmable thermostat is no longer in production limiting the availability for new installations to the existing inventory on hand.

20. Although studies have indicated a reduction in overall energy use by customers in the program, average customer savings associated with the variable rate has decreased as many customers no longer actively manage their energy usage in accordance with the variable rate price tiers. Recent rate analysis indicates 24% of customers enrolled in the program would actually save by switching to Gulf's standard residential rate assuming their energy usage remains the same. Further, the high capital costs associated with the in-home devices, installation, and platform licensing combined with ongoing maintenance are no longer cost-effective for the general body of customers at today's system costs. For these reasons, the Energy Select program is no longer

included in the Integrated DSM Plan.

21. FPL proposes to reduce the negative impact of non-cost-effective programs, such as Energy Select, to achieve the combined Residential demand goals with its existing residential load control program, the Residential On Call (“ROC”) program. When accounting for new participants only, ROC currently has a RIM ratio of 0.692<sup>3</sup> versus Energy Select’s RIM ratio of 0.246. ROC allows FPL to control customer loads by turning off customers’ appliances consistent with the applicable tariff during capacity constraints, system emergencies, or for system frequency regulation, using FPL-installed equipment connected to eligible customer-selected equipment (*i.e.*, central air conditioning, central electric heating, electric water heaters, and pool pumps).

22. Since Gulf’s legacy Energy Select program would be eliminated with approval of the Integrated DSM Plan, capital assets associated with that program would be retired on December 31, 2021. FPL proposes to record the unrecovered investment in the to-be-retired Energy Select assets as a regulatory asset in FERC account 182.2, Unrecovered plant and regulatory study costs, with recovery to take place through the ECCR clause. Recovery through the ECCR clause is appropriate because that is where Gulf is currently recovering capital costs associated with the Energy Select program. FPL proposes to amortize the regulatory asset over the remaining life of the Energy Select program assets (approximately 12 years) on a straight-line basis beginning January 1, 2022 with a return on the unamortized, unrecovered balance at the Company’s overall weighted average cost of capital that is used for clause investments. The unrecovered balance of the Energy Select assets at the date of their future retirement on December 31, 2021 equates to approximately \$22 million, which includes investment made for

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<sup>3</sup> In Table 3 of the attached Integrated DSM Plan, ROC is projected to have a RIM ratio of 1.698 when accounting for both new and existing participants. This perspective is not applicable to the Energy Select program because there are no ongoing payments to existing participants.

programmable communicating thermostats, load control relays (water heater and pool pump), in-home communications equipment, and licensing.

## **V. CONCLUSION**

23. For the foregoing reasons, FPL is seeking approval to integrate current FPL and Gulf DSM Plans into a single DSM Plan thereby terminating the Gulf DSM Plan, and to adopt certain limited modifications to the integrated DSM Plan in order to meet the ongoing needs of current Gulf system customers consistent with the integration of the two DSM plans, subject to and contingent upon the Commission's approval of FPL's pending request for unified rates in Docket No. 20210015-EI. FPL also seeks approval of the proposed regulatory accounting treatment for the retired Energy Select program assets through the creation of a regulatory asset and recovery through the ECCR clause.

**WHEREFORE**, FPL respectfully requests that the Commission:

- (a) Schedule this matter for an agenda conference;
- (b) Limit the scope of this proceeding to the approval of the Integrated DSM Plan and termination of the Gulf DSM plan and approval of associated regulatory accounting treatment, creation of a regulatory asset for unrecovered investment for the retired Gulf Energy Select program, and recovery of the regulatory asset through the ECCR clause;
- (c) Contingent upon the Commission's approval of FPL's pending request for unified rates in Docket No. 20210015-EI, approve the Integrated DSM Plan and associated updated Standards, without modification, as provided in Attachments D and E, and approve the requested regulatory accounting treatment, creation of a regulatory asset for unrecovered investment for the retired Energy Select program, and recovery of the regulatory asset through the ECCR clause; and

(d) In the event that the Commission declines to approve FPL's pending request for unified rates in Docket No. 20210015-EI, affirm that the Commission's approval of the existing FPL DSM Plan and existing Gulf DSM Plan will continue unless and until new DSM Plans are filed with and approved by the Commission.

Respectfully submitted this 6th day of August, 2021,

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By: s/William P. Cox

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**ATTACHMENT A**

**Florida Power & Light Company  
Existing Demand-Side Management Plan 2020-2024**

**FLORIDA POWER & LIGHT COMPANY  
2020-2024 DEMAND-SIDE MANAGEMENT PLAN**

**BEFORE THE FLORIDA PUBLIC SERVICE  
COMMISSION**

**FEBRUARY 24, 2020**

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>2</b>
<b>SECTION I – OVERVIEW .....</b>	<b>5</b>
<b>A. COMPOSITION OF FPL’S 2020 DSM PLAN .....</b>	<b>5</b>
<b>B. COST-EFFECTIVENESS SCREENING ANALYSIS .....</b>	<b>7</b>
<b>C. PROGRAM STANDARDS.....</b>	<b>8</b>
<b>SECTION II – DSM PROGRAM DESCRIPTIONS.....</b>	<b>9</b>
<b>RESIDENTIAL SECTOR PROGRAM PORTFOLIO .....</b>	<b>11</b>
<i>Residential Energy Survey.....</i>	<i>12</i>
<i>Residential Load Management (On Call®).....</i>	<i>13</i>
<i>Residential Air Conditioning .....</i>	<i>14</i>
<i>Residential New Construction (BuildSmart®).....</i>	<i>15</i>
<i>Residential Ceiling Insulation .....</i>	<i>16</i>
<i>Residential Low Income.....</i>	<i>17</i>
<b>BUSINESS SECTOR PROGRAM PORTFOLIO .....</b>	<b>19</b>
<i>Business Energy Evaluation (BEE) .....</i>	<i>20</i>
<i>Business On Call®.....</i>	<i>21</i>
<i>Commercial/Industrial Demand Reduction (CDR).....</i>	<i>22</i>
<i>Commercial/Industrial Load Control (CILC).....</i>	<i>23</i>
<i>Business Heating, Ventilating &amp; Air Conditioning (HVAC).....</i>	<i>24</i>
<i>Business Lighting.....</i>	<i>25</i>
<i>Business Custom Incentive (BCI) .....</i>	<i>26</i>
<b>OTHER PROGRAMS.....</b>	<b>27</b>
<i>Conservation Research and Development (CRD) .....</i>	<i>28</i>
<i>Cogeneration &amp; Small Power Production.....</i>	<i>29</i>
<b>SECTION III – PROGRAM PROJECTIONS .....</b>	<b>30</b>
<b>APPENDIX A – PROGRAM-LEVEL COST-EFFECTIVENESS ANALYSES.....</b>	<b>36</b>

## **INTRODUCTION**

Florida Power & Light Company (FPL) has been delivering cost-effective Demand-Side Management (DSM) programs for more than 40 years. These programs have included customer education, load management and energy efficiency initiatives. FPL's DSM efforts through 2019 have resulted in a cumulative Summer peak reduction of 4,870 Megawatts (MW) at the generator and estimated cumulative energy savings of 89,166 Gigawatt Hours (GWh) at the generator. Accounting for reserve margin requirements, FPL's DSM efforts through 2019 have eliminated the need to construct the equivalent of approximately 15 new 400 MW generating units. Over the years, FPL has built one of the largest and most successful DSM programs in the nation and remains committed to continuing to provide a variety of cost-effective DSM programs to FPL's customers.

Pursuant to Florida Administrative Code (F.A.C.) Rule 25-17.0021, FPL is submitting its 2020 DSM Plan designed to meet the annual Summer MW, Winter MW and GWh Goals for the Residential and Business sectors established by the Florida Public Service Commission (Commission) in Order No. PSC-2019-0509-FOF-EG. The Commission established FPL's 2020-2024 DSM Goals ordering the continuation of those Goals approved in the 2014 Goals proceeding (Order No. PSC-2014-0696-FOF-EU). The Goals set in that 2014 proceeding were based on FPL's full Achievable Potential projection (*i.e.*, not limited by FPL's actual resource needs) comprised of measures that were cost-effective at that time pursuant to the Rate Impact Measure (RIM) and Participant cost-effectiveness screening tests. Consistent with the basis for the Commission's 2019 Order, FPL's 2020 DSM Plan to meet those Goals continues all the programs



included in FPL's current DSM Plan<sup>1</sup>. This DSM Plan represents a comprehensive portfolio of 15 DSM programs offering a wide variety of programs for FPL's customers. It includes six Residential programs, seven Business programs, a Conservation Research and Development (CRD) program for evaluating new technologies, and a Cogeneration and Small Power Production program. All of these programs (except Low Income) were previously cost-effective under the RIM and Participant screening tests when approved in the 2015 DSM Plan. However, due to substantially lower FPL system costs and the increased impact of Florida Building Code and federal equipment manufacturing standards (Codes & Standards) only the Residential and Business On Call programs remain cost-effective today. FPL believes in the importance of keeping electric rates as low as possible for its customers. Therefore, continuing these programs, though no longer cost-effective, remains the most cost-efficient approach to achieve the Goals because doing so avoids the start-up costs and ramp-up rates associated with new programs. Furthermore, due to this lack of cost-effectiveness, FPL will cap program participation each year for the Residential and Business sectors individually once their respective MW and GWh Goals have been achieved in order to mitigate the financial impact of the non-cost-effective programs on the general body of customers.

The DSM Plan includes FPL's Residential Energy Survey and Business Energy Evaluation education programs which have been foundational components of FPL's DSM portfolio for decades with over 4 million Surveys having been performed since inception. The Surveys are offered through online, phone and in-person channels and provide education on actions customers can take to reduce their electric cost by participating in FPL's DSM programs and also by taking

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<sup>1</sup> FPL's current DSM Plan, approved by Order No. PSC-15-0331-PAA-EG (consummated by Order No. PSC-15-0384-CO-EG).

actions and implementing measures, many at low or no cost, which are not offered as part of FPL's DSM programs. FPL has recently launched new industry-leading versions of both residential and business Surveys which leverage customers' hourly meter data and specialized algorithms to provide enhanced individually-tailored savings suggestions.

The 2020 DSM Plan contains three Sections and one Appendix.

- **Section I** – Overview of FPL's 2020 DSM Plan summarizing how the Plan will achieve FPL's Goals, the programs and measures, and program cost-effectiveness.
- **Section II** – Detailed description of the DSM Programs.
- **Section III** – Projections for the five-year Goals period of customers, participation, penetration, and kW and kWh savings at the meter and the generator.
- **Appendix A** – Program-level cost-effectiveness analyses.

## SECTION I – OVERVIEW

### A. Composition of FPL’s 2020 DSM Plan

Table 1 shows the annual Residential and Business Goals for Summer MW, Winter MW and GWh established by Order No. PSC-2019-0509-FOF-EG.

**Table 1 – Annual Residential and Business Goals (at the Generator)**

Year	Summer MW			Winter MW			GWh		
	Residential	Business	Total	Residential	Business	Total	Residential	Business	Total
2020	26.9	26.2	53.1	16.7	16.1	32.8	25.0	28.7	53.7
2021	27.3	26.6	53.9	16.9	16.5	33.4	25.7	30.1	55.8
2022	27.6	27.1	54.7	17.2	16.9	34.1	26.5	31.6	58.1
2023	28.0	27.5	55.5	17.5	17.3	34.8	27.4	33.1	60.5
2024	28.5	28.0	56.5	17.8	17.7	35.5	28.3	34.7	63.0
<b>Total</b>	<b>138.3</b>	<b>135.4</b>	<b>273.7</b>	<b>86.1</b>	<b>84.5</b>	<b>170.6</b>	<b>132.9</b>	<b>158.2</b>	<b>291.1</b>

To achieve the annual Residential and Business DSM Goals, FPL will continue its current comprehensive portfolio of DSM programs. The 2020 DSM Plan’s programs and associated measures are shown in Table 2 with detailed descriptions of each provided in Section II. All these programs are included in FPL’s current DSM Plan. As with prior DSM Plans, FPL anticipates that the DSM Plan could change over time due to: changes in market conditions or FPL system needs; program experience; measurement and evaluation; customer research; or new technology options which may become available. Section III demonstrates how the 2020 DSM Plan meets the DSM Goals in Table 1 above. FPL does not count kW or kWh savings for the educational programs (*i.e.*, Residential Energy Survey and Business Energy Evaluation), the CRD program, or the Cogeneration and Small Power Production program.

**Table 2 – Residential and Business Programs & Measures <sup>2</sup>**

<b>Programs</b>	<b>Measures (if multiple per Program)</b>
<b>Residential Energy Survey</b>	Home Energy Survey (HES)
	Online Home Energy Survey (OHES)
	Phone Energy Survey (PES)
<b>Residential Load Management (On Call<sup>®</sup>)</b>	
<b>Residential Air Conditioning</b>	
<b>Residential New Construction (BuildSmart<sup>®</sup>)</b>	
<b>Residential Ceiling Insulation</b>	
<b>Residential Low Income</b>	Energy Survey
	Weatherization (Caulking/Stripping/Door Sweeps)
	Duct Testing & Repair
	Air Conditioning Unit Maintenance
	Air Conditioning Outdoor Coil Cleaning
	Faucet Aerators
	Low-Flow Showerhead
Water Heater Pipe Wrap	
<b>Business Energy Evaluation (BEE)</b>	Field BEE
	Online BEE
	Phone BEE
<b>Business On Call<sup>®</sup></b>	
<b>Commercial/Industrial Demand Reduction</b>	
<b>Commercial/Industrial Load Control (Closed)</b>	
<b>Business Heating, Ventilating, &amp; Air Conditioning (HVAC)</b>	Chillers
	Thermal Energy Storage (TES)
	Split/Packaged Direct Expansion (DX)
	Demand Control Ventilation (DCV)
<b>Business Lighting</b>	Energy Recovery Ventilation (ERV)
	Compact Fluorescent Lamps (CFL)
	Pulse Start Metal Halide (PSMH) Lighting
	Premium Linear Fluorescent Lamps with High Efficiency Electronic Ballasts
<b>Business Custom Incentive (BCI)</b>	High Bay Light Emitting Diodes (LED)
<b>Conservation Research &amp; Development (CRD)</b>	
<b>Cogeneration &amp; Small Power Production</b>	

<sup>2</sup> Measures listed only when there are multiple measures associated with a program.

## **B. Cost-Effectiveness Screening Analysis**

The Commission-established cost-effectiveness methodology required by Rule 25-17.008, F.A.C. to determine the cost-effectiveness of DSM programs includes the following three screening tests: (a) the RIM test; (b) the Total Resource Cost (TRC) test; and (c) the Participant test. The results for each program under the three preliminary screening tests are summarized in Table 3. The individual program cost-effectiveness screening analyses can be found in Appendix A.

**Table 3 – Cost-Effectiveness Screening Test Results**<sup>3</sup>

<b>Program</b>	<b>RIM</b>	<b>TRC</b>	<b>Participant</b>
<b>Residential Sector Programs</b>			
Residential Load Management (On Call)	1.82	3.64	Infinite
Residential Air Conditioning	0.65	0.55	1.06
Residential New Construction (BuildSmart)	0.57	0.56	1.28
Residential Ceiling Insulation	0.70	1.34	2.50
Residential Low Income	0.53	2.68	Infinite
<b>Business Sector Programs</b>			
Business On Call	1.19	3.23	Infinite
Commercial/Industrial Demand Reduction (CDR)	1.36	49.26	Infinite
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.68	1.17	1.82
Business Lighting	0.62	2.16	4.04

FPL used the same system assumptions in these cost-effectiveness screening tests as were used for the analyses in the most recent DSM Goals proceeding (Docket No. 20190015-EG). DSM program costs are based on 2019 actuals. Incentives are per FPL’s current Program Standards with the exception of the Commercial/Industrial Demand Reduction (CDR) program which reflects the proposed monthly bill credit reduction beginning in 2022 (without this reduction, the RIM ratio would drop to 0.97).

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<sup>3</sup> “Infinite” means that the participant has no out-of-pocket costs.

All of these programs (except Residential Low Income) were previously cost-effective under the RIM and Participant screening tests when approved in the 2015 DSM Plan proceeding. But most are no longer cost-effective today due to substantially lower FPL system costs and the increased impact of Codes & Standards. As in 2015, FPL's Low Income program includes measures that do not pass the RIM screening test and some that have customer payback periods of less than two years. The DSM Plan retains these types of measures to: assist low income customers; in order to achieve the 2020-2024 Residential Goals; and in response to the emphasis placed by the Commission on this customer segment in the 2014 DSM Goals Order (Order No. PSC-2014-0696-FOF-EU). Cost-effectiveness screening was not performed for the previously-mentioned educational, CRD and Cogeneration & Small Power Production programs (for which FPL does not count kW or kWh savings), the Commercial/Industrial Load Control program (which is closed to new participants), and the Business Custom Incentive program.

### **C. Program Standards**

FPL will file Program Standards for all programs within the timeframe specified by the Commission in the Final Order approving FPL's 2020 DSM Plan. The Program Standards will contain the specifics regarding each program's operations. These will be subject to periodic review and may change over time based on factors such as, but not limited to: changes in Codes & Standards; technological advances; operational needs; program results; and technology application assumptions. All program participants and contractors must comply with the requirements specified in the Program Standards.

## **SECTION II – DSM PROGRAM DESCRIPTIONS**

FPL's 2020 DSM Plan incorporates a wide array of programs. It is comprised of 15 DSM programs; six Residential programs, seven Business programs, a CRD program for evaluating new technologies, and a Cogeneration and Small Power Production program. All these programs are included in FPL's current DSM Plan. FPL's comprehensive DSM portfolio recognizes the importance of keeping electric rates low for all of FPL's customers while still meeting the established Goals.

This section includes summaries for each of the programs and provides a general description of the individual programs' objectives, features and administration. Additional specifics on each program and its operations will be provided in FPL's Program Standards to be filed after the 2020 DSM Plan is approved. The primary objective of all of the programs included in FPL's portfolio is to reduce growth of coincident peak demand and energy consumption. The portfolio addresses the major drivers of a customer's energy consumption, and its program mix is designed to address the diversity of FPL's customer types and their needs through providing financial incentives and investing in customer awareness through education.

**Post-Installation Verification** – Verification will be conducted for all programs where FPL provides a financial incentive. In order to ensure compliance with Program Standards, FPL will, at a minimum, perform verifications of the installations as required by Rule 25-17.003(10), F.A.C. For certain programs, FPL will verify 100% of the installations (*e.g.*, Commercial/Industrial Demand Reduction, Business Custom Incentive). Participating customers are required to provide FPL access to perform the verifications.

**Definitions** – Below are definitions of certain terms used throughout the program summaries.

- **Last Modified** – month and year of the last Commission-approved program modification.
- **Existing Customers** – FPL customers of record who have a certificate of occupancy (CO).
- **New Construction Customers** – FPL customers of record who do not have a CO.
- **All Customers** – Both Existing and New Construction customers.
- **Maximum Financial Incentive** – Unless otherwise indicated, these represent the current incentives per FPL’s Program Standards. These were determined for the 2015 DSM Plan to be the maximum or less that could be paid while still passing both the RIM and Participant tests, including having a payback not less than two years of the participant’s incremental cost. For most programs, these incentives are no longer cost-effective under current conditions, but are necessary to generate the participation levels needed to achieve the approved Goals. For programs/measures where there are multiple incentive levels depending on one or more parameters (*e.g.*, rate classes, building types), the value shown represents the weighted average of the various incentive amounts.
- **“Customer” (for Demand/Energy Savings and Financial Incentives values)** – Represents a single premise for Residential programs. Represents one Summer kW of demand reduction for Business programs. This method has been used by FPL for many years to account for and normalize the wide diversity in sizes, types and energy usages of businesses.



**RESIDENTIAL SECTOR PROGRAM PORTFOLIO**

## **Residential Energy Survey**

**Start Date** – January 1981

**Last Modified** – January 2006

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Residential programs. Surveys are delivered through three channels:

- (1) Home Energy Survey (HES) – performed by an FPL representative at the customer's home
- (2) Online Home Energy Survey (OHES) – performed by the customer using FPL's online system
- (3) Phone Energy Survey (PES) – performed by an FPL representative using FPL's online system

**Eligibility** – All FPL residential customers.

**Participant Financial Incentive** – Free to the participant. Residential Energy Surveys can identify opportunities for customers to receive incentives through other FPL Residential programs.

**Marketing Channels** – Television, radio and digital and print media.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Residential Load Management (On Call®)**

**Start Date** – July 1986

**Last Modified** – November 2015

This program allows FPL to turn off customers' appliances consistent with the applicable tariff during capacity constraints, system emergencies or for system frequency regulation. FPL-installed equipment is connected to eligible customer-selected end-use equipment (*i.e.*, central air conditioning, central electric heating, electric water heaters, and pool pumps), allowing FPL to control these loads.

**Eligibility** – FPL residential customers who have eligible end-use equipment. Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill as specified in Tariff Sheet No. 8.217. The credit amount is dependent on the end-use equipment selected by the customer.

**Marketing Channels** – Residential Energy Survey and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with metered data during events and from periodic system tests of participants' appliances.

## **Residential Air Conditioning**

**Start Date** – October 1990

**Last Modified** – November 2015

This program encourages customers to install high-efficiency central air conditioning systems.

**Eligibility** – Existing FPL residential customers occupying single-family detached homes who install a replacement straight cool system.

**Participant Financial Incentive** – \$150 per participant. Provided as a credit toward the installation cost on a customer's invoice from a Participating Independent Contractor (PIC).

**Marketing Channels** – Residential Energy Survey, PICs, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential New Construction (BuildSmart®)**

**Start Date** – February 1996

**Last Modified** – January 2006

This program encourages builders and developers to design and construct new homes in a manner that moves toward ENERGY STAR® qualifications.

**Eligibility** – All builders, developers and owner-builders of a new home in FPL’s service territory. Homes must be single-family detached or single-family attached where each housing unit is separated from its neighbors by a ground-to-roof wall with no housing units above or below. The energy code compliance score for the home must be better than that required by the Florida Building Code as specified in FPL’s Program Standards. Florida Building Commission-approved energy code compliance software will be used for certification.

**Participant Financial Incentive** – \$50 promotional incentive and optional \$75 verification reimbursement per participant. Paid to builders, developers, owner-builders, or their designees.

**Marketing Channels** – FPL personnel, builders, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential Ceiling Insulation**

**Start Date** – October 1981

**Last Modified** – November 2015

This program encourages customers to improve the building envelope's thermal efficiency.

**Eligibility** – Existing FPL residential customers whose homes: (1) were constructed before 1982; (2) have verified below-code insulation; and (3) have whole house central electric air conditioning/heating.

**Participant Financial Incentive** – \$75 to \$190 per participant depending on circumstances. Provided as a credit toward the installation cost on a customer's invoice from a PIC.

**Marketing Channels** – Residential Energy Survey, PICs, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential Low Income**

**Start Date** – March 2005

**Last Modified** – November 2015

This program is specifically designed to assist low income customers. Delivery is provided through two channels. First, is through FPL’s “Power to Save” energy retrofits in selected neighborhoods. FPL will conduct an Energy Survey for each customer and install, as appropriate, measures which address their main areas of energy use: weatherization/infiltration (caulking, weather stripping and door sweeps); air conditioning (duct testing and repair, air conditioning unit maintenance, and outdoor unit coil cleaning); and water heating (low flow showerheads, faucet aerators and pipe wrap). Second, is through state Weatherization Assistance Provider (WAP) agencies to which FPL will provide incentives for certain energy measures as part of the total assistance they provide to their selected low income customers. Several of these measures did not pass the RIM cost-effectiveness screening test and/or the two-year participant payback. However, FPL has retained these types of measures to assist low income customers in order to achieve the 2020-2024 Residential Goals and in response to the emphasis placed by the Commission on this customer segment in the 2014 DSM Goals Order (Order No. PSC-2014-0696-FOF-EU).

**Eligibility** – Existing FPL residential customers who meet certain low income criteria.

- FPL Power to Save – conducted in areas where the majority of customers’ incomes are consistent with WAP qualification requirements and all FPL customers in these areas may participate.
- WAP-delivered – customers who are eligible for financial assistance from federally-funded programs as verified by federal grantees or their designees.

**Participant Financial Incentive** – Participants will receive the measures for free whether provided by FPL or a WAP agency. Incentives will be paid to the WAP agency or its designee for measures which they install. The incentives per participant are:

- Weatherization/Infiltration – \$90
- Air Conditioning: Duct testing & repair – \$60; Unit maintenance – \$80; Outdoor coil cleaning – \$60
- Water Heating: Low flow showerhead – \$30; Faucet aerator – \$10; Pipe wrap – \$40

**Marketing Channels** – FPL personnel, WAP agencies, community-based organizations, faith-based organizations, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with statistical billing analysis.



## **BUSINESS SECTOR PROGRAM PORTFOLIO**

## **Business Energy Evaluation (BEE)**

**Start Date** – October 1990

**Last Modified** – March 2005

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Business programs. There are three delivery channels for the BEE:

- (1) Field BEE – performed by an FPL representative at the customer's facility
- (2) Online BEE – performed by the customer using FPL's online system
- (3) Phone BEE – performed by an FPL representative using FPL's online system

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Free to the participant. The BEE helps to determine which practices are most appropriate for a particular facility and how to qualify for incentives through other FPL Business programs.

**Marketing Channels** – FPL personnel, television, radio, and digital and print media. FPL may also provide BEEs proactively. These channels will also be supported, as appropriate, by promotional activities.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Business On Call**<sup>®</sup>

**Start Date** – June 1995

**Last Modified** – September 2006

This program allows FPL to turn off customers' direct expansion (DX) central electric air conditioning units consistent with the applicable tariff during capacity constraints or system emergencies. FPL-installed equipment is connected to the customer's DX units allowing FPL to control this load.

**Eligibility** – FPL business customers who meet the requirements of Tariff Sheet No. 8.109. Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill as specified in Tariff Sheet No. 8.109. The credit amount is dependent on the tonnage of the customer-selected air conditioning connected to FPL's load management equipment.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with metered data during events and from periodic system tests of participants' equipment.

## **Commercial/Industrial Demand Reduction (CDR)**

**Start Date** – May 2000

**Last Modified** – April 2019

This program allows FPL to control customer-determined loads of 200 kW or greater consistent with the applicable tariff during capacity constraints or system emergencies. FPL equipment is installed at the customer's facility to allow FPL to control customer loads.

**Eligibility** – FPL business customers who meet the requirements of the CDR Rider (Tariff Sheet Nos. 8.680 – 8.685). Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill calculated as specified in the CDR Rider.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

## **Commercial/Industrial Load Control (CILC)**

(Closed to New Participants)

**Start Date** – October 1990

**Last Modified** – April 2019

This program allows FPL to control customer-determined loads of 200 kW or greater consistent with the applicable tariff during capacity constraints or system emergencies. FPL equipment is installed at the customer's facility to allow FPL to control customer loads.

**Eligibility** – This program was closed to new participants December 31, 2000. It remains available only to existing CILC customers who entered into a CILC Agreement as of March 19, 1996 and continue to meet the requirements of the CILC Tariff (Tariff Sheet Nos. 8.650 – 8.659).

**Participant Financial Incentive** – Lower rate for electric service than the otherwise applicable rate as specified in the CILC Tariff.

**Marketing Channels** – Not applicable. This program is closed to new participants.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

## **Business Heating, Ventilating & Air Conditioning (HVAC)**

**Start Date** – February 1990

**Last Modified** – November 2015

This program encourages customers to install high-efficiency HVAC systems. The primary types of eligible HVAC systems include: chillers; split/package DX; demand control ventilation (DCV); energy recovery ventilation (ERV); and thermal energy storage (TES).

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Paid to customers, their designees or designers. Incentive per customer (Summer kW reduced):

- Chillers – \$160
- DX – \$165
- DCV – \$2,000
- ERV – \$1,250
- TES – \$200 - \$600 depending on circumstances

**Marketing Channels** – BEE, FPL personnel, FPL-sponsored seminars, digital and print media, architectural and engineering firms, contractors, and energy services companies. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Business Lighting**

**Start Date** – June 1984

**Last Modified** – November 2015

This program encourages customers to install high-efficiency lighting systems. The primary types of eligible lighting systems include: high bay light-emitting diodes (LED); premium linear fluorescents with high-efficiency electronic ballasts; compact fluorescent lights (CFL); and pulse-start metal halides (PSMH).

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Paid to customers, their designees or designers. Incentive per customer (Summer kW reduced):

- High Bay LED – \$80
- Premium Linear Fluorescents – \$55
- CFL – \$60
- PSMH – \$160

**Marketing Channels** – BEE, FPL personnel, digital and print media, architectural and engineering firms, contractors, and energy services companies. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Business Custom Incentive (BCI)**

**Start Date** – April 1993

**Last Modified** – March 2005

This program encourages customers to install unique high-efficiency technologies not covered by other FPL DSM programs. The primary types of customized technologies include, but are not limited to, process controls, efficient machinery and other measures unique to particular industrial processes or business applications.

**Eligibility** – All FPL business customers. Projects must demonstrate at least the minimum Summer kW reductions specified in the Program Standards. Projects that represent operational or maintenance improvements that are not permanent, fuel switching, power generation technology, or wheeling of any type are not eligible.

**Participant Financial Incentive** – Project-specific amount calculated by FPL based on passing both the RIM and Participant tests, including having a payback not less than two years of the participant's incremental cost.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Evaluated using one or more of the following methods: engineering modeling analysis; end-use metering; statistical billing analysis; a feasibility study performed by an independent registered professional engineer; and/or lab testing.



## **OTHER PROGRAMS**

## **Conservation Research and Development (CRD)**

**Start Date** – November 1990

**Last Modified** – November 2015

This program identifies and scientifically evaluates the energy and demand reductions and customer economics of emerging energy efficiency and demand response technologies and practices under FPL's climate conditions. FPL-specific analysis is essential to provide accurate assessments of cost-effectiveness and applicability for possible inclusion in a future DSM Plan. Since CRD's inception, FPL has evaluated a wide variety of residential and business technologies, such as: smart and programmable thermostats; variable-speed pool pumps; occupancy sensors; and smart air conditioning controls. The studies have resulted in several measures being incorporated into FPL's DSM portfolio and also served as an authoritative source for providing FPL's customers with accurate information and responses to their energy technology questions.

FPL typically collaborates with other utilities, Florida-based universities, the U.S. Department of Energy, and other independent research organizations to conduct joint studies to maximize the cost-efficiency of research funds. CRD projects are conducted in laboratory and field settings. All results are weather-normalized and weighted for FPL's regional population distribution.

Total program expenditures for the 2020-2024 period will not exceed \$5,000,000.

## **Cogeneration & Small Power Production**

**Start Date** – March 1981

**Last Modified** – March 2005

This program was established to recover administrative costs through the Energy Conservation Cost Recovery (ECCR) clause for executing FPL's obligations to facilities defined as Qualifying Facilities (QF) under the Public Utility Regulatory Policies Act of 1978 (PURPA) and Commission rules. These costs include: (a) interconnection; (b) installation, inspection, calibration and maintenance of meters; (c) administration of power billing and accounting processes; (d) Commission reporting; (e) contract negotiation; (f) contract administration, including legal expenses resulting from litigation; (g) facility verifications and audits; (h) communications; (i) operating coordination; and (j) problem resolution.

This program's objectives are to: (i) comply with all regulatory requirements and applicable law relating to the purchase of energy and capacity from QFs; (ii) interconnect as necessary to accomplish purchases, sales, and operation in parallel; (iii) transmit energy and capacity to another utility for purchase by that utility; and (iv) assist customers in the evaluation of potential cogeneration applications, including self-generation, while minimizing costs.

This program does not include the costs associated with FPL payments for firm capacity and energy or as-available energy made to QFs pursuant to FPL's tariff. These costs are instead recoverable by FPL through the Commission's periodic review of its Fuel and Capacity clauses.

## SECTION III – PROGRAM PROJECTIONS

### Notes for the following tables:

- Values for programs which do not contribute toward MW or GWh Goals achievement are not included (*i.e.*, Residential Energy Survey, BEE, CRD, and Cogen and Small Power Production).
- **“Customers”** – Represents a single premise for Residential programs. Represents one Summer kW of demand reduction for Business programs. This method has been used by FPL for many years to account for and normalize the wide diversity in sizes, types and energy usages of businesses.
- **Cumulative Penetration Levels** – represents penetration starting in 2020 (*i.e.*, excludes any prior period participation).

<b>Table 4 - Total Customers</b>					
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential (Premises)</b>	4,522,372	4,574,840	4,628,249	4,682,418	4,736,733
<b>Business (Summer kW)</b>	8,651,163	8,733,000	8,807,778	8,877,218	8,946,227

<b>Table 5 - Eligible Customers</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	3,818,771	3,871,239	3,924,648	3,978,817	4,033,132
Residential Air Conditioning	1,183,454	1,273,527	1,364,037	1,454,900	1,545,832
Residential New Construction (BuildSmart)	41,778	44,010	45,041	45,802	46,492
Residential Ceiling Insulation	1,235,964	1,232,114	1,227,964	1,223,814	1,219,664
Residential Low Income	886,993	892,237	902,419	912,978	923,116
<b>Business Portfolio</b>					
Business On Call	510,164	513,890	517,390	520,719	524,267
Commercial/Industrial Demand Reduction	4,919,014	4,956,396	4,989,436	5,019,272	5,048,891
Business Heating, Ventilating, & Air Conditioning (HVAC)	1,354,483	1,356,626	1,357,482	1,357,184	1,356,205
Business Lighting	632,148	634,378	635,810	636,573	637,071
Business Custom Incentive (BCI)	414,312	418,131	421,612	424,835	428,038

<b>Table 6 - Annual Participants</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	5,950	5,975	5,940	5,925	5,950
Residential Air Conditioning	22,000	22,100	23,000	23,600	24,175
Residential New Construction (BuildSmart)	3,500	3,525	3,550	3,575	3,600
Residential Ceiling Insulation	3,850	4,150	4,150	4,150	4,150
Residential Low Income	5,250	5,750	6,025	6,750	7,500
<b>Business Portfolio</b>					
Business On Call	1,100	900	750	500	400
Commercial/Industrial Demand Reduction	9,150	9,400	9,500	9,400	9,400
Business Heating, Ventilating, & Air Conditioning (HVAC)	10,670	10,760	11,000	11,530	11,850
Business Lighting	3,750	4,000	4,250	4,450	4,710
Business Custom Incentive (BCI)	100	100	100	100	100

<b>Table 7 - Cumulative Penetration Levels</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	0%	0%	0%	1%	1%
Residential Air Conditioning	2%	3%	5%	6%	7%
Residential New Construction (BuildSmart)	8%	8%	8%	8%	8%
Residential Ceiling Insulation	0%	1%	1%	1%	2%
Residential Low Income	1%	1%	2%	3%	3%
<b>Business Portfolio</b>					
Business On Call	0%	0%	1%	1%	1%
Commercial/Industrial Demand Reduction	0%	0%	1%	1%	1%
Business Heating, Ventilating, & Air Conditioning (HVAC)	1%	2%	2%	3%	4%
Business Lighting	1%	1%	2%	3%	3%
Business Custom Incentive (BCI)	0%	0%	0%	0%	0%

<b>Table 8 - Total Summer kW Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	15,393	15,458	15,368	15,329	15,393
Residential Air Conditioning	7,231	7,264	7,560	7,757	7,946
Residential New Construction (BuildSmart)	1,336	1,346	1,355	1,365	1,374
Residential Ceiling Insulation	1,306	1,408	1,408	1,408	1,408
Residential Low Income	1,670	1,829	1,916	2,147	2,386
<b>Business Portfolio</b>					
Business On Call	1,166	954	795	530	424
Commercial/Industrial Demand Reduction	9,702	9,967	10,073	9,967	9,967
Business Heating, Ventilating, & Air Conditioning (HVAC)	11,313	11,409	11,663	12,225	12,565
Business Lighting	3,976	4,241	4,506	4,718	4,994
Business Custom Incentive (BCI)	106	106	106	106	106
<b>Residential Subtotal</b>	<b>26,937</b>	<b>27,305</b>	<b>27,607</b>	<b>28,006</b>	<b>28,507</b>
<b>Business Subtotal</b>	<b>26,264</b>	<b>26,677</b>	<b>27,144</b>	<b>27,547</b>	<b>28,056</b>
<b>Grand Total</b>	<b>53,201</b>	<b>53,982</b>	<b>54,751</b>	<b>55,552</b>	<b>56,563</b>

<b>Table 9 - Total Winter kW Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	14,510	14,571	14,486	14,449	14,510
Residential Air Conditioning	0	0	0	0	0
Residential New Construction (BuildSmart)	482	486	489	493	496
Residential Ceiling Insulation	3,102	3,344	3,344	3,344	3,344
Residential Low Income	445	488	511	573	636
<b>Business Portfolio</b>					
Business On Call	0	0	0	0	0
Commercial/Industrial Demand Reduction	6,209	6,379	6,447	6,379	6,379
Business Heating, Ventilating, & Air Conditioning (HVAC)	7,241	7,302	7,465	7,824	8,041
Business Lighting	2,545	2,714	2,884	3,020	3,196
Business Custom Incentive (BCI)	106	106	106	106	106
<b>Residential Subtotal</b>	<b>18,540</b>	<b>18,889</b>	<b>18,830</b>	<b>18,859</b>	<b>18,987</b>
<b>Business Subtotal</b>	<b>16,100</b>	<b>16,501</b>	<b>16,901</b>	<b>17,329</b>	<b>17,722</b>
<b>Grand Total</b>	<b>34,641</b>	<b>35,390</b>	<b>35,732</b>	<b>36,187</b>	<b>36,709</b>

<b>Table 10 - Total Annual kWh Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	6,230	6,256	6,219	6,203	6,230
Residential Air Conditioning	14,165,910	14,230,301	14,809,815	15,196,158	15,566,403
Residential New Construction (BuildSmart)	3,899,028	3,926,878	3,954,728	3,982,579	4,010,429
Residential Ceiling Insulation	3,402,122	3,667,222	3,667,222	3,667,222	3,667,222
Residential Low Income	3,539,907	3,877,041	4,062,465	4,551,309	5,057,010
<b>Business Portfolio</b>					
Business On Call	1,152	942	785	524	419
Commercial/Industrial Demand Reduction	105,381	108,260	109,412	108,260	108,260
Business Heating, Ventilating, & Air Conditioning (HVAC)	8,546,190	8,618,276	8,810,505	9,235,011	9,491,317
Business Lighting	19,666,586	20,977,692	22,288,798	23,337,682	24,701,232
Business Custom Incentive (BCI)	418,800	418,800	418,800	418,800	418,800
<b>Residential Subtotal</b>	<b>25,013,196</b>	<b>25,707,698</b>	<b>26,500,449</b>	<b>27,403,471</b>	<b>28,307,294</b>
<b>Business Subtotal</b>	<b>28,738,108</b>	<b>30,123,970</b>	<b>31,628,300</b>	<b>33,100,277</b>	<b>34,720,028</b>
<b>Grand Total</b>	<b>53,751,305</b>	<b>55,831,668</b>	<b>58,128,749</b>	<b>60,503,748</b>	<b>63,027,322</b>

<b>Table 11 - Summer kW Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	14,518	14,579	14,494	14,457	14,518
Residential Air Conditioning	6,820	6,851	7,130	7,316	7,494
Residential New Construction (BuildSmart)	1,260	1,269	1,278	1,287	1,296
Residential Ceiling Insulation	1,232	1,328	1,328	1,328	1,328
Residential Low Income	1,575	1,725	1,808	2,025	2,250
<b>Business Portfolio</b>					
Business On Call	1,100	900	750	500	400
Commercial/Industrial Demand Reduction	9,150	9,400	9,500	9,400	9,400
Business Heating, Ventilating, & Air Conditioning (HVAC)	10,670	10,760	11,000	11,530	11,850
Business Lighting	3,750	4,000	4,250	4,450	4,710
Business Custom Incentive (BCI)	100	100	100	100	100
<b>Residential Subtotal</b>	<b>25,405</b>	<b>25,752</b>	<b>26,037</b>	<b>26,413</b>	<b>26,886</b>
<b>Business Subtotal</b>	<b>24,770</b>	<b>25,160</b>	<b>25,600</b>	<b>25,980</b>	<b>26,460</b>
<b>Grand Total</b>	<b>50,175</b>	<b>50,912</b>	<b>51,637</b>	<b>52,393</b>	<b>53,346</b>

<b>Table 12 - Winter kW Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	13,685	13,743	13,662	13,628	13,685
Residential Air Conditioning	0	0	0	0	0
Residential New Construction (BuildSmart)	455	458	462	465	468
Residential Ceiling Insulation	2,926	3,154	3,154	3,154	3,154
Residential Low Income	420	460	482	540	600
<b>Business Portfolio</b>					
Business On Call	0	0	0	0	0
Commercial/Industrial Demand Reduction	5,856	6,016	6,080	6,016	6,016
Business Heating, Ventilating, & Air Conditioning (HVAC)	6,829	6,886	7,040	7,379	7,584
Business Lighting	2,400	2,560	2,720	2,848	3,014
Business Custom Incentive (BCI)	100	100	100	100	100
<b>Residential Subtotal</b>	<b>17,486</b>	<b>17,815</b>	<b>17,760</b>	<b>17,786</b>	<b>17,907</b>
<b>Business Subtotal</b>	<b>15,185</b>	<b>15,562</b>	<b>15,940</b>	<b>16,343</b>	<b>16,714</b>
<b>Grand Total</b>	<b>32,671</b>	<b>33,377</b>	<b>33,700</b>	<b>34,129</b>	<b>34,621</b>

<b>Table 13 - Annual kWh Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	5,950	5,975	5,940	5,925	5,950
Residential Air Conditioning	13,530,000	13,591,500	14,145,000	14,514,000	14,867,625
Residential New Construction (BuildSmart)	3,724,000	3,750,600	3,777,200	3,803,800	3,830,400
Residential Ceiling Insulation	3,249,400	3,502,600	3,502,600	3,502,600	3,502,600
Residential Low Income	3,381,000	3,703,000	3,880,100	4,347,000	4,830,000
<b>Business Portfolio</b>					
Business On Call	1,100	900	750	500	400
Commercial/Industrial Demand Reduction	100,650	103,400	104,500	103,400	103,400
Business Heating, Ventilating, & Air Conditioning (HVAC)	8,162,550	8,231,400	8,415,000	8,820,450	9,065,250
Business Lighting	18,783,750	20,036,000	21,288,250	22,290,050	23,592,390
Business Custom Incentive (BCI)	400,000	400,000	400,000	400,000	400,000
<b>Residential Subtotal</b>	<b>23,890,350</b>	<b>24,553,675</b>	<b>25,310,840</b>	<b>26,173,325</b>	<b>27,036,575</b>
<b>Business Subtotal</b>	<b>27,448,050</b>	<b>28,771,700</b>	<b>30,208,500</b>	<b>31,614,400</b>	<b>33,161,440</b>
<b>Grand Total</b>	<b>51,338,400</b>	<b>53,325,375</b>	<b>55,519,340</b>	<b>57,787,725</b>	<b>60,198,015</b>

Table 14- Summer kW Savings - per Customer (at the Generator)					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	2.59	2.59	2.59	2.59	2.59
Residential Air Conditioning	0.33	0.33	0.33	0.33	0.33
Residential New Construction (BuildSmart)	0.38	0.38	0.38	0.38	0.38
Residential Ceiling Insulation	0.34	0.34	0.34	0.34	0.34
Residential Low Income	0.32	0.32	0.32	0.32	0.32
<b>Business Portfolio</b>					
Business On Call	1.06	1.06	1.06	1.06	1.06
Commercial/Industrial Demand Reduction	1.06	1.06	1.06	1.06	1.06
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.06	1.06	1.06	1.06	1.06
Business Lighting	1.06	1.06	1.06	1.06	1.06
Business Custom Incentive (BCI)	1.06	1.06	1.06	1.06	1.06

Table 15 - Winter kW Savings - per Customer (at the Generator)					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	2.44	2.44	2.44	2.44	2.44
Residential Air Conditioning	0.00	0.00	0.00	0.00	0.00
Residential New Construction (BuildSmart)	0.14	0.14	0.14	0.14	0.14
Residential Ceiling Insulation	0.81	0.81	0.81	0.81	0.81
Residential Low Income	0.08	0.08	0.08	0.08	0.08
<b>Business Portfolio</b>					
Business On Call	0.00	0.00	0.00	0.00	0.00
Commercial/Industrial Demand Reduction	0.68	0.68	0.68	0.68	0.68
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.68	0.68	0.68	0.68	0.68
Business Lighting	0.68	0.68	0.68	0.68	0.68
Business Custom Incentive (BCI)	1.06	1.06	1.06	1.06	1.06

Table 16 - Annual kWh Savings - per Customer (at the Generator)					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	1	1	1	1	1
Residential Air Conditioning	644	644	644	644	644
Residential New Construction (BuildSmart)	1,114	1,114	1,114	1,114	1,114
Residential Ceiling Insulation	884	884	884	884	884
Residential Low Income	674	674	674	674	674
<b>Business Portfolio</b>					
Business On Call	1	1	1	1	1
Commercial/Industrial Demand Reduction	12	12	12	12	12
Business Heating, Ventilating, & Air Conditioning (HVAC)	801	801	801	801	801
Business Lighting	5,244	5,244	5,244	5,244	5,244
Business Custom Incentive (BCI)	4,188	4,188	4,188	4,188	4,188



<b>Table 17 - Summer kW Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	2.44	2.44	2.44	2.44	2.44
Residential Air Conditioning	0.31	0.31	0.31	0.31	0.31
Residential New Construction (BuildSmart)	0.36	0.36	0.36	0.36	0.36
Residential Ceiling Insulation	0.32	0.32	0.32	0.32	0.32
Residential Low Income	0.30	0.30	0.30	0.30	0.30
<b>Business Portfolio</b>					
Business On Call	1.00	1.00	1.00	1.00	1.00
Commercial/Industrial Demand Reduction	1.00	1.00	1.00	1.00	1.00
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.00	1.00	1.00	1.00	1.00
Business Lighting	1.00	1.00	1.00	1.00	1.00
Business Custom Incentive (BCI)	1.00	1.00	1.00	1.00	1.00

<b>Table 18 - Winter kW Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	2.30	2.30	2.30	2.30	2.30
Residential Air Conditioning	0.00	0.00	0.00	0.00	0.00
Residential New Construction (BuildSmart)	0.13	0.13	0.13	0.13	0.13
Residential Ceiling Insulation	0.76	0.76	0.76	0.76	0.76
Residential Low Income	0.08	0.08	0.08	0.08	0.08
<b>Business Portfolio</b>					
Business On Call	0.00	0.00	0.00	0.00	0.00
Commercial/Industrial Demand Reduction	0.64	0.64	0.64	0.64	0.64
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.64	0.64	0.64	0.64	0.64
Business Lighting	0.64	0.64	0.64	0.64	0.64
Business Custom Incentive (BCI)	1.00	1.00	1.00	1.00	1.00

<b>Table 19 - Annual kWh Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Residential Load Management (On Call)	1	1	1	1	1
Residential Air Conditioning	615	615	615	615	615
Residential New Construction (BuildSmart)	1,064	1,064	1,064	1,064	1,064
Residential Ceiling Insulation	844	844	844	844	844
Residential Low Income	644	644	644	644	644
<b>Business Portfolio</b>					
Business On Call	1	1	1	1	1
Commercial/Industrial Demand Reduction	11	11	11	11	11
Business Heating, Ventilating, & Air Conditioning (HVAC)	765	765	765	765	765
Business Lighting	5,009	5,009	5,009	5,009	5,009
Business Custom Incentive (BCI)	4,000	4,000	4,000	4,000	4,000

## **APPENDIX A – Program-Level Cost-Effectiveness Analyses**

I. PROGRAM DEMAND SAVINGS & LINE LOSSES

(1) CUSTOMER KW REDUCTION AT METER .....	2.42 kW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	3.1442 kW
(3) KW LINE LOSS PERCENTAGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	1.05 kwh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 kwh

II. ECONOMIC LIFE & K FACTORS

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

III. UTILITY & CUSTOMER COSTS

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** \$/CUSTYR
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

IV. AVOIDED GENERATOR AND T&D COSTS

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,5926542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23.68513279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	0.01281834 CENTS\$/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	2.5 %**
(15) GENERATOR CAPACITY FACTOR .....	49 ** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	2.481 CENTS/kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	5.68 %**

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS\$/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

VI. COST-EFFECTIVENESS RATIOS

(1) RIM TEST .....	1.824
(2) TRC TEST .....	3.659
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	1,121	189	0	1,310	0	0	0	0	0	0
2021	1,610	568	0	2,178	0	0	0	0	0	0
2022	2,073	947	0	3,020	1	0	0	0	0	0
2023	2,528	1,324	0	3,852	2	0	0	0	0	0
2024	2,984	1,701	0	4,686	3	0	0	0	0	0
2025	1,887	1,890	0	3,777	3	0	0	0	0	0
2026	1,508	1,890	0	3,398	3	0	0	0	0	0
2027	1,161	1,890	0	3,052	3	0	0	0	0	0
2028	832	1,890	0	2,722	4	0	0	0	0	0
2029	511	1,890	0	2,402	4	0	0	0	0	0
2030	1,890	1,890	0	2,409	4	0	0	0	0	0
2031	536	1,890	0	2,426	4	0	0	0	0	0
2032	545	1,890	0	2,435	4	0	0	0	0	0
2033	548	1,890	0	2,438	4	0	0	0	0	0
2034	556	1,890	0	2,446	4	0	0	0	0	0
2035	564	1,890	0	2,454	4	0	0	0	0	0
2036	563	1,890	0	2,453	4	0	0	0	0	0
2037	580	1,890	0	2,471	4	0	0	0	0	0
2038	595	1,890	0	2,485	4	0	0	0	0	0
2039	603	1,890	0	2,493	4	0	0	0	0	0
2040	2,351	1,890	0	4,241	4	0	0	0	0	0
2041	3,059	1,890	0	4,949	5	0	0	0	0	0
2042	3,706	1,890	0	5,596	5	0	0	0	0	0
2043	4,333	1,890	0	6,223	5	0	0	0	0	0
2044	4,959	1,890	0	6,850	5	0	0	0	0	0
2045	3,133	1,890	0	5,023	5	0	0	0	0	0
2046	2,491	1,890	0	4,382	5	0	0	0	0	0
2047	1,910	1,890	0	3,800	5	0	0	0	0	0
2048	1,363	1,890	0	3,253	5	0	0	0	0	0
2049	838	1,890	0	2,728	5	0	0	0	0	0
2050	849	1,890	0	2,740	5	0	0	0	0	0
2051	878	1,890	0	2,769	5	0	0	0	0	0
2052	893	1,890	0	2,783	5	0	0	0	0	0
2053	898	1,890	0	2,788	6	0	0	0	0	0
2054	910	1,890	0	2,801	6	0	0	0	0	0
2055	924	1,890	0	2,814	6	0	0	0	0	0
2056	923	1,890	0	2,813	6	0	0	0	0	0
2057	951	1,890	0	2,841	6	0	0	0	0	0
2058	975	1,890	0	2,865	6	0	0	0	0	0
2059	988	1,890	0	2,878	6	0	0	0	0	0
2060	3,853	1,890	0	5,743	6	0	0	0	0	0
2061	3,012	1,890	0	4,904	6	0	0	0	0	0
2062	6,072	1,890	0	7,962	7	0	0	0	0	0
2063	7,100	1,890	0	8,991	7	0	0	0	0	0
2064	8,126	1,890	0	10,017	7	0	0	0	0	0
2065	5,133	1,890	0	7,024	7	0	0	0	0	0

NOM	94,454	82,229	0	176,682	211	0	0	0	0	0
NPV	19,771	19,627	0	39,398	41	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential On-Call (ROC)

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	9.70	0.00	0.00
2020	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.97	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.92	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.92	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.05	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.16	0.00	0.00
2026	2.50	2.50	2.50	2.48	49.26	2.00	11.35	0.00	0.00
2027	2.50	2.50	2.50	2.62	81.53	2.00	11.54	0.00	0.00
2028	2.50	2.50	2.50	2.74	78.00	2.00	11.80	0.00	0.00
2029	2.50	2.50	2.85	2.85	74.20	2.00	12.02	0.00	0.00
2030	2.50	2.50	3.01	3.01	60.41	2.00	12.19	0.00	0.00
2031	2.50	2.50	3.11	3.11	56.03	2.00	12.40	0.00	0.00
2032	2.50	2.50	3.19	3.19	55.78	2.00	12.65	0.00	0.00
2033	2.50	2.50	3.14	3.14	76.71	2.00	12.90	0.00	0.00
2034	2.50	2.50	3.20	3.20	77.40	2.00	13.16	0.00	0.00
2035	2.50	2.50	3.26	3.26	77.41	2.00	13.41	0.00	0.00
2036	2.50	2.50	3.31	3.31	80.60	2.00	13.87	0.00	0.00
2037	2.50	2.50	3.37	3.37	82.52	2.00	14.14	0.00	0.00
2038	2.50	2.50	3.43	3.43	82.40	2.00	14.41	0.00	0.00
2039	2.50	2.50	3.50	3.50	82.89	2.00	14.70	0.00	0.00
2040	2.50	2.50	3.56	3.56	83.40	2.00	14.90	0.00	0.00
2041	2.50	2.50	3.60	3.60	85.24	2.00	15.15	0.00	0.00
2042	2.50	2.50	3.64	3.64	85.14	2.00	15.31	0.00	0.00
2043	2.50	2.50	3.67	3.67	87.14	2.00	15.78	0.00	0.00
2044	2.50	2.50	3.71	3.71	87.66	2.00	16.13	0.00	0.00
2045	2.50	2.50	3.75	3.75	88.02	2.00	16.40	0.00	0.00
2046	2.50	2.50	3.79	3.79	87.75	2.00	16.69	0.00	0.00
2047	2.50	2.50	3.83	3.83	88.56	2.00	16.95	0.00	0.00
2048	2.50	2.50	3.87	3.87	88.14	2.00	17.24	0.00	0.00
2049	2.50	2.50	3.92	3.92	91.34	2.00	17.54	0.00	0.00
2050	2.50	2.50	4.03	4.03	91.34	2.00	17.84	0.00	0.00
2051	2.50	2.50	4.16	4.16	91.34	2.00	18.15	0.00	0.00
2052	2.50	2.50	4.28	4.28	91.34	2.00	18.46	0.00	0.00
2053	2.50	2.50	4.41	4.41	91.34	2.00	18.79	0.00	0.00
2054	2.50	2.50	4.54	4.54	91.34	2.00	19.13	0.00	0.00
2055	2.50	2.50	4.68	4.68	91.34	2.00	19.47	0.00	0.00
2056	2.50	2.50	4.82	4.82	91.34	2.00	19.82	0.00	0.00
2057	2.50	2.50	4.96	4.96	91.34	2.00	20.19	0.00	0.00
2058	2.50	2.50	5.11	5.11	91.34	2.00	20.55	0.00	0.00
2059	2.50	2.50	5.26	5.26	91.34	2.00	20.93	0.00	0.00
2060	2.50	2.50	5.42	5.42	91.34	2.00	21.32	0.00	0.00
2061	2.50	2.50	5.58	5.58	91.34	2.00	21.71	0.00	0.00
2062	2.50	2.50	5.75	5.75	91.34	2.00	22.11	0.00	0.00
2063	2.50	2.50	5.92	5.92	91.34	2.00	22.54	0.00	0.00
2064	2.50	2.50	6.10	6.10	91.34	2.00	22.95	0.00	0.00
2065	2.50	2.50	6.29	6.29	91.34	2.00	23.37	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	64,334	1,245	0	4,045	835	1,109	34	1,611	575	0	9,455	9,455	9,455	64,454
2027	62,224	1,204	0	3,913	1,566	1,081	33	1,611	(201)	0	9,207	8,547	18,001	62,843
2028	59,880	1,159	0	3,765	2,205	1,053	32	1,611	(890)	0	8,936	7,699	25,700	61,232
2029	57,619	1,115	0	3,623	2,767	1,025	32	1,611	(1,500)	0	8,673	6,937	32,637	59,620
2030	55,436	1,073	0	3,486	3,255	998	31	1,611	(2,035)	0	8,419	6,250	38,887	58,009
2031	53,324	1,032	0	3,353	3,676	970	30	1,611	(2,511)	0	8,171	5,631	44,517	56,397
2032	51,278	992	0	3,224	4,035	942	29	1,611	(2,904)	0	7,931	5,073	49,590	54,786
2033	49,293	954	0	3,099	4,337	915	28	1,611	(3,248)	0	7,697	4,570	54,160	53,175
2034	47,343	916	0	2,977	4,630	887	27	1,611	(3,582)	0	7,466	4,115	58,274	51,563
2035	45,397	879	0	2,854	4,922	859	26	1,611	(3,916)	0	7,236	3,701	61,976	49,952
2036	43,452	841	0	2,732	5,215	831	26	1,611	(4,251)	0	7,006	3,327	65,302	48,341
2037	41,506	803	0	2,610	5,508	804	25	1,611	(4,585)	0	6,776	2,986	68,289	46,729
2038	39,560	766	0	2,487	5,801	776	24	1,611	(4,919)	0	6,546	2,678	70,966	45,118
2039	37,615	728	0	2,365	6,093	748	23	1,611	(5,253)	0	6,316	2,398	73,365	43,507
2040	35,669	690	0	2,243	6,386	721	22	1,611	(5,588)	0	6,086	2,145	75,510	41,895
2041	33,723	653	0	2,120	6,679	693	21	1,611	(5,922)	0	5,855	1,916	77,426	40,284
2042	31,778	615	0	1,998	6,972	665	20	1,611	(6,257)	0	5,625	1,708	79,134	38,673
2043	29,832	577	0	1,876	7,264	637	20	1,611	(6,591)	0	5,395	1,521	80,655	37,061
2044	27,886	540	0	1,753	7,557	610	19	1,611	(6,925)	0	5,165	1,352	82,007	35,450
2045	25,941	502	0	1,631	7,850	582	18	1,611	(7,259)	0	4,935	1,199	83,205	33,838
2046	24,174	468	0	1,520	8,143	554	17	1,611	(7,593)	0	4,723	1,065	84,270	32,227
2047	22,764	441	0	1,431	8,436	527	16	1,611	(7,927)	0	4,549	952	85,222	30,616
2048	21,534	417	0	1,354	8,729	499	15	1,611	(8,261)	0	4,393	853	86,076	29,004
2049	20,303	393	0	1,277	9,022	471	15	1,611	(8,595)	0	4,237	764	86,840	27,393
2050	19,073	369	0	1,199	9,315	443	14	1,611	(8,929)	0	4,081	683	87,523	25,782
2051	17,842	345	0	1,122	9,608	416	13	1,611	(9,263)	0	3,925	610	88,132	24,170
2052	16,612	321	0	1,045	9,901	388	12	1,611	(9,597)	0	3,769	543	88,676	22,559
2053	15,381	298	0	967	10,194	360	11	1,611	(9,931)	0	3,613	484	89,159	20,948
2054	14,151	274	0	890	10,487	333	10	1,611	(10,265)	0	3,457	430	89,589	19,336
2055	12,920	250	0	812	10,780	305	9	1,611	(10,599)	0	3,301	381	89,970	17,725
2056	11,690	226	0	735	11,073	277	9	1,611	(10,933)	0	3,145	337	90,306	16,114
2057	10,459	202	0	658	11,366	249	8	1,611	(11,267)	0	2,989	297	90,603	14,502
2058	9,229	179	0	580	11,659	222	7	1,611	(11,601)	0	2,833	261	90,864	12,891
2059	7,998	155	0	503	11,952	222	7	1,611	(11,935)	0	2,705	232	91,096	12,891
2060	6,768	131	0	426	12,245	222	7	1,611	(12,269)	0	2,578	205	91,301	12,891
2061	5,537	107	0	348	12,538	222	7	1,611	(12,603)	0	2,450	181	91,482	12,891
2062	4,307	83	0	271	12,831	222	7	1,611	(12,937)	0	2,323	159	91,641	12,891
2063	3,076	60	0	193	13,124	222	7	1,611	(13,271)	0	2,195	140	91,780	12,891
2064	1,846	36	0	116	13,417	222	7	1,611	(13,605)	0	2,068	122	91,902	12,891
2065	615	12	0	39	13,710	222	7	1,611	(13,939)	0	1,941	106	92,009	12,891

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	
IN SERVICE YEAR	64,454
BOOK LIFE (YRS)	2026
EFFECT. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.73%
PROPERTY INSURANCE	1.72%
	0.053%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION SCHEDULE	ACCUMULATED DEPRECIATION TAX \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED DEPRECIATION \$ (000)	DEPRECIATION DEFERRED TAX \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (%)(12)+(13) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2026			3.75%	2,372	1,611	1,611	1,611	1,611	1,611	575	4,348	0	0	0	575	1,371
2027			7.22%	6,937	1,611	3,223	3,223	1,611	3,223	(201)	4,348	0	0	0	(201)	1,170
2028			6.68%	4,223	1,611	4,834	4,834	1,611	4,834	(890)	4,348	0	0	0	(890)	280
2029			6.18%	3,907	1,611	15,067	6,445	1,611	6,445	(1,500)	4,348	0	0	0	(1,500)	(1,220)
2030			5.71%	3,613	1,611	18,680	8,057	1,611	8,057	(2,035)	4,348	0	0	0	(2,035)	(3,254)
2031			5.29%	3,343	1,611	22,023	9,668	1,611	9,668	(2,501)	4,348	0	0	0	(2,501)	(5,755)
2032			4.89%	3,091	1,611	25,114	11,279	1,611	11,279	(2,904)	4,348	0	0	0	(2,904)	(8,659)
2033			4.52%	2,860	1,611	27,974	12,891	1,611	12,891	(3,288)	4,348	0	0	0	(3,288)	(11,906)
2034			4.46%	2,822	1,611	30,796	14,502	1,611	14,502	(3,582)	4,348	0	0	0	(3,582)	(15,488)
2035			4.46%	2,821	1,611	33,618	16,114	1,611	16,114	(3,916)	4,348	0	0	0	(3,916)	(19,405)
2036			4.46%	2,822	1,611	36,440	17,725	1,611	17,725	(4,251)	4,348	0	0	0	(4,251)	(23,655)
2037			4.46%	2,821	1,611	39,261	19,336	1,611	19,336	(4,585)	4,348	0	0	0	(4,585)	(28,240)
2038			4.46%	2,822	1,611	42,083	20,948	1,611	20,948	(4,919)	4,348	0	0	0	(4,919)	(33,159)
2039			4.46%	2,821	1,611	44,905	22,559	1,611	22,559	(5,253)	4,348	0	0	0	(5,253)	(38,413)
2040			4.46%	2,822	1,611	47,727	24,170	1,611	24,170	(5,588)	4,348	0	0	0	(5,588)	(44,001)
2041			4.46%	2,821	1,611	50,548	25,782	1,611	25,782	(5,922)	4,348	0	0	0	(5,922)	(49,923)
2042			4.46%	2,822	1,611	53,370	27,393	1,611	27,393	(6,257)	4,348	0	0	0	(6,257)	(56,179)
2043			4.46%	2,821	1,611	56,192	29,004	1,611	29,004	(6,591)	4,348	0	0	0	(6,591)	(62,770)
2044			4.46%	2,822	1,611	59,014	30,616	1,611	30,616	(6,925)	4,348	0	0	0	(6,925)	(69,695)
2045			4.46%	2,821	1,611	61,835	32,227	1,611	32,227	(7,259)	4,348	0	0	0	(7,259)	(76,955)
2046			2.23%	1,411	1,611	63,246	33,838	1,611	33,838	(7,236)	4,348	0	0	0	(7,236)	(84,191)
2047			0.00%	0	1,611	63,246	35,450	1,611	35,450	(6,855)	4,348	0	0	0	(6,855)	(91,046)
2048			0.00%	0	1,611	63,246	37,061	1,611	37,061	(6,474)	4,348	0	0	0	(6,474)	(97,521)
2049			0.00%	0	1,611	63,246	38,673	1,611	38,673	(6,094)	4,348	0	0	0	(6,094)	(103,614)
2050			0.00%	0	1,611	63,246	40,284	1,611	40,284	(5,713)	4,348	0	0	0	(5,713)	(109,327)
2051			0.00%	0	1,611	63,246	41,895	1,611	41,895	(5,332)	4,348	0	0	0	(5,332)	(114,659)
2052			0.00%	0	1,611	63,246	43,507	1,611	43,507	(4,951)	4,348	0	0	0	(4,951)	(119,610)
2053			0.00%	0	1,611	63,246	45,118	1,611	45,118	(4,570)	4,348	0	0	0	(4,570)	(124,180)
2054			0.00%	0	1,611	63,246	46,729	1,611	46,729	(4,189)	4,348	0	0	0	(4,189)	(128,369)
2055			0.00%	0	1,611	63,246	48,341	1,611	48,341	(3,809)	4,348	0	0	0	(3,809)	(132,178)
2056			0.00%	0	1,611	63,246	49,952	1,611	49,952	(3,428)	4,348	0	0	0	(3,428)	(135,606)
2057			0.00%	0	1,611	63,246	51,563	1,611	51,563	(3,047)	4,348	0	0	0	(3,047)	(138,652)
2058			0.00%	0	1,611	63,246	53,175	1,611	53,175	(2,666)	4,348	0	0	0	(2,666)	(141,318)
2059			0.00%	0	1,611	63,246	54,786	1,611	54,786	(2,285)	4,348	0	0	0	(2,285)	(143,603)
2060			0.00%	0	1,611	63,246	56,397	1,611	56,397	(1,904)	4,348	0	0	0	(1,904)	(145,508)
2061			0.00%	0	1,611	63,246	58,009	1,611	58,009	(1,523)	4,348	0	0	0	(1,523)	(147,031)
2062			0.00%	0	1,611	63,246	59,620	1,611	59,620	(1,143)	4,348	0	0	0	(1,143)	(148,174)
2063			0.00%	0	1,611	63,246	61,232	1,611	61,232	(762)	4,348	0	0	0	(762)	(148,935)
2064			0.00%	0	1,611	63,246	62,843	1,611	62,843	(381)	4,348	0	0	0	(381)	(149,316)
2065			0.00%	0	1,611	63,246	64,454	1,611	64,454	(0)	4,348	0	0	0	(0)	(149,316)

SALVAGE/REMOVAL COST	0.00%
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	796
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	4,348
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2026	3.75%	2,372	575	62,843	1,611	1,371	65,250	63,418	64,334
2027	7.22%	4,566	(201)	61,232	3,223	1,170	63,418	63,418	62,224
2028	6.68%	4,223	(890)	59,620	4,834	280	61,031	58,730	59,880
2029	6.18%	3,907	(1,500)	58,009	6,445	(1,220)	58,730	56,509	57,619
2030	5.71%	3,613	(2,035)	56,397	8,057	(3,254)	56,509	54,363	55,436
2031	5.29%	3,343	(2,501)	54,786	9,668	(5,755)	54,363	52,285	53,324
2032	4.89%	3,091	(2,904)	53,175	11,279	(8,659)	52,285	50,271	51,278
2033	4.52%	2,860	(3,248)	51,563	12,891	(11,906)	50,271	48,316	49,293
2034	4.46%	2,822	(3,382)	49,952	14,502	(15,488)	48,316	46,370	47,343
2035	4.46%	2,821	(3,516)	48,341	16,114	(19,405)	46,370	44,424	45,397
2036	4.46%	2,822	(4,251)	46,729	17,725	(23,655)	44,424	42,479	43,452
2037	4.46%	2,821	(4,585)	45,118	19,336	(28,240)	42,479	40,533	41,506
2038	4.46%	2,822	(4,919)	43,507	20,948	(33,159)	40,533	38,587	39,560
2039	4.46%	2,821	(5,253)	41,895	22,559	(38,413)	38,587	36,642	37,615
2040	4.46%	2,822	(5,588)	40,284	24,170	(44,001)	36,642	34,696	35,669
2041	4.46%	2,821	(5,922)	38,673	25,782	(49,923)	34,696	32,750	33,723
2042	4.46%	2,822	(6,257)	37,061	27,393	(56,179)	32,750	30,805	31,778
2043	4.46%	2,821	(6,591)	35,450	29,004	(62,770)	30,805	28,859	29,832
2044	4.46%	2,822	(6,925)	33,838	30,616	(69,695)	28,859	26,913	27,886
2045	4.46%	2,821	(7,259)	32,227	32,227	(76,955)	26,913	24,968	25,941
2046	2.23%	1,411	(7,236)	30,616	33,838	(84,191)	24,968	23,380	24,174
2047	0.00%	0	(6,855)	29,004	35,450	(91,046)	23,380	22,149	22,764
2048	0.00%	0	(6,474)	27,393	37,061	(97,521)	22,149	20,919	21,534
2049	0.00%	0	(6,094)	25,782	38,673	(103,614)	20,919	19,688	20,303
2050	0.00%	0	(5,713)	24,170	40,284	(109,327)	19,688	18,458	19,073
2051	0.00%	0	(5,332)	22,559	41,895	(114,659)	18,458	17,227	17,842
2052	0.00%	0	(4,951)	20,948	43,507	(119,610)	17,227	15,997	16,612
2053	0.00%	0	(4,570)	19,336	45,118	(124,180)	15,997	14,766	15,381
2054	0.00%	0	(4,189)	17,725	46,729	(128,369)	14,766	13,536	14,151
2055	0.00%	0	(3,809)	16,114	48,341	(132,178)	13,536	12,305	12,920
2056	0.00%	0	(3,428)	14,502	49,952	(135,606)	12,305	11,075	11,690
2057	0.00%	0	(3,047)	12,891	51,563	(138,652)	11,075	9,844	10,459
2058	0.00%	0	(2,666)	11,279	53,175	(141,318)	9,844	8,614	9,229
2059	0.00%	0	(2,285)	9,668	54,786	(143,603)	8,614	7,383	7,998
2060	0.00%	0	(1,904)	8,057	56,397	(145,508)	7,383	6,153	6,768
2061	0.00%	0	(1,523)	6,445	58,009	(147,031)	6,153	4,922	5,537
2062	0.00%	0	(1,143)	4,834	59,620	(148,174)	4,922	3,692	4,307
2063	0.00%	0	(762)	3,223	61,232	(148,935)	3,692	2,461	3,076
2064	0.00%	0	(381)	1,611	62,843	(149,316)	2,461	1,231	1,846
2065	0.00%	0	(0)	0	64,454	(149,316)	1,231	0	615

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.93	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	6.15	7.08	4.90	0.92	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	25.46	14.46	2.71	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	58.43	25.41	45.52	4.73	8.51	233.05	689.05

11.96

58.43

45.52

8.51

689.05

IN SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	58,988	58,988
EQUITY AFUDC	4,348	
DEBT AFUDC	1,118	
CPI	1,118	4,258
ITC Basis Reduction (Solar)		
TOTAL	64,454	63,246

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	5,950	5,950	1.80	2.75	1.80	0.00	1.00	1.00
2021	11,925	11,925	1.83	5.59	1.83	0.00	1.00	1.00
2022	17,875	17,875	1.80	2.40	1.80	0.00	1.00	1.00
2023	23,800	23,800	1.95	3.26	1.95	0.00	1.00	1.00
2024	29,750	29,750	2.14	2.69	2.14	0.00	1.00	1.00
2025	29,750	29,750	2.32	2.83	2.32	0.00	1.00	1.00
2026	29,750	29,750	2.54	3.05	2.54	2.63	1.00	1.00
2027	29,750	29,750	2.67	3.16	2.67	2.76	1.00	1.00
2028	29,750	29,750	2.75	3.26	2.75	2.85	1.00	1.00
2029	29,750	29,750	3.00	3.48	3.00	3.09	1.00	1.00
2030	29,750	29,750	3.10	3.23	3.10	3.09	1.00	1.00
2031	29,750	29,750	3.04	3.53	3.04	2.97	1.00	1.00
2032	29,750	29,750	3.26	3.78	3.26	3.07	1.00	1.00
2033	29,750	29,750	3.14	3.71	3.14	3.34	1.00	1.00
2034	29,750	29,750	3.19	3.74	3.19	3.46	1.00	1.00
2035	29,750	29,750	3.22	3.81	3.22	3.47	1.00	1.00
2036	29,750	29,750	3.27	3.78	3.27	3.52	1.00	1.00
2037	29,750	29,750	3.33	3.85	3.33	3.62	1.00	1.00
2038	29,750	29,750	3.40	3.96	3.40	3.66	1.00	1.00
2039	29,750	29,750	3.47	4.01	3.47	3.75	1.00	1.00
2040	29,750	29,750	3.54	4.06	3.54	3.85	1.00	1.00
2041	29,750	29,750	3.61	4.27	3.61	3.88	1.00	1.00
2042	29,750	29,750	3.66	4.19	3.66	3.93	1.00	1.00
2043	29,750	29,750	3.71	5.33	3.71	3.99	1.00	1.00
2044	29,750	29,750	3.76	5.53	3.76	4.04	1.00	1.00
2045	29,750	29,750	3.80	4.36	3.80	4.08	1.00	1.00
2046	29,750	29,750	3.84	4.44	3.84	4.14	1.00	1.00
2047	29,750	29,750	3.89	4.52	3.89	4.20	1.00	1.00
2048	29,750	29,750	3.94	4.54	3.94	4.22	1.00	1.00
2049	29,750	29,750	3.98	4.63	3.98	4.28	1.00	1.00
2050	29,750	29,750	5.03	6.71	5.03	4.41	1.00	1.00
2051	29,750	29,750	5.13	6.84	5.13	4.55	1.00	1.00
2052	29,750	29,750	5.23	6.98	5.23	4.68	1.00	1.00
2053	29,750	29,750	5.34	7.12	5.34	4.83	1.00	1.00
2054	29,750	29,750	5.44	7.26	5.44	4.97	1.00	1.00
2055	29,750	29,750	5.55	7.41	5.55	5.12	1.00	1.00
2056	29,750	29,750	5.66	7.55	5.66	5.28	1.00	1.00
2057	29,750	29,750	5.78	7.70	5.78	5.44	1.00	1.00
2058	29,750	29,750	5.89	7.86	5.89	5.61	1.00	1.00
2059	29,750	29,750	6.01	8.02	6.01	5.78	1.00	1.00
2060	29,750	29,750	6.13	8.18	6.13	5.95	1.00	1.00
2061	29,750	29,750	6.25	8.34	6.25	6.13	1.00	1.00
2062	29,750	29,750	6.38	8.51	6.38	6.32	1.00	1.00
2063	29,750	29,750	6.50	8.68	6.50	6.51	1.00	1.00
2064	29,750	29,750	6.63	8.85	6.63	6.71	1.00	1.00
2065	29,750	29,750	6.77	9.03	6.77	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	9,455	2,634	62	10014	10632	11532
2027	9,207	2,699	104	17517	18450	11078
2028	8,936	2,767	102	17533	18234	11104
2029	8,673	2,836	100	17315	18812	10112
2030	8,419	2,907	83	14874	15271	11012
2031	8,171	2,980	79	14288	13654	11864
2032	7,931	3,054	81	14571	14051	11586
2033	7,697	3,130	114	19705	20992	9654
2034	7,466	3,209	118	20277	21958	9112
2035	7,236	3,289	121	20686	21983	9348
2036	7,006	3,371	129	21880	23215	9171
2037	6,776	3,455	135	22768	24473	8661
2038	6,546	3,542	138	23158	24697	8687
2039	6,316	3,630	143	23746	25501	8334
2040	6,086	3,721	147	24334	26292	7996
2041	5,855	3,814	154	25132	27097	7859
2042	5,625	3,910	158	25386	27411	7668
2043	5,395	4,007	166	26199	28502	7265
2044	5,165	4,107	171	26643	29039	7048
2045	4,935	4,210	176	27033	29426	6928
2046	4,723	4,315	180	27250	29756	6713
2047	4,549	4,423	186	27780	30487	6451
2048	4,393	4,534	189	27964	30452	6628
2049	4,237	4,647	201	29316	32039	6362
2050	4,081	4,763	206	30195	33013	6233
2051	3,925	4,882	211	31101	34017	6103
2052	3,769	5,005	217	32034	35051	5973
2053	3,613	5,130	222	32995	36117	5843
2054	3,457	5,258	228	33985	37215	5712
2055	3,301	5,389	233	35005	38347	5582
2056	3,145	5,524	239	36055	39513	5450
2057	2,989	5,662	245	37136	40714	5318
2058	2,833	5,804	251	38251	41953	5186
2059	2,705	5,949	258	39398	43229	5081
2060	2,578	6,098	264	40580	44543	4976
2061	2,450	6,250	271	41797	45898	4870
2062	2,323	6,406	277	43051	47295	4763
2063	2,195	6,566	284	44343	48733	4656
2064	2,068	6,731	291	45673	50216	4547
2065	1,941	6,899	299	47043	51744	4438

NOM	208,169	177,509	7,233	1,134,014	1,230,023	296,902
NPV	54,626.24	27,798.78	1,037	169,144	180,679	71,927

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	1	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	1	0
2024	0	0	0	0	0	0	1	0
2025	0	0	0	0	0	0	1	0
2026	0	0	0	0	0	0	1	0
2027	0	0	0	0	0	0	1	0
2028	0	0	0	0	0	0	1	0
2029	0	0	0	0	0	0	1	0
2030	0	0	0	0	0	0	1	0
2031	0	0	0	0	0	0	1	0
2032	0	0	0	0	0	0	1	0
2033	0	0	0	0	0	0	1	0
2034	0	0	0	0	0	0	1	0
2035	0	0	0	0	0	0	1	0
2036	0	0	0	0	0	0	1	0
2037	0	0	0	0	0	0	1	0
2038	0	0	0	0	0	0	1	0
2039	0	0	0	0	0	0	1	0
2040	0	0	0	0	0	0	1	0
2041	0	0	0	0	0	0	1	0
2042	0	0	0	0	0	0	1	0
2043	0	0	0	0	0	0	2	0
2044	0	0	0	0	0	0	0	0
2045	0	0	0	0	0	0	1	0
2046	0	0	0	0	0	0	2	0
2047	0	0	0	0	0	0	1	0
2048	0	0	0	0	0	0	1	0
2049	0	0	0	0	0	0	2	0
2050	0	0	0	0	0	0	2	0
2051	0	0	0	0	0	0	2	0
2052	0	0	0	0	0	0	2	0
2053	0	0	0	0	0	0	2	0
2054	0	0	0	0	0	0	2	0
2055	0	0	0	0	0	0	2	0
2056	0	0	0	0	0	0	3	0
2057	0	0	0	0	0	0	3	0
2058	0	0	0	0	0	0	3	0
2059	0	0	0	0	0	0	3	0
2060	0	0	0	0	0	0	3	0
2061	0	0	0	0	0	0	3	0
2062	0	0	0	0	0	0	3	0
2063	0	0	0	0	0	0	3	0
2064	0	0	0	0	0	0	3	0
2065	0	0	0	0	0	0	3	0

NOM	0	0.00	0	0	0	0	0	0	77	0
NPV	0	0	0	0	0	0	0	0	14	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	2	2	0	0	(0)
2027	3	3	0	0	(0)
2028	2	3	0	0	(0)
2029	2	3	0	0	(0)
2030	2	2	0	0	(0)
2031	2	2	0	0	(0)
2032	2	2	0	0	(0)
2033	2	3	0	0	(0)
2034	2	3	0	0	(0)
2035	2	3	0	0	(0)
2036	3	3	0	0	(0)
2037	3	3	0	0	(0)
2038	3	3	0	0	(0)
2039	3	3	0	0	(0)
2040	3	3	0	0	(0)
2041	3	3	0	0	(0)
2042	3	3	0	0	(0)
2043	3	3	0	0	(0)
2044	3	3	0	0	(0)
2045	3	3	0	0	(0)
2046	3	3	0	0	(0)
2047	3	3	0	0	(0)
2048	3	3	0	0	(0)
2049	3	3	0	0	(0)
2050	3	3	0	0	(0)
2051	3	3	0	0	(0)
2052	3	3	0	0	(0)
2053	3	3	0	0	(0)
2054	3	3	0	0	(0)
2055	3	3	0	0	(0)
2056	3	3	0	0	(0)
2057	3	3	0	0	(0)
2058	3	3	0	0	(0)
2059	3	3	0	0	(0)
2060	3	3	0	0	(0)
2061	3	3	0	0	(0)
2062	3	3	0	0	(0)
2063	3	3	0	0	(0)
2064	3	3	0	0	(0)
2065	3	3	0	0	(0)

NOM	105	120	0	0	(15)
NPV	19	22	0	0	(3)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	1,121	0	0	0	0	(1,121)	(1,040)
2021	0	0	0	0	0	1,610	0	0	0	0	(1,610)	(2,427)
2022	0	0	0	0	0	2,073	0	0	0	0	(2,073)	(4,085)
2023	0	0	0	0	0	2,528	0	0	0	0	(2,527)	(5,961)
2024	0	0	0	0	0	2,984	0	0	0	0	(2,984)	(8,017)
2025	0	0	0	0	0	1,887	0	0	0	0	(1,886)	(9,223)
2026	0	0	0	0	0	1,508	0	0	0	0	10,024	(3,272)
2027	0	0	0	0	0	1,161	11,532	0	0	11,532	9,918	2,194
2028	0	0	0	0	0	832	11,078	0	0	11,079	10,273	7,449
2029	0	0	0	0	0	511	11,104	0	0	11,105	10,273	12,008
2030	0	0	0	0	0	518	10,112	0	0	10,113	9,602	16,633
2031	0	0	0	0	0	536	11,012	0	0	11,012	10,494	21,268
2032	0	0	0	0	0	545	11,864	0	0	11,865	11,329	25,461
2033	0	0	0	0	0	548	11,586	0	0	11,587	11,042	28,671
2034	0	0	0	0	0	548	9,654	0	0	9,655	9,107	31,471
2035	0	0	0	0	0	556	9,112	0	0	9,112	8,557	34,139
2036	0	0	0	0	0	564	9,348	0	0	9,349	8,785	36,566
2037	0	0	0	0	0	563	9,171	0	0	9,171	8,608	38,680
2038	0	0	0	0	0	580	8,661	0	0	8,662	8,082	40,646
2039	0	0	0	0	0	595	8,687	0	0	8,688	8,093	42,389
2040	0	0	0	0	0	603	8,334	0	0	8,335	7,732	44,571
2041	0	0	0	0	0	2,351	7,996	0	0	7,997	5,646	46,504
2042	0	0	0	0	0	3,059	7,859	0	0	7,860	4,801	48,910
2043	0	0	0	0	0	3,706	7,668	0	0	7,669	3,964	45,218
2044	0	0	0	0	0	4,333	7,265	0	0	7,266	2,933	45,709
2045	0	0	0	0	0	4,959	7,048	0	0	7,049	2,090	46,034
2046	0	0	0	0	0	3,133	6,928	0	0	6,929	3,796	46,581
2047	0	0	0	0	0	2,491	6,713	0	0	6,714	4,223	47,147
2048	0	0	0	0	0	1,910	6,451	0	0	6,452	4,543	47,711
2049	0	0	0	0	0	1,363	6,628	0	0	6,629	5,266	48,318
2050	0	0	0	0	0	838	6,362	0	0	6,363	5,525	48,910
2051	0	0	0	0	0	849	6,233	0	0	6,234	5,385	49,445
2052	0	0	0	0	0	878	6,103	0	0	6,105	5,227	49,927
2053	0	0	0	0	0	893	5,973	0	0	5,975	5,082	50,362
2054	0	0	0	0	0	898	5,843	0	0	5,845	4,947	50,755
2055	0	0	0	0	0	910	5,712	0	0	5,715	4,804	51,110
2056	0	0	0	0	0	924	5,582	0	0	5,584	4,659	51,429
2057	0	0	0	0	0	923	5,450	0	0	5,452	4,530	51,717
2058	0	0	0	0	0	951	5,318	0	0	5,320	4,369	51,974
2059	0	0	0	0	0	975	5,186	0	0	5,188	4,213	52,205
2060	0	0	0	0	0	988	5,081	0	0	5,083	4,096	52,413
2061	0	0	0	0	0	3,853	4,976	0	0	4,978	1,125	52,466
2062	0	0	0	0	0	5,012	4,870	0	0	4,872	(140)	52,460
2063	0	0	0	0	0	6,072	4,763	0	0	4,766	(1,306)	52,407
2064	0	0	0	0	0	7,100	4,656	0	0	4,658	(2,442)	52,315
2065	0	0	0	0	0	8,126	4,547	0	0	4,550	(3,577)	52,190
2065	0	0	0	0	0	5,133	4,438	0	0	4,440	(693)	52,167

NOM	0	94,454	0	0	94,454	296,902.27	0	77	(15)	296,965	202,511	202,511
NPV	0	19,771	0	0	19,771	71,927	0	14	(3)	71,937.94	52,167	52,167

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(11) / Col(6)): 3.64

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	189	0	189	0	0	0	0	189	176
2021	1	0	568	0	569	0	0	0	0	569	666
2022	2	0	947	0	949	0	0	0	0	949	1,425
2023	3	0	1,324	0	1,327	0	0	0	0	1,327	2,410
2024	4	0	1,701	0	1,705	0	0	0	0	1,705	3,585
2025	4	0	1,890	0	1,895	0	0	0	0	1,895	4,797
2026	4	0	1,890	0	1,895	0	0	0	0	1,895	5,922
2027	5	0	1,890	0	1,895	0	0	0	0	1,895	6,966
2028	5	0	1,890	0	1,895	0	0	0	0	1,895	7,935
2029	5	0	1,890	0	1,895	0	0	0	0	1,895	8,835
2030	5	0	1,890	0	1,895	0	0	0	0	1,895	9,670
2031	5	0	1,890	0	1,895	0	0	0	0	1,895	10,445
2032	5	0	1,890	0	1,895	0	0	0	0	1,895	11,165
2033	5	0	1,890	0	1,895	0	0	0	0	1,895	11,833
2034	5	0	1,890	0	1,895	0	0	0	0	1,895	12,453
2035	5	0	1,890	0	1,895	0	0	0	0	1,895	13,029
2036	5	0	1,890	0	1,896	0	0	0	0	1,896	13,563
2037	6	0	1,890	0	1,896	0	0	0	0	1,896	14,059
2038	6	0	1,890	0	1,896	0	0	0	0	1,896	14,520
2039	6	0	1,890	0	1,896	0	0	0	0	1,896	14,947
2040	6	0	1,890	0	1,896	0	0	0	0	1,896	15,344
2041	6	0	1,890	0	1,896	0	0	0	0	1,896	15,712
2042	6	0	1,890	0	1,896	0	0	0	0	1,896	16,054
2043	6	0	1,890	0	1,896	0	0	0	0	1,896	16,372
2044	6	0	1,890	0	1,897	0	0	0	0	1,897	16,666
2045	6	0	1,890	0	1,897	0	0	0	0	1,897	16,940
2046	7	0	1,890	0	1,897	0	0	0	0	1,897	17,194
2047	7	0	1,890	0	1,897	0	0	0	0	1,897	17,430
2048	7	0	1,890	0	1,897	0	0	0	0	1,897	17,648
2049	7	0	1,890	0	1,897	0	0	0	0	1,897	17,851
2050	7	0	1,890	0	1,897	0	0	0	0	1,897	18,040
2051	7	0	1,890	0	1,897	0	0	0	0	1,897	18,215
2052	7	0	1,890	0	1,897	0	0	0	0	1,897	18,377
2053	7	0	1,890	0	1,898	0	0	0	0	1,898	18,528
2054	7	0	1,890	0	1,898	0	0	0	0	1,898	18,668
2055	8	0	1,890	0	1,898	0	0	0	0	1,898	18,798
2056	8	0	1,890	0	1,898	0	0	0	0	1,898	18,919
2057	8	0	1,890	0	1,898	0	0	0	0	1,898	19,031
2058	8	0	1,890	0	1,898	0	0	0	0	1,898	19,135
2059	8	0	1,890	0	1,898	0	0	0	0	1,898	19,231
2060	8	0	1,890	0	1,899	0	0	0	0	1,899	19,321
2061	8	0	1,890	0	1,899	0	0	0	0	1,899	19,404
2062	9	0	1,890	0	1,899	0	0	0	0	1,899	19,481
2063	9	0	1,890	0	1,899	0	0	0	0	1,899	19,553
2064	9	0	1,890	0	1,899	0	0	0	0	1,899	19,619
2065	9	0	1,890	0	1,899	0	0	0	0	1,899	19,681

NOM	277	0	82,229	0	82,506	0	0	0	0	0	82,506
NPV	54	0	19,627	0	19,681	0	0	0	0	0	19,681

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) )

2026  
7.73%  
Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	1,121	189	0	0	1,310	0	0	0	0	0	(1,310)	(1,216)
2021	0	1,610	568	1	0	2,179	1	0	0	0	0	(2,178)	(3,093)
2022	0	2,073	947	1	0	3,021	1	0	0	0	0	(3,021)	(5,509)
2023	0	2,528	1,324	2	0	3,854	1	0	0	0	0	(3,853)	(8,369)
2024	0	2,984	1,701	3	0	4,689	1	0	0	0	0	(4,688)	(11,600)
2025	0	1,887	1,890	3	0	3,781	1	0	0	0	0	(3,780)	(14,017)
2026	0	1,508	1,890	3	0	3,402	11,533	0	0	0	0	8,131	(9,190)
2027	0	1,161	1,890	3	0	3,055	11,079	0	0	0	0	8,024	(4,768)
2028	0	832	1,890	4	0	2,726	11,105	0	0	0	0	8,379	(482)
2029	0	511	1,890	4	0	2,405	10,114	0	0	0	0	7,708	3,178
2030	0	518	1,890	4	0	2,412	11,013	0	0	0	0	10,113	6,968
2031	0	536	1,890	4	0	2,430	11,866	0	0	0	0	11,865	10,828
2032	0	545	1,890	4	0	2,439	11,587	0	0	0	0	11,587	14,303
2033	0	548	1,890	4	0	2,442	9,655	0	0	0	0	9,655	16,845
2034	0	556	1,890	4	0	2,450	9,113	0	0	0	0	9,112	19,025
2035	0	564	1,890	4	0	2,458	9,349	0	0	0	0	9,349	21,118
2036	0	563	1,890	4	0	2,457	9,172	0	0	0	0	9,171	23,010
2037	0	580	1,890	4	0	2,475	8,662	0	0	0	0	8,662	24,629
2038	0	595	1,890	4	0	2,489	8,689	0	0	0	0	8,688	26,135
2039	0	603	1,890	4	0	2,497	8,335	0	0	0	0	8,335	27,451
2040	0	2,351	1,890	4	0	4,246	7,998	0	0	0	0	7,997	28,236
2041	0	3,059	1,890	5	0	4,954	7,861	0	0	0	0	7,860	28,801
2042	0	3,706	1,890	5	0	5,600	7,669	0	0	0	0	7,669	29,174
2043	0	4,333	1,890	5	0	6,228	7,266	0	0	0	0	7,266	29,347
2044	0	4,959	1,890	5	0	6,854	7,050	0	0	0	0	7,049	29,378
2045	0	3,133	1,890	5	0	5,028	6,929	0	0	0	0	6,929	29,652
2046	0	2,491	1,890	5	0	4,387	6,715	0	0	0	0	6,714	29,963
2047	0	1,910	1,890	5	0	3,805	6,453	0	0	0	0	6,452	30,292
2048	0	1,363	1,890	5	0	3,258	6,629	0	0	0	0	6,629	30,681
2049	0	838	1,890	5	0	2,733	6,363	0	0	0	0	6,363	31,070
2050	0	849	1,890	5	0	2,745	6,235	0	0	0	0	6,234	31,416
2051	0	878	1,890	5	0	2,774	6,105	0	0	0	0	6,105	31,724
2052	0	893	1,890	5	0	2,788	5,976	0	0	0	0	5,975	31,996
2053	0	898	1,890	6	0	2,794	5,845	0	0	0	0	5,845	32,239
2054	0	910	1,890	6	0	2,806	5,715	0	0	0	0	5,715	32,453
2055	0	924	1,890	6	0	2,820	5,584	0	0	0	0	5,584	32,643
2056	0	923	1,890	6	0	2,819	5,453	0	0	0	0	5,452	32,810
2057	0	951	1,890	6	0	2,847	5,321	0	0	0	0	5,320	32,956
2058	0	975	1,890	6	0	2,871	5,188	0	0	0	0	5,188	33,083
2059	0	988	1,890	6	0	2,884	5,084	0	0	0	0	5,083	33,195
2060	0	3,853	1,890	6	0	5,749	4,979	0	0	0	0	4,978	33,158
2061	0	5,012	1,890	6	0	6,909	4,873	0	0	0	0	4,872	33,069
2062	0	6,072	1,890	7	0	7,969	4,766	0	0	0	0	4,766	32,939
2063	0	7,100	1,890	7	0	8,997	4,659	0	0	0	0	4,658	32,775
2064	0	8,126	1,890	7	0	10,024	4,550	0	0	0	0	4,550	32,583
2065	0	5,133	1,890	7	0	7,031	4,441	0	0	0	0	4,440	32,499

NOM	0	94,454	82,229	211	0	176,893	296,979.72	0.00	0.00	(14,900)	296,965	120,072
NPV	0	19,771	19,627	41	0	39,439	71,941	0	0	(3)	71,938	32,499

7.73 %  
1.82

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)):



**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER ..... 0.26 KW  
 (2) GENERATOR KW REDUCTION PER CUSTOMER ..... 0.3425 KW  
 (3) KW LINE LOSS PERCENT AGE ..... 6.14 %  
 (4) GENERATOR KWH REDUCTION PER CUSTOMER ..... 646.42 KWh  
 (5) KWH LINE LOSS PERCENTAGE ..... 4.86 %  
 (6) GROUP LINE LOSS MULTIPLIER ..... 1.00  
 (7) CUSTOMER KWH INCREASE AT METER ..... 0.00 KWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM ..... 47 YEARS  
 (2) GENERATOR ECONOMIC LIFE ..... 40 YEARS  
 (3) T&D ECONOMIC LIFE ..... 40 YEARS  
 (4) K FACTOR FOR GENERATION ..... 1.42750  
 (5) K FACTOR FOR T & D ..... 1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER ..... \*\*\* \$/CLUST  
 (2) UTILITY RECURRING COST PER CUSTOMER ..... \*\*\* \$/CLUST  
 (3) UTILITY COST ESCALATION RATE ..... \*\*\* %\*\*  
 (4) CUSTOMER EQUIPMENT COST ..... \*\*\* \$/CLUST  
 (5) CUSTOMER EQUIPMENT ESCALATION RATE ..... \*\*\* %\*\*  
 (6) CUSTOMER O & M COST ..... \*\*\* \$/CLUSTYR  
 (7) CUSTOMER O & M COST ESCALATION RATE ..... \*\*\* %\*\*  
 (8) INCREASED SUPPLY COSTS ..... \*\*\* %\*\*  
 (9) SUPPLY COSTS ESCALATION RATES ..... \*\*\* %\*\*  
 (10) UTILITY DISCOUNT RATE ..... 7.73 %  
 (11) UTILITY AFUDC RATE ..... 5.97 %  
 (12) UTILITY NON RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CLUST  
 (13) UTILITY RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CLUST  
 (14) UTILITY REBATE/INCENTIVE ESCALATION RATE ..... \*\*\* %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
 \*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR ..... 2019  
 (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT ..... 2026  
 (3) IN-SERVICE YEAR FOR AVOIDED T&D ..... 2027-1-2025  
 (4) BASE YEAR AVOIDED GENERATING COST ..... 557,592,6542 \$/KW  
 (5) BASE YEAR AVOIDED TRANSMISSION COST ..... 317,705,2925 \$/KW  
 (6) BASE YEAR DISTRIBUTION COST ..... 78,230,14236 \$/KW  
 (7) GEN, TRAN & DIST COST ESCALATION RATE ..... 2.00 %\*\*  
 (8) GENERATOR FIXED O & M COST ..... 23,685,13279 \$/KW/YR  
 (9) GENERATOR FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (10) TRANSMISSION FIXED O & M COST ..... 4,302,507237 \$/KW  
 (11) DISTRIBUTION FIXED O & M COST ..... 3,045,100973 \$/KW  
 (12) T&D FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (13) AVOIDED GEN UNIT VARIABLE O & M COSTS ..... 0.01281834 CENTS\$/KWh  
 (14) GENERATOR VARIABLE O&M COST ESCALATION RATE ..... 2.5 %\*\*  
 (15) GENERATOR CAPACITY FACTOR ..... 49 \*\* (In-service year)  
 (16) AVOIDED GENERATING UNIT FUEL COST ..... 2.481 CENTS/KWh\*\* (In-service year)  
 (17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE ..... 5.68 %\*\*

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL ..... \*\*\* CENTS\$/KWh  
 (2) NON-FUEL COST ESCALATION RATE ..... \*\*\* %  
 (3) DEMAND CHARGE IN CUSTOMER BILL ..... \*\*\* \$/KW/MO  
 (4) DEMAND CHARGE ESCALATION RATE ..... \*\*\* %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST ..... 0.652  
 (2) TRC TEST ..... 0.552  
 (3) PARTICIPANT TEST ..... 1.06

\* INPUT DATA - PART I CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential AC

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	
2020	421	3,300	0	3,721	672	0	18,431	0	18,431	
2021	433	3,315	0	3,748	2,026	0	18,978	0	18,978	
2022	462	3,450	0	3,912	3,393	0	20,245	0	20,245	
2023	486	3,540	0	4,026	5,300	0	21,292	0	21,292	
2024	510	3,623	0	4,132	6,984	0	22,333	0	22,333	
2025	0	0	0	0	7,885	0	0	0	0	
2026	0	0	0	0	8,020	0	0	0	0	
2027	0	0	0	0	8,151	0	0	0	0	
2028	0	0	0	0	8,337	0	0	0	0	
2029	0	0	0	0	8,493	0	0	0	0	
2030	0	0	0	0	8,612	0	0	0	0	
2031	0	0	0	0	8,760	0	0	0	0	
2032	0	0	0	0	8,937	0	0	0	0	
2033	0	0	0	0	9,114	0	0	0	0	
2034	0	0	0	0	9,298	0	0	0	0	
2035	610	3,300	0	3,910	9,473	0	26,694	0	26,694	
2036	628	3,315	0	3,943	9,796	0	27,486	0	27,486	
2037	670	3,450	0	4,120	9,990	0	29,320	0	29,320	
2038	704	3,540	0	4,244	10,181	0	30,837	0	30,837	
2039	739	3,623	0	4,361	10,381	0	32,345	0	32,345	
2040	0	0	0	0	10,522	0	0	0	0	
2041	0	0	0	0	10,703	0	0	0	0	
2042	0	0	0	0	10,811	0	0	0	0	
2043	0	0	0	0	11,145	0	0	0	0	
2044	0	0	0	0	11,396	0	0	0	0	
2045	0	0	0	0	11,586	0	0	0	0	
2046	0	0	0	0	11,788	0	0	0	0	
2047	0	0	0	0	11,974	0	0	0	0	
2048	0	0	0	0	12,179	0	0	0	0	
2049	0	0	0	0	12,387	0	0	0	0	
2050	883	3,300	0	4,183	12,599	0	38,661	0	38,661	
2051	909	3,315	0	4,224	12,818	0	39,807	0	39,807	
2052	970	3,450	0	4,420	13,042	0	42,464	0	42,464	
2053	1,020	3,540	0	4,560	13,273	0	44,661	0	44,661	
2054	1,070	3,623	0	4,692	13,509	0	46,845	0	46,845	
2055	0	0	0	0	13,752	0	0	0	0	
2056	0	0	0	0	14,001	0	0	0	0	
2057	0	0	0	0	14,258	0	0	0	0	
2058	0	0	0	0	14,519	0	0	0	0	
2059	0	0	0	0	14,785	0	0	0	0	
2060	0	0	0	0	15,056	0	0	0	0	
2061	0	0	0	0	15,335	0	0	0	0	
2062	0	0	0	0	15,620	0	0	0	0	
2063	0	0	0	0	15,918	0	0	0	0	
2064	0	0	0	0	16,213	0	0	0	0	
2065	1,279	3,300	0	4,579	16,510	0	55,992	0	55,992	

NOM	11,792	54,983	0	66,774	499,501	0	516,390	0	516,390
NPV	3,177	19,904	0	23,081	97,395	0	139,130	0	139,130

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Residential AC

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	9.70	0.00	0.00
2020	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.97	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.92	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.92	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.05	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.16	0.00	0.00
2026	2.50	2.50	2.50	2.48	49.26	2.00	11.35	0.00	0.00
2027	2.50	2.50	2.50	2.62	81.53	2.00	11.54	0.00	0.00
2028	2.50	2.50	2.50	2.74	78.00	2.00	11.80	0.00	0.00
2029	2.50	2.50	2.50	2.85	74.20	2.00	12.02	0.00	0.00
2030	2.50	2.50	2.50	3.01	60.41	2.00	12.19	0.00	0.00
2031	2.50	2.50	2.50	3.11	56.03	2.00	12.40	0.00	0.00
2032	2.50	2.50	2.50	3.19	55.78	2.00	12.65	0.00	0.00
2033	2.50	2.50	2.50	3.14	76.71	2.00	12.90	0.00	0.00
2034	2.50	2.50	2.50	3.20	77.40	2.00	13.16	0.00	0.00
2035	2.50	2.50	2.50	3.26	77.41	2.00	13.41	0.00	0.00
2036	2.50	2.50	2.50	3.31	80.60	2.00	13.87	0.00	0.00
2037	2.50	2.50	2.50	3.37	82.52	2.00	14.14	0.00	0.00
2038	2.50	2.50	2.50	3.43	82.40	2.00	14.41	0.00	0.00
2039	2.50	2.50	2.50	3.50	82.89	2.00	14.70	0.00	0.00
2040	2.50	2.50	2.50	3.56	83.40	2.00	14.90	0.00	0.00
2041	2.50	2.50	2.50	3.60	85.24	2.00	15.15	0.00	0.00
2042	2.50	2.50	2.50	3.64	85.14	2.00	15.31	0.00	0.00
2043	2.50	2.50	2.50	3.67	87.14	2.00	15.78	0.00	0.00
2044	2.50	2.50	2.50	3.71	87.66	2.00	16.13	0.00	0.00
2045	2.50	2.50	2.50	3.75	88.02	2.00	16.40	0.00	0.00
2046	2.50	2.50	2.50	3.79	87.75	2.00	16.69	0.00	0.00
2047	2.50	2.50	2.50	3.83	88.56	2.00	16.95	0.00	0.00
2048	2.50	2.50	2.50	3.87	88.14	2.00	17.24	0.00	0.00
2049	2.50	2.50	2.50	3.92	91.34	2.00	17.54	0.00	0.00
2050	2.50	2.50	2.50	4.03	91.34	2.00	17.84	0.00	0.00
2051	2.50	2.50	2.50	4.16	91.34	2.00	18.15	0.00	0.00
2052	2.50	2.50	2.50	4.28	91.34	2.00	18.46	0.00	0.00
2053	2.50	2.50	2.50	4.41	91.34	2.00	18.79	0.00	0.00
2054	2.50	2.50	2.50	4.54	91.34	2.00	19.13	0.00	0.00
2055	2.50	2.50	2.50	4.68	91.34	2.00	19.47	0.00	0.00
2056	2.50	2.50	2.50	4.82	91.34	2.00	19.82	0.00	0.00
2057	2.50	2.50	2.50	4.96	91.34	2.00	20.19	0.00	0.00
2058	2.50	2.50	2.50	5.11	91.34	2.00	20.55	0.00	0.00
2059	2.50	2.50	2.50	5.26	91.34	2.00	20.93	0.00	0.00
2060	2.50	2.50	2.50	5.42	91.34	2.00	21.32	0.00	0.00
2061	2.50	2.50	2.50	5.58	91.34	2.00	21.71	0.00	0.00
2062	2.50	2.50	2.50	5.75	91.34	2.00	22.11	0.00	0.00
2063	2.50	2.50	2.50	5.92	91.34	2.00	22.54	0.00	0.00
2064	2.50	2.50	2.50	6.10	91.34	2.00	22.95	0.00	0.00
2065	2.50	2.50	2.50	6.29	91.34	2.00	23.37	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

PROGRAM NAME: Residential AC

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	27,054	524	0	1,701	351	466	14	678	242	0	3,976	3,976	3,976	27,104
2027	26,167	506	0	1,645	659	455	14	678	(84)	0	3,872	3,594	7,570	26,427
2028	25,181	487	0	1,583	927	443	14	678	(374)	0	3,758	3,238	10,808	25,749
2029	24,230	469	0	1,524	1,163	431	13	678	(651)	0	3,647	2,917	13,725	25,072
2030	23,312	451	0	1,466	1,369	420	13	678	(856)	0	3,540	2,628	16,353	24,394
2031	22,424	434	0	1,410	1,546	408	13	678	(1,052)	0	3,436	2,368	18,720	23,716
2032	21,564	417	0	1,356	1,697	396	12	678	(1,221)	0	3,335	2,133	20,854	23,039
2033	20,729	401	0	1,303	1,824	385	12	678	(1,366)	0	3,237	1,922	22,775	22,361
2034	19,909	385	0	1,252	1,947	373	11	678	(1,506)	0	3,140	1,730	24,506	21,684
2035	19,091	369	0	1,200	2,070	361	11	678	(1,647)	0	3,043	1,557	26,062	21,006
2036	18,272	354	0	1,149	2,193	350	11	678	(1,787)	0	2,946	1,399	27,461	20,328
2037	17,454	338	0	1,097	2,316	338	10	678	(1,928)	0	2,849	1,256	28,717	19,651
2038	16,636	322	0	1,046	2,439	326	10	678	(2,069)	0	2,753	1,126	29,843	18,973
2039	15,818	306	0	995	2,562	315	10	678	(2,209)	0	2,656	1,009	30,851	18,295
2040	15,000	290	0	943	2,686	303	9	678	(2,350)	0	2,559	902	31,754	17,618
2041	14,181	274	0	892	2,809	291	9	678	(2,490)	0	2,462	806	32,559	16,940
2042	13,363	259	0	840	2,932	280	9	678	(2,631)	0	2,366	718	33,278	16,263
2043	12,545	243	0	789	3,055	268	8	678	(2,772)	0	2,269	640	33,917	15,585
2044	11,727	227	0	737	3,178	256	8	678	(2,912)	0	2,172	568	34,486	14,907
2045	10,909	211	0	686	3,301	245	8	678	(3,053)	0	2,075	504	34,990	14,230
2046	10,166	197	0	639	3,425	233	7	678	(3,194)	0	1,986	448	35,437	13,552
2047	9,573	185	0	602	3,548	221	7	678	(3,335)	0	1,913	400	35,838	12,875
2048	9,055	175	0	569	3,671	210	6	678	(3,476)	0	1,847	359	36,197	12,197
2049	8,538	165	0	537	3,794	198	6	678	(3,617)	0	1,782	321	36,518	11,519
2050	8,021	155	0	504	3,917	186	6	678	(3,758)	0	1,716	287	36,805	10,842
2051	7,503	145	0	472	4,040	175	5	678	(3,899)	0	1,650	256	37,062	10,164
2052	6,986	135	0	439	4,163	163	5	678	(4,040)	0	1,585	229	37,290	9,487
2053	6,468	125	0	407	4,286	152	5	678	(4,181)	0	1,519	203	37,493	8,809
2054	5,951	115	0	374	4,409	140	4	678	(4,322)	0	1,454	181	37,674	8,131
2055	5,433	105	0	342	4,532	128	4	678	(4,463)	0	1,388	160	37,834	7,454
2056	4,916	95	0	309	4,655	117	4	678	(4,604)	0	1,322	142	37,976	6,776
2057	4,398	85	0	277	4,778	105	3	678	(4,745)	0	1,257	125	38,101	6,098
2058	3,881	75	0	244	4,901	93	3	678	(4,886)	0	1,191	110	38,211	5,421
2059	3,363	65	0	211	5,024	81	3	678	(5,027)	0	1,138	97	38,308	5,421
2060	2,846	55	0	179	5,147	69	3	678	(5,168)	0	1,084	86	38,394	5,421
2061	2,329	45	0	146	5,270	57	3	678	(5,309)	0	1,030	76	38,470	5,421
2062	1,811	35	0	114	5,393	45	3	678	(5,450)	0	977	67	38,537	5,421
2063	1,294	25	0	81	5,516	33	3	678	(5,591)	0	923	59	38,596	5,421
2064	776	15	0	49	5,639	21	3	678	(5,732)	0	870	51	38,647	5,421
2065	259	5	0	16	5,762	9	3	678	(5,873)	0	816	45	38,692	5,421

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	27,104
IN SERVICE YEAR	2026
BOOK LIFE (YRS)	40
EFFECT. TAX RATE	25.345%
DISCOUNT RATE	7.73%
PROPERTY TAX	1.72%
PROPERTY INSURANCE	0.053%

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION	TAX DEPRECIATION	ACCUMULATED DEPRECIATION	BOOK DEPRECIATION	ACCUMULATED DEPRECIATION	DEPRECIATION FOR DEFERRED TAX	ACCUMULATED DEPRECIATION FOR DEFERRED TAX	DEFERRED TAX DUE TO DEPRECIATION	TOTAL EQUITY AFUDC	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE	SALVAGE TAX RATE	ANNUAL DEFERRED TAX (9%*(12)+(13))	ACCUMULATED DEFERRED TAX \$ (000)
2026				997		678	678	678	242	1,828	0	0	0	242	577
2027	3.75%	1,920	1,920	997	678	678	678	678	(84)	1,828	0	0	0	(84)	492
2028	7.22%	1,776	1,776	2,917	678	1,355	678	1,355	(374)	1,828	0	0	0	(374)	118
2029	6.68%	1,643	1,643	4,693	678	2,033	678	2,033	(611)	1,828	0	0	0	(611)	(513)
2030	6.18%	1,519	1,519	6,336	678	2,710	678	2,710	(856)	1,828	0	0	0	(856)	(1,368)
2031	5.71%	1,406	1,406	7,856	678	3,388	678	3,388	(1,052)	1,828	0	0	0	(1,052)	(2,420)
2032	5.29%	1,300	1,300	9,261	678	4,066	678	4,066	(1,221)	1,828	0	0	0	(1,221)	(3,641)
2033	4.89%	1,203	1,203	10,561	678	4,743	678	4,743	(1,366)	1,828	0	0	0	(1,366)	(5,007)
2034	4.52%	1,187	1,187	11,764	678	5,421	678	5,421	(1,506)	1,828	0	0	0	(1,506)	(6,513)
2035	4.46%	1,186	1,186	12,951	678	6,098	678	6,098	(1,647)	1,828	0	0	0	(1,647)	(8,160)
2036	4.46%	1,187	1,187	14,137	678	6,776	678	6,776	(1,787)	1,828	0	0	0	(1,787)	(9,948)
2037	4.46%	1,186	1,186	15,324	678	7,454	678	7,454	(1,928)	1,828	0	0	0	(1,928)	(11,876)
2038	4.46%	1,187	1,187	16,510	678	8,131	678	8,131	(2,069)	1,828	0	0	0	(2,069)	(13,944)
2039	4.46%	1,186	1,186	17,697	678	8,809	678	8,809	(2,209)	1,828	0	0	0	(2,209)	(16,153)
2040	4.46%	1,187	1,187	18,883	678	9,487	678	9,487	(2,350)	1,828	0	0	0	(2,350)	(18,503)
2041	4.46%	1,186	1,186	20,070	678	10,164	678	10,164	(2,490)	1,828	0	0	0	(2,490)	(20,994)
2042	4.46%	1,187	1,187	21,257	678	10,842	678	10,842	(2,631)	1,828	0	0	0	(2,631)	(23,625)
2043	4.46%	1,186	1,186	22,443	678	11,519	678	11,519	(2,772)	1,828	0	0	0	(2,772)	(26,396)
2044	4.46%	1,187	1,187	23,630	678	12,197	678	12,197	(2,912)	1,828	0	0	0	(2,912)	(29,308)
2045	4.46%	1,186	1,186	24,817	678	12,875	678	12,875	(3,053)	1,828	0	0	0	(3,053)	(32,361)
2046	2.23%	593	593	26,003	678	13,552	678	13,552	(3,043)	1,828	0	0	0	(3,043)	(35,404)
2047	0.00%	0	0	26,596	678	14,230	678	14,230	(2,883)	1,828	0	0	0	(2,883)	(38,287)
2048	0.00%	0	0	26,596	678	14,907	678	14,907	(2,723)	1,828	0	0	0	(2,723)	(41,010)
2049	0.00%	0	0	26,596	678	15,585	678	15,585	(2,562)	1,828	0	0	0	(2,562)	(43,572)
2050	0.00%	0	0	26,596	678	16,263	678	16,263	(2,402)	1,828	0	0	0	(2,402)	(45,974)
2051	0.00%	0	0	26,596	678	16,940	678	16,940	(2,242)	1,828	0	0	0	(2,242)	(48,217)
2052	0.00%	0	0	26,596	678	17,618	678	17,618	(2,082)	1,828	0	0	0	(2,082)	(50,299)
2053	0.00%	0	0	26,596	678	18,295	678	18,295	(1,922)	1,828	0	0	0	(1,922)	(52,220)
2054	0.00%	0	0	26,596	678	18,973	678	18,973	(1,762)	1,828	0	0	0	(1,762)	(53,982)
2055	0.00%	0	0	26,596	678	19,651	678	19,651	(1,602)	1,828	0	0	0	(1,602)	(55,584)
2056	0.00%	0	0	26,596	678	20,328	678	20,328	(1,441)	1,828	0	0	0	(1,441)	(57,025)
2057	0.00%	0	0	26,596	678	21,006	678	21,006	(1,281)	1,828	0	0	0	(1,281)	(58,306)
2058	0.00%	0	0	26,596	678	21,684	678	21,684	(1,121)	1,828	0	0	0	(1,121)	(59,427)
2059	0.00%	0	0	26,596	678	22,361	678	22,361	(961)	1,828	0	0	0	(961)	(60,388)
2060	0.00%	0	0	26,596	678	23,039	678	23,039	(801)	1,828	0	0	0	(801)	(61,189)
2061	0.00%	0	0	26,596	678	23,716	678	23,716	(641)	1,828	0	0	0	(641)	(61,830)
2062	0.00%	0	0	26,596	678	24,394	678	24,394	(480)	1,828	0	0	0	(480)	(62,310)
2063	0.00%	0	0	26,596	678	25,072	678	25,072	(320)	1,828	0	0	0	(320)	(62,631)
2064	0.00%	0	0	26,596	678	25,749	678	25,749	(160)	1,828	0	0	0	(160)	(62,791)
2065	0.00%	0	0	26,596	678	26,427	678	26,427	(0)	1,828	0	0	0	(0)	(62,791)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	335
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,828
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$ (000)	(4) DEFERRED TAX \$ (000)	(5) END OF YEAR NET PLANT IN SERVICE \$ (000)	(5a)* ACCUMULATED DEPRECIATION \$ (000)	(5b)* ACCUMULATED DEF TAXES \$ (000)	(6) BEGINNING YEAR RATE BASE \$ (000)	(7) ENDING OF YEAR RATE BASE \$ (000)	(8) MID-YEAR RATE BASE \$ (000)
2026	3.75%	997	242	26,427	678	577	27,439	26,669	27,054
2027	7.22%	1,920	(84)	25,749	1,355	492	26,669	26,669	26,167
2028	6.68%	1,776	(374)	25,072	2,033	118	25,665	24,697	25,181
2029	6.18%	1,643	(631)	24,394	2,710	(513)	24,697	23,763	24,230
2030	5.71%	1,519	(856)	23,716	3,388	(1,368)	23,763	22,861	23,312
2031	5.29%	1,406	(1,052)	23,039	4,066	(2,420)	22,861	21,987	22,424
2032	4.89%	1,300	(1,221)	22,361	4,743	(3,641)	21,987	21,140	21,564
2033	4.52%	1,203	(1,366)	21,684	5,421	(5,007)	21,140	20,318	20,729
2034	4.46%	1,187	(1,506)	21,006	6,098	(6,513)	20,318	19,500	19,909
2035	4.46%	1,186	(1,647)	20,328	6,776	(8,160)	19,500	18,681	19,091
2036	4.46%	1,187	(1,787)	19,651	7,454	(9,948)	18,681	17,863	18,272
2037	4.46%	1,186	(1,928)	18,973	8,131	(11,876)	17,863	17,045	17,454
2038	4.46%	1,187	(2,069)	18,295	8,809	(13,944)	17,045	16,227	16,636
2039	4.46%	1,186	(2,209)	17,618	9,487	(16,153)	16,227	15,409	15,818
2040	4.46%	1,187	(2,350)	16,940	10,164	(18,503)	15,409	14,590	15,000
2041	4.46%	1,186	(2,490)	16,263	10,842	(20,994)	14,590	13,772	14,181
2042	4.46%	1,187	(2,631)	15,585	11,519	(23,625)	13,772	12,954	13,363
2043	4.46%	1,186	(2,772)	14,907	12,197	(26,396)	12,954	12,136	12,545
2044	4.46%	1,187	(2,912)	14,230	12,875	(29,308)	12,136	11,318	11,727
2045	4.46%	1,186	(3,053)	13,552	13,552	(32,361)	11,318	10,499	10,909
2046	2.23%	593	(3,043)	12,875	14,230	(35,404)	10,499	9,832	10,166
2047	0.00%	0	(2,883)	12,197	14,907	(38,287)	9,832	9,314	9,573
2048	0.00%	0	(2,723)	11,519	15,585	(41,010)	9,314	8,797	9,055
2049	0.00%	0	(2,562)	10,842	16,263	(43,572)	8,797	8,279	8,538
2050	0.00%	0	(2,402)	10,164	16,940	(45,974)	8,279	7,762	8,021
2051	0.00%	0	(2,242)	9,487	17,618	(48,217)	7,762	7,244	7,503
2052	0.00%	0	(2,082)	8,809	18,295	(50,299)	7,244	6,727	6,986
2053	0.00%	0	(1,922)	8,131	18,973	(52,220)	6,727	6,209	6,468
2054	0.00%	0	(1,762)	7,454	19,651	(53,982)	6,209	5,692	5,951
2055	0.00%	0	(1,602)	6,776	20,328	(55,584)	5,692	5,175	5,433
2056	0.00%	0	(1,441)	6,098	21,006	(57,025)	5,175	4,657	4,916
2057	0.00%	0	(1,281)	5,421	21,684	(58,306)	4,657	4,140	4,398
2058	0.00%	0	(1,121)	4,743	22,361	(59,427)	4,140	3,622	3,881
2059	0.00%	0	(961)	4,066	23,039	(60,388)	3,622	3,105	3,363
2060	0.00%	0	(801)	3,388	23,716	(61,189)	3,105	2,587	2,846
2061	0.00%	0	(641)	2,710	24,394	(61,830)	2,587	2,070	2,329
2062	0.00%	0	(480)	2,033	25,072	(62,310)	2,070	1,552	1,811
2063	0.00%	0	(320)	1,355	25,749	(62,631)	1,552	1,035	1,294
2064	0.00%	0	(160)	678	26,427	(62,791)	1,035	517	776
2065	0.00%	0	(0)	(0)	27,104	(62,791)	517	(0)	259

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)	
2019	-7	0.0%	1.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2020	-6	2.5%	1.025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2021	-5	2.5%	1.051	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2022	-4	2.5%	1.077	5.19	31.14	15.57	1.45	0.19	0.93	6.15	7.08	0.75	0.14	0.14	0.14	32.07	32.07	
2023	-3	2.5%	1.104	23.10	142.17	102.22	3.76	5.21	18.38	18.38	25.46	14.46	2.71	2.71	2.71	148.32	180.39	
2024	-2	2.5%	1.131	40.77	257.23	301.92	6.75	11.96	32.97	32.97	58.43	25.41	4.73	4.73	4.73	275.61	456.00	
2025	-1	2.5%	1.160	30.94	200.08	530.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	233.05	689.05	
							100.00		630.61									
									58.43		45.52			8.51			689.05	

	BOOK BASIS FOR DEF. TAX	TAX BASIS
CONSTRUCTION CASH	24,806	24,806
EQUITY AFUDC	1,828	
DEBT AFUDC	470	
CPI	470	1,791
ITC Basis Reduction (Solar)		
TOTAL	27,104	26,596

IN-SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	22,000	22,000	1.80	1.98	1.84	0.00	1.00	1.00
2021	44,100	44,100	1.83	2.21	1.88	0.00	1.00	1.00
2022	67,100	67,100	1.80	1.99	1.84	0.00	1.00	1.00
2023	90,700	90,700	1.95	2.20	1.99	0.00	1.00	1.00
2024	114,850	114,850	2.14	2.36	2.18	0.00	1.00	1.00
2025	114,850	114,850	2.32	2.56	2.36	0.00	1.00	1.00
2026	114,850	114,850	2.54	2.82	2.58	2.63	1.00	1.00
2027	114,850	114,850	2.67	2.98	2.72	2.76	1.00	1.00
2028	114,850	114,850	2.75	3.03	2.80	2.85	1.00	1.00
2029	114,850	114,850	3.00	3.30	3.08	3.09	1.00	1.00
2030	114,850	114,850	3.10	3.41	3.19	3.09	1.00	1.00
2031	114,850	114,850	3.04	3.33	3.10	2.97	1.00	1.00
2032	114,850	114,850	3.26	3.74	3.34	3.07	1.00	1.00
2033	114,850	114,850	3.14	3.44	3.19	3.34	1.00	1.00
2034	114,850	114,850	3.19	3.42	3.25	3.46	1.00	1.00
2035	114,850	114,850	3.22	3.49	3.27	3.47	1.00	1.00
2036	114,850	114,850	3.27	3.57	3.31	3.52	1.00	1.00
2037	114,850	114,850	3.33	3.59	3.37	3.62	1.00	1.00
2038	114,850	114,850	3.40	3.67	3.44	3.66	1.00	1.00
2039	114,850	114,850	3.47	3.74	3.51	3.75	1.00	1.00
2040	114,850	114,850	3.54	3.81	3.58	3.85	1.00	1.00
2041	114,850	114,850	3.61	3.89	3.65	3.88	1.00	1.00
2042	114,850	114,850	3.66	3.97	3.71	3.93	1.00	1.00
2043	114,850	114,850	3.71	4.02	3.76	3.99	1.00	1.00
2044	114,850	114,850	3.76	4.13	3.82	4.04	1.00	1.00
2045	114,850	114,850	3.80	4.06	3.85	4.08	1.00	1.00
2046	114,850	114,850	3.84	4.14	3.89	4.14	1.00	1.00
2047	114,850	114,850	3.89	4.18	3.94	4.20	1.00	1.00
2048	114,850	114,850	3.94	4.27	4.00	4.22	1.00	1.00
2049	114,850	114,850	3.98	4.29	4.04	4.28	1.00	1.00
2050	114,850	114,850	5.03	5.38	5.12	4.41	1.00	1.00
2051	114,850	114,850	5.13	5.49	5.22	4.55	1.00	1.00
2052	114,850	114,850	5.23	5.60	5.33	4.68	1.00	1.00
2053	114,850	114,850	5.34	5.71	5.43	4.83	1.00	1.00
2054	114,850	114,850	5.44	5.82	5.54	4.97	1.00	1.00
2055	114,850	114,850	5.55	5.94	5.65	5.12	1.00	1.00
2056	114,850	114,850	5.66	6.06	5.76	5.28	1.00	1.00
2057	114,850	114,850	5.78	6.18	5.88	5.44	1.00	1.00
2058	114,850	114,850	5.89	6.30	6.00	5.61	1.00	1.00
2059	114,850	114,850	6.01	6.43	6.12	5.78	1.00	1.00
2060	114,850	114,850	6.13	6.56	6.24	5.95	1.00	1.00
2061	114,850	114,850	6.25	6.69	6.36	6.13	1.00	1.00
2062	114,850	114,850	6.38	6.82	6.49	6.32	1.00	1.00
2063	114,850	114,850	6.50	6.96	6.62	6.51	1.00	1.00
2064	114,850	114,850	6.63	7.10	6.75	6.71	1.00	1.00
2065	114,850	114,850	6.77	7.24	6.89	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.



AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	3,976	1,107	26	4211	4471	4849
2027	3,872	1,135	44	7566	7759	4659
2028	3,758	1,164	43	7373	7668	4669
2029	3,647	1,193	42	7281	7911	4252
2030	3,540	1,222	35	6255	6422	4631
2031	3,436	1,253	33	6009	5742	4989
2032	3,335	1,284	34	6128	5909	4872
2033	3,237	1,316	48	8286	8828	4060
2034	3,140	1,349	50	8527	9234	3832
2035	3,043	1,383	51	8699	9244	3931
2036	2,946	1,418	54	9201	9762	3856
2037	2,849	1,453	57	9574	10291	3642
2038	2,753	1,489	58	9739	10386	3653
2039	2,656	1,527	60	9986	10724	3504
2040	2,559	1,565	62	10233	11056	3363
2041	2,462	1,604	65	10569	11395	3305
2042	2,366	1,644	66	10676	11527	3225
2043	2,269	1,685	70	11017	11986	3055
2044	2,172	1,727	72	11204	12211	2964
2045	2,075	1,770	74	11368	12374	2913
2046	1,986	1,815	75	11459	12513	2823
2047	1,913	1,860	78	11682	12821	2713
2048	1,847	1,907	80	11759	12806	2787
2049	1,782	1,954	85	12328	13473	2675
2050	1,716	2,003	87	12698	13883	2621
2051	1,650	2,053	89	13079	14305	2566
2052	1,585	2,105	91	13471	14740	2512
2053	1,519	2,157	93	13875	15188	2457
2054	1,454	2,211	96	14291	15650	2402
2055	1,388	2,266	98	14720	16126	2347
2056	1,322	2,322	101	15162	16616	2292
2057	1,257	2,381	103	15617	17121	2236
2058	1,191	2,441	106	16085	17642	2181
2059	1,138	2,502	108	16568	18179	2137
2060	1,084	2,564	111	17065	18732	2092
2061	1,030	2,628	114	17577	19301	2048
2062	977	2,694	117	18104	19888	2003
2063	923	2,761	120	18647	20493	1958
2064	870	2,830	123	19207	21117	1912
2065	816	2,901	126	19783	21759	1866

NOM	87,540	74,647	3,042	476,878	517,232	124,854
NPV	22,971.54	11,690.00	436	71,129	75,979	30,247

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	144	0
2021	362	51	413	67	28	95	499	0
2022	726	88	814	135	48	183	735	0
2023	1,105	128	1,234	206	70	276	1,163	0
2024	1,495	171	1,667	280	93	373	1,612	0
2025	1,896	196	2,092	355	107	462	1,954	0
2026	1,837	201	2,038	346	110	456	2,156	0
2027	1,779	206	1,985	337	112	449	2,287	0
2028	1,723	211	1,934	328	115	443	2,317	0
2029	1,669	217	1,885	320	118	437	2,518	0
2030	1,616	222	1,838	311	121	432	2,606	0
2031	1,563	228	1,791	303	124	427	2,541	0
2032	1,511	233	1,744	295	127	422	2,894	0
2033	1,459	239	1,698	287	130	417	2,620	0
2034	1,406	245	1,651	279	133	412	2,597	0
2035	1,354	251	1,605	270	137	407	2,652	0
2036	1,303	258	1,560	262	140	403	2,717	0
2037	1,254	264	1,518	254	144	398	2,731	0
2038	1,210	271	1,481	246	147	393	2,791	0
2039	1,170	277	1,448	238	151	389	2,839	0
2040	1,135	284	1,419	230	155	385	2,895	0
2041	1,103	291	1,395	222	159	381	2,957	0
2042	1,073	299	1,372	214	163	377	3,018	0
2043	1,042	306	1,349	207	167	374	3,060	0
2044	1,012	314	1,326	201	171	371	3,151	0
2045	981	322	1,303	195	175	371	3,072	0
2046	951	330	1,281	190	179	370	3,144	0
2047	921	338	1,258	185	184	369	3,168	0
2048	890	346	1,236	180	189	369	3,253	0
2049	860	355	1,215	175	193	369	3,255	0
2050	829	364	1,193	170	198	368	4,077	0
2051	799	373	1,172	165	203	368	4,159	0
2052	768	382	1,150	160	208	369	4,242	0
2053	738	392	1,130	155	213	369	4,327	0
2054	707	402	1,109	150	219	369	4,413	0
2055	677	412	1,089	145	224	370	4,501	0
2056	646	422	1,068	140	230	370	4,591	0
2057	617	433	1,049	136	236	371	4,683	0
2058	588	443	1,032	131	241	372	4,777	0
2059	561	454	1,015	126	247	373	4,872	0
2060	534	466	1,000	121	254	374	4,970	0
2061	509	477	987	116	260	376	5,070	0
2062	485	489	974	111	266	377	5,170	0
2063	460	502	961	106	273	379	5,274	0
2064	435	514	949	101	280	381	5,379	0
2065	355	527	882	97	287	384	5,487	0

NOM	46,115	14,195.24	60,310	9,251	7,729	16,981	149,339	0
NPV	14,448	2,577	17,025	2,799	1,403	4,202	27,108	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential AC

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	1	1	0	0	0
2027	1	1	0	0	0
2028	1	1	0	0	0
2029	1	1	0	0	0
2030	1	1	0	0	0
2031	1	1	0	0	0
2032	1	1	0	0	0
2033	1	1	0	0	0
2034	1	1	0	0	0
2035	1	1	0	0	0
2036	1	1	0	0	0
2037	1	1	0	0	0
2038	1	1	0	0	0
2039	1	1	0	0	0
2040	1	1	0	0	0
2041	1	1	0	0	0
2042	1	1	0	0	0
2043	1	1	0	0	0
2044	1	1	0	0	0
2045	1	1	0	0	0
2046	1	1	0	0	0
2047	1	1	0	0	0
2048	1	1	0	0	0
2049	1	1	0	0	0
2050	1	1	0	0	0
2051	1	1	0	0	0
2052	1	1	0	0	0
2053	1	1	0	0	0
2054	1	1	0	0	0
2055	1	1	0	0	0
2056	1	1	0	0	0
2057	1	1	0	0	0
2058	1	1	0	0	0
2059	1	1	0	0	0
2060	1	1	0	0	0
2061	1	1	0	0	0
2062	1	1	0	0	0
2063	1	1	0	0	0
2064	1	1	0	0	0
2065	1	1	0	0	0

NOM	44	50	14	0	8
NPV	8	9	3	0	2

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	421	18,431	0	18,852	0	0	144	0	144	145	(17,365)
2021	0	433	18,978	0	19,411	0	508	499	0	1,008	1,008	(33,222)
2022	0	462	20,245	0	20,707	0	997	735	0	1,733	1,733	(48,396)
2023	0	486	21,292	0	21,778	0	1,510	1,163	0	2,673	2,673	(62,579)
2024	0	510	22,333	0	22,843	0	2,040	1,612	0	3,652	3,652	(75,803)
2025	0	0	0	0	0	0	2,554	1,954	0	4,509	4,509	(72,919)
2026	0	0	0	0	0	4,849	2,494	2,156	0	9,500	9,500	(67,279)
2027	0	0	0	0	0	4,659	2,434	2,287	0	9,380	9,380	(62,110)
2028	0	0	0	0	0	4,669	2,377	2,317	0	9,364	9,364	(57,320)
2029	0	0	0	0	0	4,252	2,233	2,518	0	9,093	9,093	(53,002)
2030	0	0	0	0	0	4,631	2,270	2,606	0	9,507	9,507	(48,812)
2031	0	0	0	0	0	4,989	2,218	2,541	0	9,748	9,748	(44,824)
2032	0	0	0	0	0	4,872	2,166	2,894	0	9,933	9,933	(41,052)
2033	0	0	0	0	0	4,060	2,115	2,894	0	8,794	8,794	(37,952)
2034	0	0	0	0	0	3,832	2,063	2,597	0	8,492	8,492	(35,174)
2035	0	610	26,694	0	27,303	3,931	2,012	2,652	0	8,596	8,596	(40,855)
2036	0	628	27,486	0	28,113	3,856	1,963	2,717	0	8,536	8,536	(46,374)
2037	0	670	29,320	0	29,990	3,642	1,916	2,731	0	8,289	8,289	(52,053)
2038	0	704	30,837	0	31,541	3,653	1,874	2,791	0	8,318	8,318	(57,693)
2039	0	739	32,345	0	33,083	3,504	1,837	2,839	0	8,180	8,180	(63,308)
2040	0	0	0	0	0	3,363	1,804	2,895	0	8,062	8,062	(61,621)
2041	0	0	0	0	0	3,305	1,775	2,957	0	8,038	8,038	(60,060)
2042	0	0	0	0	0	3,225	1,748	3,018	0	7,991	7,991	(58,619)
2043	0	0	0	0	0	3,055	1,723	3,060	0	7,838	7,838	(57,307)
2044	0	0	0	0	0	2,964	1,698	3,151	0	7,813	7,813	(56,093)
2045	0	0	0	0	0	2,913	1,674	3,072	0	7,659	7,659	(54,989)
2046	0	0	0	0	0	2,823	1,650	3,144	0	7,617	7,617	(53,969)
2047	0	0	0	0	0	2,713	1,628	3,168	0	7,508	7,508	(53,036)
2048	0	0	0	0	0	2,787	1,605	3,253	0	7,645	7,645	(52,154)
2049	0	0	0	0	0	2,675	1,583	3,255	0	7,514	7,514	(51,350)
2050	0	883	38,661	0	39,544	2,621	1,562	4,077	0	8,259	8,259	(54,459)
2051	0	909	39,807	0	40,716	2,566	1,540	4,159	0	8,266	8,266	(57,452)
2052	0	970	42,464	0	43,434	2,512	1,519	4,252	0	8,283	8,283	(60,462)
2053	0	1,020	44,661	0	45,681	2,457	1,498	4,327	0	8,294	8,294	(63,434)
2054	0	1,070	46,845	0	47,914	2,402	1,478	4,413	0	8,307	8,307	(66,357)
2055	0	0	0	0	0	2,347	1,458	4,501	0	8,322	8,322	(65,788)
2056	0	0	0	0	0	2,292	1,439	4,591	0	8,322	8,322	(65,259)
2057	0	0	0	0	0	2,236	1,420	4,683	0	8,340	8,340	(64,767)
2058	0	0	0	0	0	2,181	1,403	4,777	0	8,361	8,361	(64,309)
2059	0	0	0	0	0	2,137	1,388	4,872	0	8,397	8,397	(63,882)
2060	0	0	0	0	0	2,092	1,374	4,970	0	8,437	8,437	(63,484)
2061	0	0	0	0	0	2,048	1,362	5,070	0	8,480	8,480	(63,113)
2062	0	11,792	516,390	0	528,182	124,853.95	77,291	149,339	8	351,492	351,492	(176,691)
2063	0	3,177	139,130	0	142,307	30,247	21,227	27,108	2	78,584.67	78,584.67	(63,723)
2064	0	0	0	0	0	0	0	0	0	0	0	0
2065	0	1,279	55,992	0	57,271	1,866	1,266	5,487	0	8,619	8,619	(48,652)

Discount Rate: 0.55 %

Benefit/Cost Ratio (Col(11) / Col(6)):

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	884	0	3,300	0	4,184	18,431	0	0	18,431	(14,247)	(13,224)
2021	2,665	0	3,315	0	5,980	18,978	0	0	18,978	(12,998)	(24,423)
2022	4,465	0	3,450	0	7,915	20,245	0	0	20,245	(12,329)	(34,284)
2023	6,974	0	3,540	0	10,514	21,292	0	0	21,292	(10,778)	(42,285)
2024	9,189	0	3,623	0	12,811	22,333	0	0	22,333	(9,521)	(48,846)
2025	10,375	0	0	0	10,375	0	0	0	0	10,375	(42,210)
2026	10,552	0	0	0	10,552	0	0	0	0	10,552	(35,945)
2027	10,725	0	0	0	10,725	0	0	0	0	10,725	(30,035)
2028	10,969	0	0	0	10,969	0	0	0	0	10,969	(24,424)
2029	11,176	0	0	0	11,176	0	0	0	0	11,176	(19,117)
2030	11,332	0	0	0	11,332	0	0	0	0	11,332	(14,123)
2031	11,526	0	0	0	11,526	0	0	0	0	11,526	(9,407)
2032	11,759	0	0	0	11,759	0	0	0	0	11,759	(4,942)
2033	11,992	0	0	0	11,992	0	0	0	0	11,992	(715)
2034	12,234	0	0	0	12,234	0	0	0	0	12,234	3,288
2035	12,465	0	3,300	0	15,765	26,694	0	0	26,694	(10,929)	(31)
2036	12,889	0	3,315	0	16,204	27,486	0	0	27,486	(11,282)	(3211)
2037	13,145	0	3,450	0	16,595	29,320	0	0	29,320	(6,541)	(6,541)
2038	13,396	0	3,540	0	16,936	30,837	0	0	30,837	(13,901)	(9,918)
2039	13,660	0	3,623	0	17,282	32,345	0	0	32,345	(15,062)	(13,314)
2040	13,844	0	0	0	13,844	0	0	0	0	13,844	(10,416)
2041	14,083	0	0	0	14,083	0	0	0	0	14,083	(7,681)
2042	14,225	0	0	0	14,225	0	0	0	0	14,225	(5,116)
2043	14,665	0	0	0	14,665	0	0	0	0	14,665	(2,661)
2044	14,995	0	0	0	14,995	0	0	0	0	14,995	(332)
2045	15,245	0	0	0	15,245	0	0	0	0	15,245	1,867
2046	15,511	0	0	0	15,511	0	0	0	0	15,511	3,943
2047	15,756	0	0	0	15,756	0	0	0	0	15,756	5,901
2048	16,025	0	0	0	16,025	0	0	0	0	16,025	7,749
2049	16,298	0	0	0	16,298	0	0	0	0	16,298	9,493
2050	16,578	0	3,300	0	19,878	38,661	0	0	38,661	(18,783)	7,627
2051	16,865	0	3,315	0	20,180	39,807	0	0	39,807	(19,627)	5,817
2052	17,161	0	3,450	0	20,611	42,464	0	0	42,464	(21,833)	3,946
2053	17,464	0	3,540	0	21,004	44,661	0	0	44,661	(23,657)	2,066
2054	17,775	0	3,623	0	21,398	46,845	0	0	46,845	(25,447)	188
2055	18,094	0	0	0	18,094	0	0	0	0	18,094	1,427
2056	18,422	0	0	0	18,422	0	0	0	0	18,422	2,598
2057	18,760	0	0	0	18,760	0	0	0	0	18,760	3,705
2058	19,103	0	0	0	19,103	0	0	0	0	19,103	4,751
2059	19,454	0	0	0	19,454	0	0	0	0	19,454	5,740
2060	19,810	0	0	0	19,810	0	0	0	0	19,810	6,675
2061	20,177	0	0	0	20,177	0	0	0	0	20,177	7,558
2062	20,553	0	0	0	20,553	0	0	0	0	20,553	8,394
2063	20,945	0	0	0	20,945	0	0	0	0	20,945	9,184
2064	21,333	0	0	0	21,333	0	0	0	0	21,333	9,932
2065	21,724	0	3,300	0	25,024	55,992	0	0	55,992	(30,969)	8,925

NOM	657,238	0	54,983	0	712,220	516,390	0	0	516,390	195,830
NPV	128,151	0	19,904	0	148,055	139,130	0	0	139,130	8,925

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 1.06

2026  
7.73%  
1.06

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential AC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	421	3,300	672	0	4,393	144	0	0	0	145	(4,248)	(3,945)
2021	0	433	3,315	2,026	0	5,774	499	508	0	0	1,008	(4,767)	(8,050)
2022	0	462	3,450	3,393	0	7,306	735	997	0	0	1,733	(5,573)	(12,503)
2023	0	486	3,540	3,300	0	9,326	1,163	1,510	0	0	2,673	(6,653)	(17,446)
2024	0	510	3,623	6,984	0	11,116	1,612	2,040	0	0	3,652	(7,465)	(22,590)
2025	0	0	0	7,885	0	7,885	1,954	2,554	0	0	4,509	(3,376)	(24,749)
2026	0	0	0	8,020	0	8,020	7,006	2,494	0	0	9,500	1,480	(23,870)
2027	0	0	0	8,151	0	8,151	6,945	2,484	0	0	9,380	1,229	(23,193)
2028	0	0	0	8,337	0	8,337	6,987	2,377	0	0	9,364	1,028	(22,667)
2029	0	0	0	8,493	0	8,493	6,770	2,323	0	0	9,093	9,093	(22,383)
2030	0	0	0	8,612	0	8,612	7,236	2,270	0	0	9,507	8,948	(21,988)
2031	0	0	0	8,760	0	8,760	7,530	2,218	0	0	9,748	9,748	(21,584)
2032	0	0	0	8,937	0	8,937	7,767	2,166	0	0	9,933	9,933	(21,206)
2033	0	0	0	9,114	0	9,114	6,680	2,115	0	0	8,794	(319)	(21,319)
2034	0	0	0	9,298	0	9,298	6,428	2,063	0	0	8,492	(806)	(21,583)
2035	0	610	3,300	9,473	0	13,383	6,583	2,012	0	0	8,596	(4,787)	(23,036)
2036	0	628	3,315	9,796	0	13,738	6,573	1,963	0	0	8,536	(5,202)	(24,503)
2037	0	670	3,450	9,990	0	14,109	6,373	1,916	0	0	8,289	(5,820)	(26,026)
2038	0	704	3,540	10,181	0	14,425	6,444	1,874	0	0	8,318	(6,107)	(27,509)
2039	0	739	3,623	10,381	0	14,742	6,343	1,837	0	0	8,180	(6,563)	(28,989)
2040	0	0	0	10,522	0	10,522	6,257	1,804	0	0	8,062	(2,460)	(29,504)
2041	0	0	0	10,703	0	10,703	6,262	1,775	0	0	8,038	(2,666)	(30,021)
2042	0	0	0	10,811	0	10,811	6,243	1,748	0	0	7,991	(2,820)	(30,530)
2043	0	0	0	11,145	0	11,145	6,115	1,723	0	0	7,838	(3,307)	(31,083)
2044	0	0	0	11,396	0	11,396	6,115	1,698	0	0	7,813	(3,583)	(31,640)
2045	0	0	0	11,586	0	11,586	5,985	1,674	0	0	7,659	(3,927)	(32,206)
2046	0	0	0	11,788	0	11,788	5,967	1,650	0	0	7,617	(4,171)	(32,765)
2047	0	0	0	11,974	0	11,974	5,881	1,628	0	0	7,508	(4,466)	(33,320)
2048	0	0	0	12,179	0	12,179	6,040	1,605	0	0	7,645	(4,834)	(33,842)
2049	0	0	0	12,387	0	12,387	5,931	1,583	0	0	7,514	(5,211)	(34,364)
2050	0	883	3,300	12,599	0	16,382	6,698	1,562	0	0	8,259	(6,523)	(35,211)
2051	0	909	3,315	12,818	0	17,042	6,725	1,540	0	0	8,266	(6,776)	(36,020)
2052	0	970	3,450	13,042	0	17,462	6,754	1,519	0	0	8,273	(6,807)	(36,807)
2053	0	1,020	3,540	13,273	0	17,833	6,784	1,498	0	0	8,283	(6,850)	(37,566)
2054	0	1,070	3,623	13,509	0	18,201	6,816	1,478	0	0	8,294	(6,907)	(38,297)
2055	0	0	0	13,752	0	13,752	6,848	1,458	0	0	8,307	(7,007)	(39,031)
2056	0	0	0	14,001	0	14,001	6,883	1,439	0	0	8,322	(7,118)	(39,842)
2057	0	0	0	14,258	0	14,258	6,919	1,420	0	0	8,340	(7,232)	(40,654)
2058	0	0	0	14,519	0	14,519	6,958	1,403	0	0	8,361	(7,346)	(41,486)
2059	0	0	0	14,785	0	14,785	7,009	1,388	0	0	8,397	(7,461)	(42,320)
2060	0	0	0	15,056	0	15,056	7,063	1,374	0	0	8,437	(7,576)	(43,154)
2061	0	0	0	15,335	0	15,335	7,118	1,362	0	0	8,480	(7,691)	(44,004)
2062	0	0	0	15,620	0	15,620	7,173	1,351	0	0	8,525	(7,806)	(44,864)
2063	0	0	0	15,918	0	15,918	7,232	1,340	0	0	8,573	(7,921)	(45,734)
2064	0	0	0	16,213	0	16,213	7,292	1,330	0	0	8,622	(8,036)	(46,614)
2065	0	1,279	3,300	16,510	0	21,089	7,353	1,266	0	0	8,619	(8,151)	(47,505)

NOM	0	11,792	54,983	499,501	0	566,275	274,192.75	771,200.98	0.00	7.85	351,492	(214,784)	(214,784)
NPV	0	3,177	19,904	97,395	0	120,476	57,355	21,227	0	2	78,585	(41,891)	(41,891)

7.73 %  
0.65

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)):

INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER .....	0.33 kW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	0.4231 kW
(3) KW LINE LOSS PERCENT AGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	1,118.35 kWh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** \$/CUSTYR
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV. AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,592,6542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	317,705,2925 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	78,230,14236 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23,685,13279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	4,302,507237 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	3,045,100973 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	49 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	2,481 CENTS/KWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	5.68 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V. NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/KWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI. COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.574
(2) TRC TEST .....	0.563
(3) PARTICIPANT TEST .....	1.28

\* INPUT DATA - PART I CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Buildingsmart

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	507	13	0	520	185	0	4,166	0	0	4,166
2021	523	13	0	537	558	0	4,300	0	0	4,300
2022	540	13	0	554	929	0	4,439	0	0	4,439
2023	558	14	0	571	1,437	0	4,582	0	0	4,582
2024	575	14	0	589	1,875	0	4,729	0	0	4,729
2025	0	0	0	0	2,108	0	0	0	0	0
2026	0	0	0	0	2,144	0	0	0	0	0
2027	0	0	0	0	2,179	0	0	0	0	0
2028	0	0	0	0	2,229	0	0	0	0	0
2029	0	0	0	0	2,271	0	0	0	0	0
2030	0	0	0	0	2,303	0	0	0	0	0
2031	0	0	0	0	2,342	0	0	0	0	0
2032	0	0	0	0	2,390	0	0	0	0	0
2033	0	0	0	0	2,437	0	0	0	0	0
2034	0	0	0	0	2,486	0	0	0	0	0
2035	0	0	0	0	2,533	0	0	0	0	0
2036	0	0	0	0	2,619	0	0	0	0	0
2037	0	0	0	0	2,671	0	0	0	0	0
2038	0	0	0	0	2,722	0	0	0	0	0
2039	0	0	0	0	2,776	0	0	0	0	0
2040	831	13	0	844	2,813	0	6,826	0	0	6,826
2041	857	13	0	871	2,862	0	7,046	0	0	7,046
2042	885	13	0	898	2,891	0	7,274	0	0	7,274
2043	914	14	0	927	2,980	0	7,508	0	0	7,508
2044	943	14	0	957	3,047	0	7,750	0	0	7,750
2045	0	0	0	0	3,098	0	0	0	0	0
2046	0	0	0	0	3,152	0	0	0	0	0
2047	0	0	0	0	3,202	0	0	0	0	0
2048	0	0	0	0	3,256	0	0	0	0	0
2049	0	0	0	0	3,312	0	0	0	0	0
2050	0	0	0	0	3,369	0	0	0	0	0
2051	0	0	0	0	3,427	0	0	0	0	0
2052	0	0	0	0	3,487	0	0	0	0	0
2053	0	0	0	0	3,549	0	0	0	0	0
2054	0	0	0	0	3,612	0	0	0	0	0
2055	0	0	0	0	3,677	0	0	0	0	0
2056	0	0	0	0	3,744	0	0	0	0	0
2057	0	0	0	0	3,812	0	0	0	0	0
2058	0	0	0	0	3,882	0	0	0	0	0
2059	0	0	0	0	3,953	0	0	0	0	0
2060	1,361	13	0	1,374	4,026	0	11,185	0	0	11,185
2061	1,405	13	0	1,418	4,100	0	11,546	0	0	11,546
2062	1,450	13	0	1,464	4,177	0	11,919	0	0	11,919
2063	1,497	14	0	1,511	4,256	0	12,303	0	0	12,303
2064	1,545	14	0	1,559	4,335	0	12,699	0	0	12,699
2065	0	0	0	0	4,414	0	0	0	0	0

NOM	14,391	202	0	14,593	133,629	0	118,272	0	0	118,272
NPV	3,258	69	0	3,327	26,098	0	26,779	0	0	26,779

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS



INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Residential Buildingsmart

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	9.70	0.00	0.00
2020	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.97	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.92	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.92	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.05	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.16	0.00	0.00
2026	2.50	2.50	2.50	2.48	49.26	2.00	11.35	0.00	0.00
2027	2.50	2.50	2.50	2.62	81.53	2.00	11.54	0.00	0.00
2028	2.50	2.50	2.50	2.74	78.00	2.00	11.80	0.00	0.00
2029	2.50	2.50	2.85	2.85	74.20	2.00	12.02	0.00	0.00
2030	2.50	2.50	3.01	3.01	60.41	2.00	12.19	0.00	0.00
2031	2.50	2.50	3.11	3.11	56.03	2.00	12.40	0.00	0.00
2032	2.50	2.50	3.19	3.19	55.78	2.00	12.65	0.00	0.00
2033	2.50	2.50	3.14	3.14	76.71	2.00	12.90	0.00	0.00
2034	2.50	2.50	3.20	3.20	77.40	2.00	13.16	0.00	0.00
2035	2.50	2.50	3.26	3.26	77.41	2.00	13.41	0.00	0.00
2036	2.50	2.50	3.31	3.31	80.60	2.00	13.87	0.00	0.00
2037	2.50	2.50	3.37	3.37	82.52	2.00	14.14	0.00	0.00
2038	2.50	2.50	3.43	3.43	82.40	2.00	14.41	0.00	0.00
2039	2.50	2.50	3.50	3.50	82.89	2.00	14.70	0.00	0.00
2040	2.50	2.50	3.56	3.56	83.40	2.00	14.90	0.00	0.00
2041	2.50	2.50	3.60	3.60	85.24	2.00	15.15	0.00	0.00
2042	2.50	2.50	3.64	3.64	85.14	2.00	15.31	0.00	0.00
2043	2.50	2.50	3.67	3.67	87.14	2.00	15.78	0.00	0.00
2044	2.50	2.50	3.71	3.71	87.66	2.00	16.13	0.00	0.00
2045	2.50	2.50	3.75	3.75	88.02	2.00	16.40	0.00	0.00
2046	2.50	2.50	3.79	3.79	87.75	2.00	16.69	0.00	0.00
2047	2.50	2.50	3.83	3.83	88.56	2.00	16.95	0.00	0.00
2048	2.50	2.50	3.87	3.87	88.14	2.00	17.24	0.00	0.00
2049	2.50	2.50	3.92	3.92	91.34	2.00	17.54	0.00	0.00
2050	2.50	2.50	4.03	4.03	91.34	2.00	17.84	0.00	0.00
2051	2.50	2.50	4.16	4.16	91.34	2.00	18.15	0.00	0.00
2052	2.50	2.50	4.28	4.28	91.34	2.00	18.46	0.00	0.00
2053	2.50	2.50	4.41	4.41	91.34	2.00	18.79	0.00	0.00
2054	2.50	2.50	4.54	4.54	91.34	2.00	19.13	0.00	0.00
2055	2.50	2.50	4.68	4.68	91.34	2.00	19.47	0.00	0.00
2056	2.50	2.50	4.82	4.82	91.34	2.00	19.82	0.00	0.00
2057	2.50	2.50	4.96	4.96	91.34	2.00	20.19	0.00	0.00
2058	2.50	2.50	5.11	5.11	91.34	2.00	20.55	0.00	0.00
2059	2.50	2.50	5.26	5.26	91.34	2.00	20.93	0.00	0.00
2060	2.50	2.50	5.42	5.42	91.34	2.00	21.32	0.00	0.00
2061	2.50	2.50	5.58	5.58	91.34	2.00	21.71	0.00	0.00
2062	2.50	2.50	5.75	5.75	91.34	2.00	22.11	0.00	0.00
2063	2.50	2.50	5.92	5.92	91.34	2.00	22.54	0.00	0.00
2064	2.50	2.50	6.10	6.10	91.34	2.00	22.95	0.00	0.00
2065	2.50	2.50	6.29	6.29	91.34	2.00	23.37	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	5,165	100	0	325	67	89	3	129	46	0	759	759	759	5,175
2027	4,996	97	0	314	126	87	3	129	(16)	0	739	686	1,445	5,045
2028	4,807	93	0	302	177	85	3	129	(71)	0	717	618	2,063	4,916
2029	4,626	90	0	291	222	82	3	129	(120)	0	696	557	2,620	4,787
2030	4,451	86	0	280	261	80	2	129	(163)	0	676	502	3,122	4,657
2031	4,281	83	0	269	295	78	2	129	(201)	0	656	452	3,574	4,528
2032	4,117	80	0	259	324	76	2	129	(233)	0	637	407	3,981	4,398
2033	3,957	77	0	249	348	73	2	129	(261)	0	618	367	4,348	4,269
2034	3,801	74	0	239	372	71	2	129	(288)	0	599	330	4,678	4,140
2035	3,645	71	0	229	395	69	2	129	(314)	0	581	297	4,976	4,010
2036	3,488	68	0	219	419	67	2	129	(341)	0	562	267	5,243	3,881
2037	3,332	64	0	210	442	65	2	129	(368)	0	544	240	5,482	3,752
2038	3,176	61	0	200	466	62	2	129	(395)	0	526	215	5,697	3,623
2039	3,020	58	0	190	489	60	2	129	(422)	0	507	193	5,890	3,493
2040	2,864	55	0	180	513	58	2	129	(449)	0	489	172	6,062	3,363
2041	2,707	52	0	170	536	56	2	129	(475)	0	470	154	6,216	3,234
2042	2,551	49	0	160	560	53	2	129	(502)	0	452	137	6,353	3,105
2043	2,395	46	0	151	583	51	2	129	(529)	0	433	122	6,475	2,975
2044	2,239	43	0	141	607	49	2	129	(556)	0	415	109	6,584	2,846
2045	2,083	40	0	131	630	47	1	129	(583)	0	396	96	6,680	2,717
2046	1,941	38	0	122	625	45	1	129	(610)	0	379	85	6,766	2,587
2047	1,828	35	0	115	592	42	1	129	(637)	0	365	76	6,842	2,458
2048	1,729	33	0	109	560	40	1	129	(664)	0	353	69	6,910	2,329
2049	1,630	32	0	102	527	38	1	129	(691)	0	340	61	6,972	2,199
2050	1,531	30	0	96	494	36	1	129	(718)	0	328	55	7,027	2,070
2051	1,432	28	0	90	462	33	1	129	(745)	0	315	49	7,076	1,940
2052	1,334	26	0	84	429	31	1	129	(772)	0	303	44	7,119	1,811
2053	1,235	24	0	78	396	29	1	129	(800)	0	290	39	7,158	1,682
2054	1,136	22	0	71	364	27	1	129	(827)	0	278	34	7,193	1,552
2055	1,037	20	0	65	331	24	1	129	(855)	0	265	31	7,223	1,423
2056	938	18	0	59	298	22	1	129	(883)	0	252	27	7,250	1,294
2057	840	16	0	53	265	20	1	129	(911)	0	240	24	7,274	1,164
2058	741	14	0	47	233	18	1	129	(939)	0	227	21	7,295	1,035
2059	642	12	0	40	200	18	1	129	(967)	0	217	19	7,314	906
2060	543	11	0	34	167	18	1	129	(995)	0	207	16	7,330	777
2061	445	9	0	28	135	18	1	129	(1,023)	0	197	15	7,344	648
2062	346	7	0	22	102	18	1	129	(1,051)	0	186	13	7,357	519
2063	247	5	0	16	69	18	1	129	(1,079)	0	176	11	7,368	390
2064	148	3	0	9	37	18	1	129	(1,107)	0	166	10	7,378	261
2065	49	1	0	3	4	18	1	129	(1,135)	0	156	9	7,387	132

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	
IN SERVICE YEAR	5,175
BOOK LIFE (YRS)	2026
EFFEC. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.73%
PROPERTY INSURANCE	1.72%
	0.053%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9)*(12)+(13) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2026	3.75%	190	190	129	129	129	129	46	349	0	0	0	46	110
2027	7.22%	367	557	129	259	129	259	(16)	349	0	0	0	(16)	94
2028	6.68%	339	896	129	388	129	388	(71)	349	0	0	0	(71)	22
2029	6.18%	314	1,210	129	517	129	517	(120)	349	0	0	0	(120)	(98)
2030	5.71%	290	1,500	129	647	129	647	(163)	349	0	0	0	(163)	(261)
2031	5.29%	268	1,768	129	776	129	776	(201)	349	0	0	0	(201)	(462)
2032	4.89%	248	2,016	129	906	129	906	(233)	349	0	0	0	(233)	(695)
2033	4.52%	230	2,246	129	1,035	129	1,035	(261)	349	0	0	0	(261)	(956)
2034	4.46%	227	2,472	129	1,164	129	1,164	(288)	349	0	0	0	(288)	(1,243)
2035	4.46%	227	2,699	129	1,294	129	1,294	(314)	349	0	0	0	(314)	(1,558)
2036	4.46%	227	2,926	129	1,423	129	1,423	(341)	349	0	0	0	(341)	(1,899)
2037	4.46%	227	3,152	129	1,552	129	1,552	(368)	349	0	0	0	(368)	(2,267)
2038	4.46%	227	3,379	129	1,682	129	1,682	(395)	349	0	0	0	(395)	(2,662)
2039	4.46%	227	3,605	129	1,811	129	1,811	(422)	349	0	0	0	(422)	(3,084)
2040	4.46%	227	3,832	129	1,940	129	1,940	(449)	349	0	0	0	(449)	(3,533)
2041	4.46%	227	4,058	129	2,070	129	2,070	(475)	349	0	0	0	(475)	(4,008)
2042	4.46%	227	4,285	129	2,199	129	2,199	(502)	349	0	0	0	(502)	(4,510)
2043	4.46%	227	4,511	129	2,329	129	2,329	(529)	349	0	0	0	(529)	(5,039)
2044	4.46%	227	4,738	129	2,458	129	2,458	(556)	349	0	0	0	(556)	(5,595)
2045	4.46%	227	4,964	129	2,587	129	2,587	(583)	349	0	0	0	(583)	(6,178)
2046	2.23%	113	5,078	129	2,717	129	2,717	(581)	349	0	0	0	(581)	(6,759)
2047	0.00%	0	5,078	129	2,846	129	2,846	(550)	349	0	0	0	(550)	(7,309)
2048	0.00%	0	5,078	129	2,975	129	2,975	(520)	349	0	0	0	(520)	(7,829)
2049	0.00%	0	5,078	129	3,105	129	3,105	(489)	349	0	0	0	(489)	(8,319)
2050	0.00%	0	5,078	129	3,234	129	3,234	(459)	349	0	0	0	(459)	(8,777)
2051	0.00%	0	5,078	129	3,363	129	3,363	(428)	349	0	0	0	(428)	(9,205)
2052	0.00%	0	5,078	129	3,493	129	3,493	(397)	349	0	0	0	(397)	(9,603)
2053	0.00%	0	5,078	129	3,622	129	3,622	(367)	349	0	0	0	(367)	(9,970)
2054	0.00%	0	5,078	129	3,752	129	3,752	(336)	349	0	0	0	(336)	(10,306)
2055	0.00%	0	5,078	129	3,881	129	3,881	(306)	349	0	0	0	(306)	(10,612)
2056	0.00%	0	5,078	129	4,010	129	4,010	(275)	349	0	0	0	(275)	(10,887)
2057	0.00%	0	5,078	129	4,140	129	4,140	(245)	349	0	0	0	(245)	(11,132)
2058	0.00%	0	5,078	129	4,269	129	4,269	(214)	349	0	0	0	(214)	(11,346)
2059	0.00%	0	5,078	129	4,398	129	4,398	(183)	349	0	0	0	(183)	(11,529)
2060	0.00%	0	5,078	129	4,528	129	4,528	(153)	349	0	0	0	(153)	(11,682)
2061	0.00%	0	5,078	129	4,657	129	4,657	(122)	349	0	0	0	(122)	(11,804)
2062	0.00%	0	5,078	129	4,787	129	4,787	(92)	349	0	0	0	(92)	(11,896)
2063	0.00%	0	5,078	129	4,916	129	4,916	(61)	349	0	0	0	(61)	(11,957)
2064	0.00%	0	5,078	129	5,045	129	5,045	(31)	349	0	0	0	(31)	(11,988)
2065	0.00%	0	5,078	129	5,175	129	5,175	(0)	349	0	0	0	(0)	(11,988)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	64
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	349
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$(000)	(4) DEFERRED TAX \$(000)	(5) END OF YEAR NET PLANT IN SERVICE \$(000)	(5a)* ACCUMULATED DEPRECIATION \$(000)	(5b)* ACCUMULATED DEF TAXES \$(000)	(6) BEGINNING YEAR RATE BASE \$(000)	(7) ENDING OF YEAR RATE BASE \$(000)	(8) MID-YEAR RATE BASE \$(000)
2026	3.75%	190	46	5,043	129	110	5,238	5,091	5,165
2027	7.22%	367	(16)	4,916	259	94	5,091	4,900	4,996
2028	6.68%	339	(71)	4,787	388	22	4,900	4,715	4,807
2029	6.18%	314	(120)	4,657	517	(98)	4,715	4,537	4,626
2030	5.71%	290	(163)	4,528	647	(261)	4,537	4,364	4,451
2031	5.29%	268	(201)	4,398	776	(462)	4,364	4,198	4,281
2032	4.89%	248	(233)	4,269	906	(695)	4,198	4,036	4,117
2033	4.52%	230	(261)	4,140	1,035	(956)	4,036	3,879	3,957
2034	4.46%	227	(288)	4,010	1,164	(1,243)	3,879	3,723	3,801
2035	4.46%	227	(314)	3,881	1,294	(1,558)	3,723	3,567	3,645
2036	4.46%	227	(341)	3,752	1,423	(1,899)	3,567	3,410	3,488
2037	4.46%	227	(368)	3,622	1,552	(2,267)	3,410	3,254	3,332
2038	4.46%	227	(395)	3,493	1,682	(2,662)	3,254	3,098	3,176
2039	4.46%	227	(422)	3,363	1,811	(3,084)	3,098	2,942	3,020
2040	4.46%	227	(449)	3,234	1,940	(3,533)	2,942	2,786	2,864
2041	4.46%	227	(475)	3,105	2,070	(4,008)	2,786	2,629	2,707
2042	4.46%	227	(502)	2,975	2,199	(4,510)	2,629	2,473	2,551
2043	4.46%	227	(529)	2,846	2,329	(5,039)	2,473	2,317	2,395
2044	4.46%	227	(556)	2,717	2,458	(5,595)	2,317	2,161	2,239
2045	4.46%	227	(583)	2,587	2,587	(6,178)	2,161	2,004	2,083
2046	2.23%	113	(581)	2,458	2,717	(6,759)	2,004	1,877	1,941
2047	0.00%	0	(550)	2,329	2,846	(7,309)	1,877	1,778	1,828
2048	0.00%	0	(520)	2,199	2,975	(7,829)	1,778	1,679	1,729
2049	0.00%	0	(489)	2,070	3,105	(8,319)	1,679	1,581	1,630
2050	0.00%	0	(459)	1,940	3,234	(8,777)	1,581	1,482	1,531
2051	0.00%	0	(428)	1,811	3,363	(9,205)	1,482	1,383	1,432
2052	0.00%	0	(397)	1,682	3,493	(9,603)	1,383	1,284	1,334
2053	0.00%	0	(367)	1,552	3,622	(9,970)	1,284	1,185	1,235
2054	0.00%	0	(336)	1,423	3,752	(10,306)	1,185	1,087	1,136
2055	0.00%	0	(306)	1,294	3,881	(10,612)	1,087	988	1,037
2056	0.00%	0	(275)	1,164	4,010	(10,887)	988	889	938
2057	0.00%	0	(245)	1,035	4,140	(11,132)	889	790	840
2058	0.00%	0	(214)	906	4,269	(11,346)	790	692	741
2059	0.00%	0	(183)	776	4,398	(11,529)	692	593	642
2060	0.00%	0	(153)	647	4,528	(11,682)	593	494	543
2061	0.00%	0	(122)	517	4,657	(11,804)	494	395	445
2062	0.00%	0	(92)	388	4,787	(11,896)	395	296	346
2063	0.00%	0	(61)	259	4,916	(11,957)	296	198	247
2064	0.00%	0	(31)	129	5,045	(11,988)	198	99	148
2065	0.00%	0	(0)	0	5,175	(11,988)	99	(0)	49

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.19	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	1.45	6.15	4.90	5.64	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	18.38	14.46	20.10	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	32.97	25.41	45.52	4.73	8.51	233.05	689.05

11.96

58.43

45.52

8.51

689.05

IN-SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF. TAX	TAX BASIS
CONSTRUCTION CASH	4,736	4,736
EQUITY AFUDC	349	
DEBT AFUDC	90	342
CPI	90	
ITC Basis Reduction (Solar)		
TOTAL	5,175	5,078

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	3,500	3,500	1.80	1.93	1.86	0.00	1.00	1.00
2021	7,025	7,025	1.83	2.08	1.92	0.00	1.00	1.00
2022	10,575	10,575	1.80	1.94	1.86	0.00	1.00	1.00
2023	14,150	14,150	1.95	2.13	2.02	0.00	1.00	1.00
2024	17,750	17,750	2.14	2.31	2.21	0.00	1.00	1.00
2025	17,750	17,750	2.32	2.49	2.39	0.00	1.00	1.00
2026	17,750	17,750	2.54	2.74	2.61	2.63	1.00	1.00
2027	17,750	17,750	2.67	2.89	2.76	2.76	1.00	1.00
2028	17,750	17,750	2.75	2.95	2.83	2.85	1.00	1.00
2029	17,750	17,750	3.00	3.20	3.08	3.09	1.00	1.00
2030	17,750	17,750	3.10	3.31	3.17	3.09	1.00	1.00
2031	17,750	17,750	3.04	3.28	3.09	2.97	1.00	1.00
2032	17,750	17,750	3.26	3.59	3.37	3.07	1.00	1.00
2033	17,750	17,750	3.14	3.34	3.19	3.34	1.00	1.00
2034	17,750	17,750	3.19	3.40	3.24	3.46	1.00	1.00
2035	17,750	17,750	3.22	3.42	3.27	3.47	1.00	1.00
2036	17,750	17,750	3.27	3.50	3.34	3.52	1.00	1.00
2037	17,750	17,750	3.33	3.54	3.40	3.62	1.00	1.00
2038	17,750	17,750	3.40	3.62	3.47	3.66	1.00	1.00
2039	17,750	17,750	3.47	3.68	3.54	3.75	1.00	1.00
2040	17,750	17,750	3.54	3.76	3.61	3.85	1.00	1.00
2041	17,750	17,750	3.61	3.83	3.69	3.88	1.00	1.00
2042	17,750	17,750	3.66	3.90	3.75	3.93	1.00	1.00
2043	17,750	17,750	3.71	3.96	3.80	3.99	1.00	1.00
2044	17,750	17,750	3.76	4.04	3.87	4.04	1.00	1.00
2045	17,750	17,750	3.80	4.01	3.89	4.08	1.00	1.00
2046	17,750	17,750	3.84	4.08	3.93	4.14	1.00	1.00
2047	17,750	17,750	3.89	4.12	3.98	4.20	1.00	1.00
2048	17,750	17,750	3.94	4.20	4.04	4.22	1.00	1.00
2049	17,750	17,750	3.98	4.23	4.09	4.28	1.00	1.00
2050	17,750	17,750	5.03	5.32	5.17	4.41	1.00	1.00
2051	17,750	17,750	5.13	5.43	5.27	4.55	1.00	1.00
2052	17,750	17,750	5.23	5.54	5.38	4.68	1.00	1.00
2053	17,750	17,750	5.34	5.65	5.49	4.83	1.00	1.00
2054	17,750	17,750	5.44	5.76	5.60	4.97	1.00	1.00
2055	17,750	17,750	5.55	5.87	5.71	5.12	1.00	1.00
2056	17,750	17,750	5.66	5.99	5.82	5.28	1.00	1.00
2057	17,750	17,750	5.78	6.11	5.94	5.44	1.00	1.00
2058	17,750	17,750	5.89	6.23	6.06	5.61	1.00	1.00
2059	17,750	17,750	6.01	6.36	6.18	5.78	1.00	1.00
2060	17,750	17,750	6.13	6.49	6.30	5.95	1.00	1.00
2061	17,750	17,750	6.25	6.62	6.43	6.13	1.00	1.00
2062	17,750	17,750	6.38	6.75	6.56	6.32	1.00	1.00
2063	17,750	17,750	6.50	6.88	6.69	6.51	1.00	1.00
2064	17,750	17,750	6.63	7.02	6.82	6.71	1.00	1.00
2065	17,750	17,750	6.77	7.16	6.96	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Buildingsmart

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	759	211	5	804	854	926
2027	739	217	8	1406	1481	889
2028	717	222	8	1408	1464	891
2029	696	228	8	1390	1510	812
2030	676	233	7	1194	1226	884
2031	656	239	6	1147	1096	953
2032	637	245	6	1170	1128	930
2033	618	251	9	1582	1685	775
2034	599	258	9	1628	1763	732
2035	581	264	10	1661	1765	750
2036	562	271	10	1757	1864	756
2037	544	277	11	1828	1965	695
2038	526	284	11	1859	1983	697
2039	507	291	11	1906	2047	669
2040	489	299	12	1954	2111	642
2041	470	306	12	2018	2175	631
2042	452	314	13	2038	2201	616
2043	433	322	13	2103	2288	583
2044	415	330	14	2139	2331	566
2045	396	338	14	2170	2362	556
2046	379	346	14	2188	2389	539
2047	365	355	15	2230	2448	518
2048	353	364	15	2245	2445	532
2049	340	373	16	2354	2572	511
2050	328	382	17	2424	2650	500
2051	315	392	17	2497	2731	490
2052	303	402	17	2572	2814	480
2053	290	412	18	2649	2900	469
2054	278	422	18	2728	2988	459
2055	265	433	19	2810	3079	448
2056	252	443	19	2895	3172	438
2057	240	455	20	2981	3269	427
2058	227	466	20	3071	3368	416
2059	217	478	21	3163	3471	408
2060	207	490	21	3258	3576	399
2061	197	502	22	3356	3685	391
2062	186	514	22	3456	3797	382
2063	176	527	23	3560	3912	374
2064	166	540	23	3667	4032	365
2065	156	554	24	3777	4154	356

NOM	16,713	14,251	581	91,043	98,751	23,836
NPV	4,385.59	2,231.78	83	13,579	14,506	5,775

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmurt

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	39	0
2021	71	10	81	13	5	19	127	0
2022	143	17	160	27	9	36	195	0
2023	215	25	240	40	14	54	302	0
2024	288	33	321	54	18	72	420	0
2025	361	37	399	68	20	88	505	0
2026	350	38	388	66	21	87	557	0
2027	339	39	378	64	21	86	589	0
2028	328	40	369	63	22	84	598	0
2029	318	41	359	61	23	83	648	0
2030	308	42	350	59	23	82	671	0
2031	298	43	341	58	24	81	665	0
2032	288	45	332	56	24	80	734	0
2033	278	46	323	55	25	79	676	0
2034	268	47	315	53	25	79	687	0
2035	258	48	306	52	26	78	691	0
2036	248	49	297	50	27	77	708	0
2037	239	50	289	48	27	76	715	0
2038	230	52	282	47	28	75	732	0
2039	223	53	276	45	29	74	743	0
2040	216	54	271	44	30	73	760	0
2041	210	56	266	42	30	73	775	0
2042	204	57	261	41	31	72	789	0
2043	199	58	257	40	32	71	801	0
2044	193	60	253	38	33	71	818	0
2045	187	61	248	37	33	71	811	0
2046	181	63	244	36	34	71	826	0
2047	175	65	240	35	35	70	831	0
2048	170	66	236	34	36	70	850	0
2049	164	68	232	33	37	70	855	0
2050	158	69	227	32	38	70	1,074	0
2051	152	71	223	32	39	70	1,096	0
2052	146	73	219	31	40	70	1,118	0
2053	140	75	215	30	41	70	1,140	0
2054	135	77	211	29	42	70	1,163	0
2055	129	79	207	28	43	71	1,186	0
2056	123	81	204	27	44	71	1,210	0
2057	117	83	200	26	45	71	1,234	0
2058	112	85	197	25	46	71	1,259	0
2059	107	87	194	24	47	71	1,284	0
2060	102	89	191	23	48	71	1,310	0
2061	97	91	188	22	50	72	1,336	0
2062	92	93	186	21	51	72	1,363	0
2063	88	96	183	20	52	72	1,390	0
2064	83	98	181	19	53	73	1,418	0
2065	67	101	168	18	55	73	1,446	0

NOM	8,797	2,711.25	11,508	1,765	1,476	3,241	39,148	0
NPV	2,763	493	3,256	535	268	804	7,062	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.





TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	507	4,166	0	4,672	0	0	39	0	39	(4,634)	(4,301)
2021	0	523	4,300	0	4,823	0	100	127	0	227	(4,596)	(8,262)
2022	0	540	4,439	0	4,979	0	196	195	0	392	(4,587)	(11,930)
2023	0	558	4,582	0	5,140	0	294	302	0	595	(4,544)	(15,304)
2024	0	575	4,729	0	5,305	0	392	420	0	813	(4,492)	(18,399)
2025	0	0	0	0	0	0	487	505	0	991	991	(17,765)
2026	0	0	0	0	0	926	475	557	0	1,958	1,958	(16,603)
2027	0	0	0	0	0	889	464	589	0	1,942	1,942	(15,333)
2028	0	0	0	0	0	891	453	598	0	1,943	1,943	(14,539)
2029	0	0	0	0	0	812	443	648	0	1,902	1,902	(13,636)
2030	0	0	0	0	0	884	433	671	0	1,988	1,988	(12,760)
2031	0	0	0	0	0	953	423	665	0	2,040	2,040	(11,925)
2032	0	0	0	0	0	930	413	734	0	2,077	2,077	(11,136)
2033	0	0	0	0	0	775	403	676	0	1,854	1,854	(10,483)
2034	0	0	0	0	0	732	393	687	0	1,812	1,812	(9,890)
2035	0	0	0	0	0	750	383	691	0	1,825	1,825	(9,335)
2036	0	0	0	0	0	736	374	708	0	1,818	1,818	(8,823)
2037	0	0	0	0	0	695	365	715	0	1,776	1,776	(8,358)
2038	0	0	0	0	0	697	357	732	0	1,787	1,787	(7,924)
2039	0	0	0	0	0	669	350	743	0	1,763	1,763	(7,527)
2040	0	831	6,826	0	7,656	642	344	760	0	1,746	(6,159)	(8,763)
2041	0	857	7,046	0	7,904	631	338	775	0	1,745	(5,910)	(9,960)
2042	0	885	7,274	0	8,159	616	333	789	0	1,738	(6,420)	(11,118)
2043	0	914	7,508	0	8,422	583	328	801	0	1,713	(6,709)	(12,240)
2044	0	943	7,750	0	8,693	566	324	818	0	1,708	(6,985)	(13,326)
2045	0	0	0	0	0	556	319	811	0	1,686	1,686	(13,082)
2046	0	0	0	0	0	539	315	826	0	1,680	1,680	(12,858)
2047	0	0	0	0	0	518	310	831	0	1,660	1,660	(12,651)
2048	0	0	0	0	0	532	306	850	0	1,689	1,689	(12,457)
2049	0	0	0	0	0	511	302	855	0	1,668	1,668	(12,278)
2050	0	0	0	0	0	500	298	1,074	0	1,872	1,872	(12,092)
2051	0	0	0	0	0	490	294	1,096	0	1,880	1,880	(11,919)
2052	0	0	0	0	0	480	290	1,118	0	1,887	1,887	(11,757)
2053	0	0	0	0	0	469	286	1,140	0	1,895	1,895	(11,606)
2054	0	0	0	0	0	459	282	1,163	0	1,904	1,904	(11,466)
2055	0	0	0	0	0	448	278	1,186	0	1,912	1,912	(11,335)
2056	0	0	0	0	0	438	274	1,210	0	1,922	1,922	(11,213)
2057	0	0	0	0	0	427	271	1,234	0	1,932	1,932	(11,099)
2058	0	0	0	0	0	416	268	1,259	0	1,943	1,943	(10,993)
2059	0	0	0	0	0	408	265	1,284	0	1,957	1,957	(10,893)
2060	0	1,361	11,185	0	12,546	399	262	1,310	0	1,971	(10,575)	(10,575)
2061	0	1,405	11,546	0	12,951	391	260	1,336	0	1,987	(10,965)	(11,872)
2062	0	1,450	11,919	0	13,369	382	258	1,363	0	2,003	(11,367)	(12,334)
2063	0	1,497	12,303	0	13,800	374	256	1,390	0	2,019	(11,781)	(12,779)
2064	0	1,545	12,699	0	14,244	365	254	1,418	0	2,037	(12,207)	(13,207)
2065	0	0	0	0	0	356	241	1,446	0	2,043	2,043	(13,140)
NOM	0	14,391	118,272	0	132,663	23,836.36	14,749	39,148	3	77,737	(54,927)	(54,927)
NPV	0	3,258	26,779	0	30,037	5,775	4,059	7,062	1	16,896.97	(13,140)	(13,140)

Discount Rate: 0.56 %  
Benefit/Cost Ratio (Col(11) / Col(6)):

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	243	0	13	0	257	4,166	0	0	4,166	(3,909)	(3,628)
2021	734	0	13	0	748	4,300	0	0	4,300	(3,553)	(6,689)
2022	1,223	0	13	0	1,236	4,439	0	0	4,439	(3,203)	(9,251)
2023	1,890	0	14	0	1,904	4,582	0	0	4,582	(2,678)	(11,239)
2024	2,467	0	14	0	2,481	4,729	0	0	4,729	(2,249)	(12,788)
2025	2,774	0	0	0	2,774	0	0	0	0	2,774	(11,014)
2026	2,821	0	0	0	2,821	0	0	0	0	2,821	(9,339)
2027	2,868	0	0	0	2,868	0	0	0	0	2,868	(7,759)
2028	2,933	0	0	0	2,933	0	0	0	0	2,933	(6,258)
2029	2,988	0	0	0	2,988	0	0	0	0	2,988	(4,839)
2030	3,030	0	0	0	3,030	0	0	0	0	3,030	(3,504)
2031	3,082	0	0	0	3,082	0	0	0	0	3,082	(2,243)
2032	3,144	0	0	0	3,144	0	0	0	0	3,144	(1,049)
2033	3,206	0	0	0	3,206	0	0	0	0	3,206	81
2034	3,271	0	0	0	3,271	0	0	0	0	3,271	1,151
2035	3,333	0	0	0	3,333	0	0	0	0	3,333	2,164
2036	3,446	0	0	0	3,446	0	0	0	0	3,446	3,135
2037	3,515	0	0	0	3,515	0	0	0	0	3,515	4,055
2038	3,582	0	0	0	3,582	0	0	0	0	3,582	4,925
2039	3,652	0	0	0	3,652	0	0	0	0	3,652	5,748
2040	3,702	0	13	0	3,715	6,826	0	0	6,826	(3,111)	5,097
2041	3,766	0	13	0	3,779	7,046	0	0	7,046	(3,267)	4,463
2042	3,804	0	13	0	3,817	7,274	0	0	7,274	(3,457)	3,839
2043	3,921	0	14	0	3,935	7,508	0	0	7,508	(3,573)	3,241
2044	4,009	0	14	0	4,023	7,750	0	0	7,750	(3,727)	2,662
2045	4,076	0	0	0	4,076	0	0	0	0	4,076	3,250
2046	4,147	0	0	0	4,147	0	0	0	0	4,147	3,805
2047	4,213	0	0	0	4,213	0	0	0	0	4,213	4,329
2048	4,285	0	0	0	4,285	0	0	0	0	4,285	4,823
2049	4,358	0	0	0	4,358	0	0	0	0	4,358	5,289
2050	4,433	0	0	0	4,433	0	0	0	0	4,433	5,730
2051	4,509	0	0	0	4,509	0	0	0	0	4,509	6,146
2052	4,589	0	0	0	4,589	0	0	0	0	4,589	6,539
2053	4,670	0	0	0	4,670	0	0	0	0	4,670	6,910
2054	4,753	0	0	0	4,753	0	0	0	0	4,753	7,260
2055	4,838	0	0	0	4,838	0	0	0	0	4,838	7,592
2056	4,926	0	0	0	4,926	0	0	0	0	4,926	7,905
2057	5,016	0	0	0	5,016	0	0	0	0	5,016	8,201
2058	5,108	0	0	0	5,108	0	0	0	0	5,108	8,480
2059	5,202	0	0	0	5,202	0	0	0	0	5,202	8,745
2060	5,297	0	13	0	5,310	11,185	0	0	11,185	(5,875)	8,467
2061	5,395	0	13	0	5,408	11,546	0	0	11,546	(6,138)	8,199
2062	5,495	0	13	0	5,509	11,919	0	0	11,919	(6,410)	7,938
2063	5,600	0	14	0	5,614	12,303	0	0	12,303	(6,689)	7,686
2064	5,704	0	14	0	5,718	12,699	0	0	12,699	(6,981)	7,441
2065	5,809	0	0	0	5,809	0	0	0	0	5,809	7,630

NOM	175,828	0	202	0	176,029	118,272	0	0	118,272	57,757
NPV	34,340	0	69	0	34,409	26,779	0	0	26,779	7,630

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 1.28

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Buildingsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATED DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	507	13	185	0	705	39	0	0	0	39	(667)	(619)
2021	0	523	13	558	0	1,095	127	100	0	0	227	(867)	(1,366)
2022	0	540	13	929	0	1,469	195	196	0	0	392	(1,091)	(2,239)
2023	0	558	14	1,437	0	2,008	302	294	0	0	595	(1,413)	(3,287)
2024	0	575	14	1,875	0	2,464	420	392	0	0	813	(1,651)	(4,425)
2025	0	0	0	2,108	0	2,108	505	487	0	0	991	(1,117)	(5,140)
2026	0	0	0	2,144	0	2,144	1,482	475	0	0	1,958	(187)	(5,251)
2027	0	0	0	2,179	0	2,179	1,478	464	0	0	1,942	(238)	(5,382)
2028	0	0	0	2,229	0	2,229	1,490	453	0	0	1,943	(286)	(5,528)
2029	0	0	0	2,271	0	2,271	1,460	443	0	0	1,902	(369)	(5,703)
2030	0	0	0	2,303	0	2,303	1,555	433	0	0	1,988	(315)	(5,842)
2031	0	0	0	2,342	0	2,342	1,618	423	0	0	2,040	(302)	(5,965)
2032	0	0	0	2,390	0	2,390	1,664	413	0	0	2,077	(312)	(6,084)
2033	0	0	0	2,437	0	2,437	1,451	403	0	0	1,854	(583)	(6,289)
2034	0	0	0	2,486	0	2,486	1,419	393	0	0	1,812	(674)	(6,510)
2035	0	0	0	2,533	0	2,533	1,442	383	0	0	1,825	(708)	(6,725)
2036	0	0	0	2,619	0	2,619	1,444	374	0	0	1,818	(801)	(6,951)
2037	0	0	0	2,671	0	2,671	1,411	365	0	0	1,776	(895)	(7,185)
2038	0	0	0	2,722	0	2,722	1,430	357	0	0	1,787	(935)	(7,412)
2039	0	0	0	2,776	0	2,776	1,413	350	0	0	1,763	(1,013)	(7,640)
2040	0	831	13	2,813	0	3,657	1,402	344	0	0	1,746	(1,911)	(8,040)
2041	0	857	13	2,862	0	3,733	1,406	338	0	0	1,745	(1,988)	(8,427)
2042	0	885	13	2,891	0	3,789	1,405	333	0	0	1,738	(2,051)	(8,796)
2043	0	914	14	2,980	0	3,907	1,384	328	0	0	1,713	(2,195)	(9,164)
2044	0	943	14	3,047	0	4,004	1,384	324	0	0	1,708	(2,296)	(9,520)
2045	0	0	0	3,098	0	3,098	1,367	319	0	0	1,686	(1,412)	(9,724)
2046	0	0	0	3,152	0	3,152	1,365	315	0	0	1,680	(1,472)	(9,921)
2047	0	0	0	3,202	0	3,202	1,349	310	0	0	1,660	(1,542)	(10,113)
2048	0	0	0	3,256	0	3,256	1,383	306	0	0	1,689	(1,568)	(10,293)
2049	0	0	0	3,312	0	3,312	1,366	302	0	0	1,668	(1,644)	(10,469)
2050	0	0	0	3,369	0	3,369	1,575	298	0	0	1,872	(1,496)	(10,618)
2051	0	0	0	3,427	0	3,427	1,586	294	0	0	1,880	(1,548)	(10,761)
2052	0	0	0	3,487	0	3,487	1,597	290	0	0	1,887	(1,600)	(10,898)
2053	0	0	0	3,549	0	3,549	1,609	286	0	0	1,895	(1,654)	(11,029)
2054	0	0	0	3,612	0	3,612	1,622	282	0	0	1,904	(1,709)	(11,155)
2055	0	0	0	3,677	0	3,677	1,634	278	0	0	1,912	(1,765)	(11,276)
2056	0	0	0	3,744	0	3,744	1,647	274	0	0	1,922	(1,822)	(11,392)
2057	0	0	0	3,812	0	3,812	1,661	271	0	0	1,932	(1,880)	(11,503)
2058	0	0	0	3,882	0	3,882	1,675	268	0	0	1,943	(1,939)	(11,609)
2059	0	0	0	3,953	0	3,953	1,692	265	0	0	1,957	(1,997)	(11,711)
2060	0	1,361	13	4,026	0	5,400	1,709	262	0	0	1,971	(3,429)	(11,872)
2061	0	1,405	13	4,100	0	5,519	1,727	260	0	0	1,987	(3,532)	(12,027)
2062	0	1,450	13	4,177	0	5,640	1,745	258	0	0	2,003	(3,638)	(12,175)
2063	0	1,497	14	4,256	0	5,767	1,764	256	0	0	2,019	(3,748)	(12,316)
2064	0	1,545	14	4,335	0	5,894	1,783	254	0	0	2,037	(3,857)	(12,451)
2065	0	0	0	4,414	0	4,414	1,802	241	0	0	2,043	(2,371)	(12,529)
NOM	0	14,391	202	133,629	0	148,222	62,984.53	14,749.46	0.00	2.58	77,737	(70,485)	
NPV	0	3,258	69	26,098	0	29,425	12,837	4,059	0	1	16,897	(12,529)	

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(12) / Col(7)): 0.57

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER .....	0.39 KW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	0.5017 KW
(3) KW LINE LOSS PERCENT AGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	887.00 KWh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 KWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** \$/CUSTYR
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV. AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,592,6542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	317,705,2925 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	78,230,14236 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23,68513279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	4,302,507237 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	3,045,100973 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	49 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	2,481 CENTS/KWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	5.68 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V. NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/KWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI. COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.702
(2) TRC TEST .....	1.344
(3) PARTICIPANT TEST .....	2.50

\* INPUT DATA - PART I CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Insulation

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	109	701	0	810	161	0	2,094	0	0	2,094
2021	120	756	0	876	498	0	2,314	0	0	2,314
2022	123	756	0	879	844	0	2,372	0	0	2,372
2023	126	756	0	882	1,311	0	2,431	0	0	2,431
2024	129	756	0	885	1,713	0	2,492	0	0	2,492
2025	0	0	0	0	1,926	0	0	0	0	0
2026	0	0	0	0	1,959	0	0	0	0	0
2027	0	0	0	0	1,991	0	0	0	0	0
2028	0	0	0	0	2,037	0	0	0	0	0
2029	0	0	0	0	2,075	0	0	0	0	0
2030	0	0	0	0	2,104	0	0	0	0	0
2031	0	0	0	0	2,140	0	0	0	0	0
2032	0	0	0	0	2,184	0	0	0	0	0
2033	0	0	0	0	2,227	0	0	0	0	0
2034	0	0	0	0	2,272	0	0	0	0	0
2035	0	0	0	0	2,315	0	0	0	0	0
2036	0	0	0	0	2,393	0	0	0	0	0
2037	0	0	0	0	2,441	0	0	0	0	0
2038	0	0	0	0	2,487	0	0	0	0	0
2039	0	0	0	0	2,536	0	0	0	0	0
2040	178	701	0	879	2,571	0	3,432	0	0	3,432
2041	197	756	0	952	2,615	0	3,792	0	0	3,792
2042	202	756	0	957	2,641	0	3,887	0	0	3,887
2043	207	756	0	962	2,723	0	3,984	0	0	3,984
2044	212	756	0	967	2,784	0	4,083	0	0	4,083
2045	0	0	0	0	2,831	0	0	0	0	0
2046	0	0	0	0	2,880	0	0	0	0	0
2047	0	0	0	0	2,926	0	0	0	0	0
2048	0	0	0	0	2,976	0	0	0	0	0
2049	0	0	0	0	3,026	0	0	0	0	0
2050	0	0	0	0	3,078	0	0	0	0	0
2051	0	0	0	0	3,132	0	0	0	0	0
2052	0	0	0	0	3,187	0	0	0	0	0
2053	0	0	0	0	3,243	0	0	0	0	0
2054	0	0	0	0	3,301	0	0	0	0	0
2055	0	0	0	0	3,360	0	0	0	0	0
2056	0	0	0	0	3,421	0	0	0	0	0
2057	0	0	0	0	3,484	0	0	0	0	0
2058	0	0	0	0	3,547	0	0	0	0	0
2059	0	0	0	0	3,612	0	0	0	0	0
2060	292	701	0	993	3,679	0	5,624	0	0	5,624
2061	322	756	0	1,078	3,747	0	6,213	0	0	6,213
2062	330	756	0	1,086	3,816	0	6,369	0	0	6,369
2063	338	756	0	1,094	3,889	0	6,528	0	0	6,528
2064	347	756	0	1,103	3,961	0	6,691	0	0	6,691
2065	0	0	0	0	4,034	0	0	0	0	0

NOM	3,231	11,171	0	14,401	122,080	0	62,306	0	0	62,306
NPV	731	3,813	0	4,544	23,825	0	14,091	0	0	14,091

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Residential Insulation

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	9.70	0.00	0.00
2020	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.97	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.92	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.92	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.05	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.16	0.00	0.00
2026	2.50	2.50	2.50	2.48	49.26	2.00	11.35	0.00	0.00
2027	2.50	2.50	2.50	2.62	81.53	2.00	11.54	0.00	0.00
2028	2.50	2.50	2.50	2.74	78.00	2.00	11.80	0.00	0.00
2029	2.50	2.50	2.85	2.85	74.20	2.00	12.02	0.00	0.00
2030	2.50	2.50	3.01	3.01	60.41	2.00	12.19	0.00	0.00
2031	2.50	2.50	3.11	3.11	56.03	2.00	12.40	0.00	0.00
2032	2.50	2.50	3.19	3.19	55.78	2.00	12.65	0.00	0.00
2033	2.50	2.50	3.14	3.14	76.71	2.00	12.90	0.00	0.00
2034	2.50	2.50	3.20	3.20	77.40	2.00	13.16	0.00	0.00
2035	2.50	2.50	3.26	3.26	77.41	2.00	13.41	0.00	0.00
2036	2.50	2.50	3.31	3.31	80.60	2.00	13.87	0.00	0.00
2037	2.50	2.50	3.37	3.37	82.52	2.00	14.14	0.00	0.00
2038	2.50	2.50	3.43	3.43	82.40	2.00	14.41	0.00	0.00
2039	2.50	2.50	3.50	3.50	82.89	2.00	14.70	0.00	0.00
2040	2.50	2.50	3.56	3.56	83.40	2.00	14.90	0.00	0.00
2041	2.50	2.50	3.60	3.60	85.24	2.00	15.15	0.00	0.00
2042	2.50	2.50	3.64	3.64	85.14	2.00	15.31	0.00	0.00
2043	2.50	2.50	3.67	3.67	87.14	2.00	15.78	0.00	0.00
2044	2.50	2.50	3.71	3.71	87.66	2.00	16.13	0.00	0.00
2045	2.50	2.50	3.75	3.75	88.02	2.00	16.40	0.00	0.00
2046	2.50	2.50	3.79	3.79	87.75	2.00	16.69	0.00	0.00
2047	2.50	2.50	3.83	3.83	88.56	2.00	16.95	0.00	0.00
2048	2.50	2.50	3.87	3.87	88.14	2.00	17.24	0.00	0.00
2049	2.50	2.50	3.92	3.92	91.34	2.00	17.54	0.00	0.00
2050	2.50	2.50	4.03	4.03	91.34	2.00	17.84	0.00	0.00
2051	2.50	2.50	4.16	4.16	91.34	2.00	18.15	0.00	0.00
2052	2.50	2.50	4.28	4.28	91.34	2.00	18.46	0.00	0.00
2053	2.50	2.50	4.41	4.41	91.34	2.00	18.79	0.00	0.00
2054	2.50	2.50	4.54	4.54	91.34	2.00	19.13	0.00	0.00
2055	2.50	2.50	4.68	4.68	91.34	2.00	19.47	0.00	0.00
2056	2.50	2.50	4.82	4.82	91.34	2.00	19.82	0.00	0.00
2057	2.50	2.50	4.96	4.96	91.34	2.00	20.19	0.00	0.00
2058	2.50	2.50	5.11	5.11	91.34	2.00	20.55	0.00	0.00
2059	2.50	2.50	5.26	5.26	91.34	2.00	20.93	0.00	0.00
2060	2.50	2.50	5.42	5.42	91.34	2.00	21.32	0.00	0.00
2061	2.50	2.50	5.58	5.58	91.34	2.00	21.71	0.00	0.00
2062	2.50	2.50	5.75	5.75	91.34	2.00	22.11	0.00	0.00
2063	2.50	2.50	5.92	5.92	91.34	2.00	22.54	0.00	0.00
2064	2.50	2.50	6.10	6.10	91.34	2.00	22.95	0.00	0.00
2065	2.50	2.50	6.29	6.29	91.34	2.00	23.37	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

PROGRAM NAME: Residential Insulation  
CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	7,057	137	0	444	92	122	4	177	63	0	1,037	1,037	1,037	7,070
2027	6,825	132	0	429	172	119	4	177	(22)	0	1,010	937	1,974	6,893
2028	6,568	127	0	413	242	116	4	177	(98)	0	980	845	2,819	6,716
2029	6,320	122	0	397	303	109	3	177	(164)	0	951	761	3,580	6,540
2030	6,081	118	0	382	357	102	3	177	(223)	0	923	686	4,265	6,363
2031	5,849	113	0	368	403	106	3	177	(274)	0	896	618	4,883	6,186
2032	5,625	109	0	354	443	103	3	177	(318)	0	870	556	5,439	6,009
2033	5,407	105	0	340	476	100	3	177	(356)	0	844	501	5,941	5,833
2034	5,193	100	0	327	508	97	3	177	(393)	0	819	451	6,392	5,656
2035	4,980	96	0	313	540	94	3	177	(430)	0	794	406	6,798	5,479
2036	4,766	92	0	300	572	91	3	177	(466)	0	768	365	7,163	5,302
2037	4,553	88	0	286	604	88	3	177	(503)	0	743	328	7,490	5,126
2038	4,339	84	0	273	636	85	3	177	(540)	0	718	294	7,784	4,949
2039	4,126	80	0	259	668	82	3	177	(576)	0	693	263	8,047	4,772
2040	3,912	76	0	246	700	79	2	177	(613)	0	668	235	8,282	4,595
2041	3,699	72	0	233	733	76	2	177	(650)	0	642	210	8,493	4,419
2042	3,486	67	0	219	765	73	2	177	(686)	0	617	187	8,680	4,242
2043	3,272	63	0	206	797	70	2	177	(723)	0	592	167	8,847	4,065
2044	3,059	59	0	192	829	67	2	177	(760)	0	567	148	8,995	3,888
2045	2,845	55	0	179	861	64	2	177	(796)	0	541	131	9,127	3,712
2046	2,652	51	0	167	894	61	2	177	(832)	0	518	117	9,243	3,535
2047	2,497	48	0	157	926	58	2	177	(868)	0	499	104	9,348	3,358
2048	2,362	46	0	149	958	55	2	177	(904)	0	482	94	9,441	3,181
2049	2,227	43	0	140	990	52	2	177	(940)	0	465	84	9,525	3,005
2050	2,092	40	0	132	1,022	49	1	177	(976)	0	448	75	9,600	2,828
2051	1,957	38	0	123	1,054	46	1	177	(1,012)	0	431	67	9,667	2,651
2052	1,822	35	0	115	1,086	43	1	177	(1,048)	0	413	60	9,727	2,474
2053	1,687	33	0	106	1,118	40	1	177	(1,084)	0	396	53	9,780	2,298
2054	1,552	30	0	98	1,150	36	1	177	(1,120)	0	379	47	9,827	2,121
2055	1,417	27	0	89	1,182	33	1	177	(1,156)	0	362	42	9,869	1,944
2056	1,282	25	0	81	1,214	30	1	177	(1,192)	0	345	37	9,905	1,767
2057	1,147	22	0	72	1,246	27	1	177	(1,228)	0	328	33	9,938	1,591
2058	1,012	20	0	64	1,278	24	1	177	(1,264)	0	311	29	9,967	1,414
2059	877	17	0	55	1,310	24	1	177	(1,300)	0	297	25	9,992	1,414
2060	742	14	0	47	1,342	24	1	177	(1,336)	0	283	22	10,015	1,414
2061	607	12	0	38	1,374	24	1	177	(1,372)	0	269	20	10,034	1,414
2062	472	9	0	30	1,406	24	1	177	(1,408)	0	255	17	10,052	1,414
2063	337	7	0	21	1,438	24	1	177	(1,444)	0	241	15	10,067	1,414
2064	202	4	0	13	1,470	24	1	177	(1,480)	0	227	13	10,081	1,414
2065	67	1	0	4	1,502	24	1	177	(1,516)	0	213	12	10,092	1,414

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	7,070
IN SERVICE YEAR	2026
BOOK LIFE (YRS)	40
EFFEC. TAX RATE	25.345%
DISCOUNT RATE	7.73%
PROPERTY TAX	1.72%
PROPERTY INSURANCE	0.053%

K-FACTOR = CPWFC / IN-SVC COST = 1.42750



DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2026	3.75%	260	260	177	177	177	177	63	477	0	0	0	63	150
2027	7.22%	501	761	177	353	177	353	(22)	477	0	0	0	(22)	128
2028	6.68%	463	1,224	177	530	177	530	(98)	477	0	0	0	(98)	31
2029	6.18%	429	1,653	177	707	177	707	(164)	477	0	0	0	(164)	(134)
2030	5.71%	396	2,049	177	884	177	884	(223)	477	0	0	0	(223)	(357)
2031	5.29%	367	2,416	177	1,060	177	1,060	(274)	477	0	0	0	(274)	(631)
2032	4.89%	339	2,755	177	1,237	177	1,237	(318)	477	0	0	0	(318)	(950)
2033	4.52%	314	3,068	177	1,414	177	1,414	(356)	477	0	0	0	(356)	(1,306)
2034	4.46%	310	3,378	177	1,591	177	1,591	(393)	477	0	0	0	(393)	(1,699)
2035	4.46%	309	3,687	177	1,767	177	1,767	(430)	477	0	0	0	(430)	(2,128)
2036	4.46%	310	3,997	177	1,944	177	1,944	(466)	477	0	0	0	(466)	(2,595)
2037	4.46%	309	4,306	177	2,121	177	2,121	(503)	477	0	0	0	(503)	(3,098)
2038	4.46%	310	4,616	177	2,298	177	2,298	(540)	477	0	0	0	(540)	(3,637)
2039	4.46%	309	4,926	177	2,474	177	2,474	(576)	477	0	0	0	(576)	(4,213)
2040	4.46%	310	5,235	177	2,651	177	2,651	(613)	477	0	0	0	(613)	(4,826)
2041	4.46%	309	5,545	177	2,828	177	2,828	(650)	477	0	0	0	(650)	(5,476)
2042	4.46%	310	5,854	177	3,005	177	3,005	(686)	477	0	0	0	(686)	(6,162)
2043	4.46%	309	6,164	177	3,181	177	3,181	(723)	477	0	0	0	(723)	(6,885)
2044	4.46%	310	6,473	177	3,358	177	3,358	(760)	477	0	0	0	(760)	(7,645)
2045	4.46%	309	6,783	177	3,535	177	3,535	(796)	477	0	0	0	(796)	(8,441)
2046	2.23%	155	6,937	177	3,712	177	3,712	(794)	477	0	0	0	(794)	(9,235)
2047	0.00%	0	6,937	177	3,888	177	3,888	(752)	477	0	0	0	(752)	(9,987)
2048	0.00%	0	6,937	177	4,065	177	4,065	(710)	477	0	0	0	(710)	(10,697)
2049	0.00%	0	6,937	177	4,242	177	4,242	(668)	477	0	0	0	(668)	(11,365)
2050	0.00%	0	6,937	177	4,419	177	4,419	(627)	477	0	0	0	(627)	(11,992)
2051	0.00%	0	6,937	177	4,595	177	4,595	(585)	477	0	0	0	(585)	(12,577)
2052	0.00%	0	6,937	177	4,772	177	4,772	(543)	477	0	0	0	(543)	(13,120)
2053	0.00%	0	6,937	177	4,949	177	4,949	(501)	477	0	0	0	(501)	(13,621)
2054	0.00%	0	6,937	177	5,126	177	5,126	(460)	477	0	0	0	(460)	(14,081)
2055	0.00%	0	6,937	177	5,302	177	5,302	(418)	477	0	0	0	(418)	(14,498)
2056	0.00%	0	6,937	177	5,479	177	5,479	(376)	477	0	0	0	(376)	(14,874)
2057	0.00%	0	6,937	177	5,656	177	5,656	(334)	477	0	0	0	(334)	(15,208)
2058	0.00%	0	6,937	177	5,833	177	5,833	(292)	477	0	0	0	(292)	(15,501)
2059	0.00%	0	6,937	177	6,009	177	6,009	(251)	477	0	0	0	(251)	(15,752)
2060	0.00%	0	6,937	177	6,186	177	6,186	(209)	477	0	0	0	(209)	(15,960)
2061	0.00%	0	6,937	177	6,363	177	6,363	(167)	477	0	0	0	(167)	(16,127)
2062	0.00%	0	6,937	177	6,540	177	6,540	(125)	477	0	0	0	(125)	(16,253)
2063	0.00%	0	6,937	177	6,716	177	6,716	(84)	477	0	0	0	(84)	(16,336)
2064	0.00%	0	6,937	177	6,893	177	6,893	(42)	477	0	0	0	(42)	(16,378)
2065	0.00%	0	6,937	177	7,070	177	7,070	0	477	0	0	0	0	(16,378)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	87
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	477
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF. TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2026	3.75%	260	63	6,893	177	150	7,157	6,956	7,057
2027	7.22%	501	(22)	6,716	353	128	6,956	6,994	6,825
2028	6.68%	463	(98)	6,540	530	31	6,994	6,442	6,568
2029	6.18%	429	(164)	6,363	707	(134)	6,442	6,198	6,320
2030	5.71%	396	(223)	6,186	884	(357)	6,198	5,963	6,081
2031	5.29%	367	(274)	6,009	1,060	(631)	5,963	5,735	5,849
2032	4.89%	339	(318)	5,833	1,237	(950)	5,735	5,514	5,625
2033	4.52%	314	(356)	5,656	1,414	(1,306)	5,514	5,300	5,407
2034	4.46%	310	(393)	5,479	1,591	(1,699)	5,300	5,086	5,193
2035	4.46%	309	(430)	5,302	1,767	(2,128)	5,086	4,873	4,980
2036	4.46%	310	(466)	5,126	1,944	(2,595)	4,873	4,659	4,766
2037	4.46%	309	(503)	4,949	2,121	(3,098)	4,659	4,446	4,553
2038	4.46%	310	(540)	4,772	2,298	(3,637)	4,446	4,233	4,339
2039	4.46%	309	(576)	4,595	2,474	(4,213)	4,233	4,019	4,126
2040	4.46%	310	(613)	4,419	2,651	(4,826)	4,019	3,806	3,912
2041	4.46%	309	(650)	4,242	2,828	(5,476)	3,806	3,592	3,699
2042	4.46%	310	(686)	4,065	3,005	(6,162)	3,592	3,379	3,486
2043	4.46%	309	(723)	3,888	3,181	(6,885)	3,379	3,165	3,272
2044	4.46%	310	(760)	3,712	3,358	(7,645)	3,165	2,952	3,059
2045	4.46%	309	(796)	3,535	3,535	(8,441)	2,952	2,739	2,845
2046	2.23%	155	(794)	3,358	3,712	(9,235)	2,739	2,564	2,652
2047	0.00%	0	(752)	3,181	3,888	(9,987)	2,564	2,429	2,497
2048	0.00%	0	(710)	3,005	4,065	(10,697)	2,429	2,295	2,362
2049	0.00%	0	(668)	2,828	4,242	(11,365)	2,295	2,160	2,227
2050	0.00%	0	(627)	2,651	4,419	(11,992)	2,160	2,025	2,092
2051	0.00%	0	(585)	2,474	4,595	(12,577)	2,025	1,890	1,957
2052	0.00%	0	(543)	2,298	4,772	(13,120)	1,890	1,755	1,822
2053	0.00%	0	(501)	2,121	4,949	(13,621)	1,755	1,620	1,687
2054	0.00%	0	(460)	1,944	5,126	(14,081)	1,620	1,485	1,552
2055	0.00%	0	(418)	1,767	5,302	(14,498)	1,485	1,350	1,417
2056	0.00%	0	(376)	1,591	5,479	(14,874)	1,350	1,215	1,282
2057	0.00%	0	(334)	1,414	5,656	(15,208)	1,215	1,080	1,147
2058	0.00%	0	(292)	1,237	5,833	(15,501)	1,080	945	1,012
2059	0.00%	0	(251)	1,060	6,009	(15,752)	945	810	877
2060	0.00%	0	(209)	884	6,186	(15,960)	810	675	742
2061	0.00%	0	(167)	707	6,363	(16,127)	675	540	607
2062	0.00%	0	(125)	530	6,540	(16,253)	540	405	472
2063	0.00%	0	(84)	353	6,716	(16,336)	405	270	337
2064	0.00%	0	(42)	177	6,893	(16,378)	270	135	202
2065	0.00%	0	0	0	7,070	(16,378)	135	0	67

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.19	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	1.45	6.15	4.90	5.64	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	18.38	14.46	20.10	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	32.97	25.41	45.52	4.73	8.51	233.05	689.05

11.96 58.43 45.52 8.51 689.05

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	6,470	6,470
EQUITY AFUDC	477	
DEBT AFUDC	123	
CPI	123	467
ITC Basis Reduction (Solar)		
TOTAL	7,070	6,937

IN SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	3,850	3,850	1.80	1.94	1.85	0.00	1.00	1.00
2021	8,000	8,000	1.83	2.12	1.91	0.00	1.00	1.00
2022	12,150	12,150	1.80	1.96	1.86	0.00	1.00	1.00
2023	16,300	16,300	1.95	2.14	2.01	0.00	1.00	1.00
2024	20,450	20,450	2.14	2.32	2.20	0.00	1.00	1.00
2025	20,450	20,450	2.32	2.51	2.38	0.00	1.00	1.00
2026	20,450	20,450	2.54	2.76	2.60	2.63	1.00	1.00
2027	20,450	20,450	2.67	2.92	2.75	2.76	1.00	1.00
2028	20,450	20,450	2.75	2.97	2.82	2.85	1.00	1.00
2029	20,450	20,450	3.00	3.20	3.08	3.09	1.00	1.00
2030	20,450	20,450	3.10	3.31	3.15	3.09	1.00	1.00
2031	20,450	20,450	3.04	3.29	3.08	2.97	1.00	1.00
2032	20,450	20,450	3.26	3.63	3.35	3.07	1.00	1.00
2033	20,450	20,450	3.14	3.37	3.17	3.34	1.00	1.00
2034	20,450	20,450	3.19	3.40	3.24	3.46	1.00	1.00
2035	20,450	20,450	3.22	3.44	3.27	3.47	1.00	1.00
2036	20,450	20,450	3.27	3.52	3.33	3.52	1.00	1.00
2037	20,450	20,450	3.33	3.55	3.39	3.62	1.00	1.00
2038	20,450	20,450	3.40	3.63	3.46	3.66	1.00	1.00
2039	20,450	20,450	3.47	3.69	3.53	3.75	1.00	1.00
2040	20,450	20,450	3.54	3.78	3.60	3.85	1.00	1.00
2041	20,450	20,450	3.61	3.85	3.68	3.88	1.00	1.00
2042	20,450	20,450	3.66	3.91	3.74	3.93	1.00	1.00
2043	20,450	20,450	3.71	3.98	3.79	3.99	1.00	1.00
2044	20,450	20,450	3.76	4.06	3.85	4.04	1.00	1.00
2045	20,450	20,450	3.80	4.02	3.88	4.08	1.00	1.00
2046	20,450	20,450	3.84	4.10	3.92	4.14	1.00	1.00
2047	20,450	20,450	3.89	4.13	3.97	4.20	1.00	1.00
2048	20,450	20,450	3.94	4.22	4.03	4.22	1.00	1.00
2049	20,450	20,450	3.98	4.24	4.07	4.28	1.00	1.00
2050	20,450	20,450	5.03	5.34	5.15	4.41	1.00	1.00
2051	20,450	20,450	5.13	5.44	5.26	4.55	1.00	1.00
2052	20,450	20,450	5.23	5.55	5.36	4.68	1.00	1.00
2053	20,450	20,450	5.34	5.66	5.47	4.83	1.00	1.00
2054	20,450	20,450	5.44	5.78	5.58	4.97	1.00	1.00
2055	20,450	20,450	5.55	5.89	5.69	5.12	1.00	1.00
2056	20,450	20,450	5.66	6.01	5.81	5.28	1.00	1.00
2057	20,450	20,450	5.78	6.13	5.92	5.44	1.00	1.00
2058	20,450	20,450	5.89	6.25	6.04	5.61	1.00	1.00
2059	20,450	20,450	6.01	6.38	6.16	5.78	1.00	1.00
2060	20,450	20,450	6.13	6.50	6.28	5.95	1.00	1.00
2061	20,450	20,450	6.25	6.63	6.41	6.13	1.00	1.00
2062	20,450	20,450	6.38	6.77	6.54	6.32	1.00	1.00
2063	20,450	20,450	6.50	6.90	6.67	6.51	1.00	1.00
2064	20,450	20,450	6.63	7.04	6.80	6.71	1.00	1.00
2065	20,450	20,450	6.77	7.18	6.94	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Insulation

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	1,037	289	7	1,098	1,166	1,265
2027	1,010	296	11	1,921	2,024	1,215
2028	980	303	11	1,923	2,000	1,218
2029	951	311	11	1,899	2,063	1,109
2030	923	319	9	1,631	1,675	1,208
2031	896	327	9	1,567	1,498	1,301
2032	870	335	9	1,598	1,541	1,271
2033	844	343	12	2,161	2,303	1,059
2034	819	352	13	2,224	2,409	999
2035	794	361	13	2,269	2,411	1,025
2036	768	370	14	2,400	2,546	1,006
2037	743	379	15	2,497	2,684	950
2038	718	388	15	2,540	2,709	953
2039	693	398	16	2,605	2,797	914
2040	668	408	16	2,669	2,884	877
2041	642	418	17	2,757	2,972	862
2042	617	429	17	2,785	3,007	841
2043	592	440	18	2,874	3,126	797
2044	567	451	19	2,922	3,185	773
2045	541	462	19	2,965	3,228	760
2046	518	473	20	2,989	3,264	736
2047	499	485	20	3,047	3,344	708
2048	482	497	21	3,067	3,340	727
2049	465	510	22	3,216	3,514	698
2050	448	522	23	3,312	3,621	684
2051	431	536	23	3,411	3,731	669
2052	413	549	24	3,514	3,845	655
2053	396	563	24	3,619	3,962	641
2054	379	577	25	3,728	4,082	627
2055	362	591	26	3,840	4,206	612
2056	345	606	26	3,955	4,334	598
2057	328	621	27	4,073	4,466	583
2058	311	637	28	4,196	4,602	569
2059	297	653	28	4,321	4,742	557
2060	283	669	29	4,451	4,886	546
2061	269	686	30	4,585	5,034	534
2062	255	703	30	4,722	5,188	522
2063	241	720	31	4,864	5,345	511
2064	227	738	32	5,010	5,508	499
2065	213	757	33	5,160	5,676	487

NOM	22,834	19,471	793	124,387	134,918	32,567
NPV	5,991.82	3,049.18	114	18,553	19,818	7,890

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	34	0
2021	93	13	106	17	7	25	116	0
2022	193	23	217	36	13	49	179	0
2023	293	34	327	55	18	73	278	0
2024	394	45	438	74	24	98	388	0
2025	494	51	545	93	28	120	465	0
2026	478	52	531	90	29	119	514	0
2027	463	54	517	88	29	117	544	0
2028	449	55	504	85	30	116	552	0
2029	435	57	491	83	31	114	593	0
2030	421	58	479	81	32	113	612	0
2031	407	59	467	79	32	111	610	0
2032	394	61	454	77	33	110	680	0
2033	380	62	442	75	34	109	624	0
2034	366	64	430	73	35	107	630	0
2035	353	66	418	70	36	106	637	0
2036	339	67	406	68	37	105	652	0
2037	327	69	396	66	37	104	658	0
2038	315	71	386	64	38	103	672	0
2039	305	72	377	62	39	101	683	0
2040	296	74	370	60	40	100	699	0
2041	287	76	363	58	41	99	712	0
2042	279	78	357	56	42	98	725	0
2043	272	80	351	54	43	98	736	0
2044	264	82	345	52	44	97	753	0
2045	256	84	340	51	46	96	743	0
2046	248	86	334	50	47	96	758	0
2047	240	88	328	48	48	96	763	0
2048	232	90	322	47	49	96	781	0
2049	224	93	317	46	50	96	785	0
2050	216	95	311	44	52	96	886	0
2051	208	97	305	43	53	96	1,005	0
2052	200	100	300	42	54	96	1,025	0
2053	192	102	294	40	56	96	1,046	0
2054	184	105	289	39	57	96	1,067	0
2055	176	107	284	38	58	96	1,088	0
2056	168	110	278	37	60	97	1,110	0
2057	161	113	273	35	61	97	1,132	0
2058	153	116	269	34	63	97	1,155	0
2059	146	119	265	33	65	97	1,178	0
2060	139	121	261	31	66	98	1,201	0
2061	133	125	257	30	68	98	1,225	0
2062	126	128	254	29	70	98	1,250	0
2063	120	131	251	28	71	99	1,275	0
2064	113	134	247	26	73	99	1,300	0
2065	93	137	230	25	75	100	1,326	0

NOM	12,023	3,703.74	15,727	2,412	2,017	4,429	35,945	0
NPV	3,772	673	4,445	731	366	1,097	6,491	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Insulation

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	0	0	0	0	0
2028	0	0	0	0	0
2029	0	0	0	0	0
2030	0	0	0	0	0
2031	0	0	0	0	0
2032	0	0	0	0	0
2033	0	0	0	0	0
2034	0	0	0	0	0
2035	0	0	0	0	0
2036	0	0	0	0	0
2037	0	0	0	0	0
2038	0	0	0	0	0
2039	0	0	0	0	0
2040	0	0	0	0	0
2041	0	0	0	0	0
2042	0	0	0	0	0
2043	0	0	0	0	0
2044	0	0	0	0	0
2045	0	0	0	0	0
2046	0	0	0	0	0
2047	0	0	0	0	0
2048	0	0	0	0	0
2049	0	0	0	0	0
2050	0	0	0	0	0
2051	0	0	0	0	0
2052	0	0	0	0	0
2053	0	0	0	0	0
2054	0	0	0	0	0
2055	0	0	0	0	0
2056	0	0	0	0	0
2057	0	0	0	0	0
2058	0	0	0	0	0
2059	0	0	0	0	0
2060	0	0	0	0	0
2061	0	0	0	0	0
2062	0	0	0	0	0
2063	0	0	0	0	0
2064	0	0	0	0	0
2065	0	0	0	0	0

NOM	12	13	3	0	2
NPV	2	2	1	0	1

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	109	2,094	0	2,203	0	0	34	0	34	(2,169)	(2,014)
2021	0	120	2,314	0	2,434	0	131	116	0	247	(2,187)	(3,898)
2022	0	123	2,372	0	2,495	0	265	179	0	445	(2,050)	(5,538)
2023	0	126	2,431	0	2,557	0	400	278	0	678	(1,879)	(6,932)
2024	0	129	2,492	0	2,621	0	536	388	0	924	(1,697)	(8,102)
2025	0	0	0	0	0	0	666	465	0	1,131	(7,379)	(11,31)
2026	0	0	0	0	0	1,265	650	514	0	2,429	(5,937)	(5,937)
2027	0	0	0	0	0	1,215	634	544	0	2,394	(4,617)	(4,617)
2028	0	0	0	0	0	1,218	619	552	0	2,389	(3,395)	(3,395)
2029	0	0	0	0	0	1,109	605	593	0	2,308	(2,308)	(2,308)
2030	0	0	0	0	0	1,208	591	612	0	2,411	(1,237)	(1,237)
2031	0	0	0	0	0	1,301	578	610	0	2,489	(2,489)	(2,489)
2032	0	0	0	0	0	1,271	564	680	0	2,515	(2,515)	(2,515)
2033	0	0	0	0	0	1,059	551	624	0	2,234	(2,234)	(2,234)
2034	0	0	0	0	0	999	538	630	0	2,167	(2,167)	(2,167)
2035	0	0	0	0	0	1,025	524	637	0	2,187	(2,187)	(2,187)
2036	0	0	0	0	0	1,006	511	652	0	2,169	(2,169)	(2,169)
2037	0	0	0	0	0	950	499	658	0	2,107	(2,107)	(2,107)
2038	0	0	0	0	0	953	488	672	0	2,114	(2,114)	(2,114)
2039	0	0	0	0	0	914	479	683	0	2,076	(2,076)	(2,076)
2040	0	178	3,432	0	3,610	0	470	699	0	2,046	(1,564)	(1,564)
2041	0	197	3,792	0	3,988	0	463	712	0	2,037	(1,952)	(4,335)
2042	0	202	3,887	0	4,088	0	456	725	0	2,022	(2,067)	(3,962)
2043	0	207	3,984	0	4,190	0	449	736	0	1,982	(2,208)	(3,595)
2044	0	212	4,083	0	4,295	0	442	753	0	1,969	(2,326)	(3,231)
2045	0	0	0	0	0	760	436	743	0	1,939	(1,939)	(3,511)
2046	0	0	0	0	0	736	430	758	0	1,924	(1,924)	(3,768)
2047	0	0	0	0	0	708	424	763	0	1,895	(1,895)	(4,004)
2048	0	0	0	0	0	727	418	781	0	1,927	(1,927)	(4,226)
2049	0	0	0	0	0	698	413	785	0	1,895	(1,895)	(4,429)
2050	0	0	0	0	0	684	407	986	0	2,076	(2,076)	(4,635)
2051	0	0	0	0	0	669	401	1,005	0	2,076	(2,076)	(4,827)
2052	0	0	0	0	0	655	396	1,025	0	2,076	(2,076)	(5,005)
2053	0	0	0	0	0	641	391	1,046	0	2,077	(2,077)	(5,170)
2054	0	0	0	0	0	627	385	1,067	0	2,079	(2,079)	(5,323)
2055	0	0	0	0	0	612	380	1,088	0	2,080	(2,080)	(5,465)
2056	0	0	0	0	0	598	375	1,110	0	2,083	(2,083)	(5,598)
2057	0	0	0	0	0	583	370	1,132	0	2,086	(2,086)	(5,721)
2058	0	0	0	0	0	569	366	1,155	0	2,089	(2,089)	(5,835)
2059	0	0	0	0	0	557	362	1,178	0	2,097	(2,097)	(5,942)
2060	0	292	5,624	0	5,915	0	358	1,201	0	2,105	(3,810)	(5,762)
2061	0	322	6,213	0	6,536	0	355	1,225	0	2,115	(4,421)	(5,568)
2062	0	330	6,369	0	6,699	0	352	1,250	0	2,125	(4,574)	(5,382)
2063	0	338	6,528	0	6,866	0	349	1,275	0	2,135	(4,732)	(5,204)
2064	0	347	6,691	0	7,038	0	347	1,300	0	2,146	(4,892)	(5,033)
2065	0	0	0	0	0	487	330	1,326	0	2,143	(2,143)	(5,102)

NOM	0	3,231	62,306	0	65,536	32,566.52	20,156	35,945	2	88,669	23,133	
NPV	0	731	14,091	0	14,821	7,890	5,542	6,491	1	19,923.43	5,102	

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(11) / Col(6)) : 1.34



PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	212	913	701	0	1,411	2,094	0	0	2,094	(1,181)	(1,096)
2021	656	1,411	756	0	1,866	2,314	0	0	2,314	(903)	(1,874)
2022	1,110	1,866	756	0	2,372	2,372	0	0	2,372	(506)	(2,279)
2023	1,725	2,481	756	0	2,481	2,431	0	0	2,431	50	(2,242)
2024	2,254	3,010	756	0	3,010	2,492	0	0	2,492	518	(1,885)
2025	2,535	2,535	0	0	2,535	0	0	0	0	2,535	(264)
2026	2,578	2,578	0	0	2,578	0	0	0	0	2,578	1,267
2027	2,620	2,620	0	0	2,620	0	0	0	0	2,620	2,711
2028	2,680	2,680	0	0	2,680	0	0	0	0	2,680	4,082
2029	2,731	2,731	0	0	2,731	0	0	0	0	2,731	5,379
2030	2,769	2,769	0	0	2,769	0	0	0	0	2,769	6,599
2031	2,816	2,816	0	0	2,816	0	0	0	0	2,816	7,751
2032	2,873	2,873	0	0	2,873	0	0	0	0	2,873	8,842
2033	2,930	2,930	0	0	2,930	0	0	0	0	2,930	9,875
2034	2,989	2,989	0	0	2,989	0	0	0	0	2,989	10,853
2035	3,045	3,045	0	0	3,045	0	0	0	0	3,045	11,778
2036	3,149	3,149	0	0	3,149	0	0	0	0	3,149	12,666
2037	3,212	3,212	0	0	3,212	0	0	0	0	3,212	13,506
2038	3,273	3,273	0	0	3,273	0	0	0	0	3,273	14,301
2039	3,337	3,337	0	0	3,337	0	0	0	0	3,337	15,053
2040	3,383	3,383	701	0	4,084	3,432	0	0	3,432	652	15,190
2041	3,441	3,441	756	0	4,197	3,792	0	0	3,792	405	15,268
2042	3,476	3,476	756	0	4,231	3,887	0	0	3,887	345	15,331
2043	3,583	3,583	756	0	4,339	3,984	0	0	3,984	355	15,300
2044	3,664	3,664	756	0	4,419	4,083	0	0	4,083	336	15,442
2045	3,725	3,725	0	0	3,725	0	0	0	0	3,725	15,979
2046	3,790	3,790	0	0	3,790	0	0	0	0	3,790	16,487
2047	3,850	3,850	0	0	3,850	0	0	0	0	3,850	16,965
2048	3,915	3,915	0	0	3,915	0	0	0	0	3,915	17,416
2049	3,982	3,982	0	0	3,982	0	0	0	0	3,982	17,843
2050	4,050	4,050	0	0	4,050	0	0	0	0	4,050	18,245
2051	4,121	4,121	0	0	4,121	0	0	0	0	4,121	18,625
2052	4,193	4,193	0	0	4,193	0	0	0	0	4,193	18,984
2053	4,267	4,267	0	0	4,267	0	0	0	0	4,267	19,323
2054	4,343	4,343	0	0	4,343	0	0	0	0	4,343	19,644
2055	4,421	4,421	0	0	4,421	0	0	0	0	4,421	19,946
2056	4,501	4,501	0	0	4,501	0	0	0	0	4,501	20,232
2057	4,584	4,584	0	0	4,584	0	0	0	0	4,584	20,503
2058	4,668	4,668	0	0	4,668	0	0	0	0	4,668	20,758
2059	4,753	4,753	0	0	4,753	0	0	0	0	4,753	21,000
2060	4,840	4,840	701	0	5,541	5,624	0	0	5,624	(82)	20,996
2061	4,930	4,930	756	0	5,686	6,213	0	0	6,213	(528)	20,973
2062	5,022	5,022	756	0	5,777	6,369	0	0	6,369	(591)	20,949
2063	5,118	5,118	756	0	5,873	6,528	0	0	6,528	(655)	20,924
2064	5,212	5,212	756	0	5,968	6,691	0	0	6,691	(723)	20,899
2065	5,308	5,308	0	0	5,308	0	0	0	0	5,308	21,072

NOM	160,632	0	11,171	0	171,803	62,306	0	0	62,306	109,497	0
NPV	31,349	0	3,813	0	35,162	14,091	0	0	14,091	21,072	0

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 2.50

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Insulation

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	109	701	161	0	971	34	0	0	0	34	(937)	(870)
2021	0	120	756	498	0	1,374	116	0	0	0	247	(1,127)	(1,841)
2022	0	123	756	844	0	1,722	179	265	0	0	445	(1,278)	(2,863)
2023	0	126	756	1,311	0	2,193	278	400	0	0	678	(1,515)	(3,987)
2024	0	129	756	1,713	0	2,598	388	536	0	0	924	(1,674)	(5,141)
2025	0	0	0	1,926	0	1,926	465	666	0	0	1,131	(796)	(5,650)
2026	0	0	0	1,959	0	1,959	1,779	650	0	0	2,429	(5,371)	(5,371)
2027	0	0	0	1,991	0	1,991	1,759	634	0	0	2,394	(5,149)	(5,149)
2028	0	0	0	2,037	0	2,037	1,720	619	0	0	2,389	(4,969)	(4,969)
2029	0	0	0	2,075	0	2,075	1,703	605	0	0	2,308	(4,859)	(4,859)
2030	0	0	0	2,104	0	2,104	1,819	591	0	0	2,411	(4,723)	(4,723)
2031	0	0	0	2,140	0	2,140	1,911	578	0	0	2,489	(4,581)	(4,581)
2032	0	0	0	2,184	0	2,184	1,951	564	0	0	2,515	(4,455)	(4,455)
2033	0	0	0	2,227	0	2,227	1,683	551	0	0	2,234	(4,452)	(4,452)
2034	0	0	0	2,272	0	2,272	1,629	538	0	0	2,167	(4,487)	(4,487)
2035	0	0	0	2,315	0	2,315	1,662	524	0	0	2,187	(4,526)	(4,526)
2036	0	0	0	2,393	0	2,393	1,658	511	0	0	2,169	(4,589)	(4,589)
2037	0	0	0	2,441	0	2,441	1,608	499	0	0	2,107	(4,676)	(4,676)
2038	0	0	0	2,487	0	2,487	1,625	488	0	0	2,114	(4,767)	(4,767)
2039	0	0	0	2,536	0	2,536	1,597	479	0	0	2,076	(4,871)	(4,871)
2040	0	178	701	2,571	0	3,450	1,576	470	0	0	2,046	(5,165)	(5,165)
2041	0	197	756	2,615	0	3,507	1,574	463	0	0	2,037	(5,462)	(5,462)
2042	0	202	756	2,641	0	3,599	1,566	456	0	0	2,022	(5,746)	(5,746)
2043	0	207	756	2,723	0	3,685	1,533	449	0	0	1,982	(6,031)	(6,031)
2044	0	212	756	2,784	0	3,752	1,527	442	0	0	1,969	(6,308)	(6,308)
2045	0	0	0	2,831	0	2,831	1,503	436	0	0	1,939	(6,437)	(6,437)
2046	0	0	0	2,880	0	2,880	1,494	430	0	0	1,924	(6,565)	(6,565)
2047	0	0	0	2,926	0	2,926	1,471	424	0	0	1,895	(6,693)	(6,693)
2048	0	0	0	2,976	0	2,976	1,508	418	0	0	1,895	(6,814)	(6,814)
2049	0	0	0	3,026	0	3,026	1,483	413	0	0	1,895	(6,935)	(6,935)
2050	0	0	0	3,078	0	3,078	1,669	407	0	0	2,076	(7,035)	(7,035)
2051	0	0	0	3,132	0	3,132	1,675	401	0	0	2,076	(7,132)	(7,132)
2052	0	0	0	3,187	0	3,187	1,680	396	0	0	2,076	(7,227)	(7,227)
2053	0	0	0	3,243	0	3,243	1,687	391	0	0	2,077	(7,320)	(7,320)
2054	0	0	0	3,301	0	3,301	1,693	385	0	0	2,079	(7,410)	(7,410)
2055	0	0	0	3,360	0	3,360	1,700	380	0	0	2,080	(7,497)	(7,497)
2056	0	0	0	3,421	0	3,421	1,708	375	0	0	2,083	(7,582)	(7,582)
2057	0	0	0	3,484	0	3,484	1,715	370	0	0	2,086	(7,665)	(7,665)
2058	0	0	0	3,547	0	3,547	1,724	366	0	0	2,089	(7,745)	(7,745)
2059	0	0	0	3,612	0	3,612	1,735	362	0	0	2,097	(7,822)	(7,822)
2060	0	292	701	3,679	0	4,671	1,747	358	0	0	2,105	(7,943)	(7,943)
2061	0	322	756	3,747	0	4,825	1,759	355	0	0	2,115	(8,061)	(8,061)
2062	0	330	756	3,816	0	4,902	1,772	352	0	0	2,125	(8,174)	(8,174)
2063	0	338	756	3,889	0	4,983	1,785	349	0	0	2,135	(8,282)	(8,282)
2064	0	347	756	3,961	0	5,064	1,799	347	0	0	2,146	(8,384)	(8,384)
2065	0	0	0	4,034	0	4,034	1,813	330	0	0	2,143	(8,446)	(8,446)

NOM	0	3,231	11,171	122,080	0	136,482	68,511.43	20,155.99	0.00	1.81	88,669	(47,812)	(47,812)
NPV	0	731	3,813	23,825	0	28,369	14,381	5,542	0	1	19,923	(8,446)	(8,446)

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) : 7.73 %  
0.70

INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER .....	0.27 KW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	0.3470 KW
(3) KW LINE LOSS PERCENT AGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	676.90 kwh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 kwh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CLUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CLUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CLUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CLUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CLUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CLUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2027-1-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,592,6542 \$KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	317,705,2925 \$KW
(6) BASE YEAR DISTRIBUTION COST .....	78,230,14236 \$KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23,685,13279 \$KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	4,302,507237 \$KW
(11) DISTRIBUTION FIXED O & M COST .....	3,045,100973 \$KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	49 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	2,481 CENTS/KWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	5.68 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/KWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.534
(2) TRC TEST .....	2.682
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	655	237	0	892	168	0	0	0	0	0
2021	736	259	0	995	521	0	0	0	0	0
2022	787	271	0	1,058	895	0	0	0	0	0
2023	907	305	0	1,212	1,433	0	0	0	0	0
2024	1,033	338	0	1,372	1,957	0	0	0	0	0
2025	0	0	0	0	2,247	0	0	0	0	0
2026	0	0	0	0	2,285	0	0	0	0	0
2027	0	0	0	0	2,322	0	0	0	0	0
2028	0	0	0	0	2,375	0	0	0	0	0
2029	818	237	0	1,055	2,420	0	0	0	0	0
2030	919	259	0	1,178	2,866	0	0	0	0	0
2031	983	271	0	1,253	2,915	0	0	0	0	0
2032	1,133	305	0	1,438	2,974	0	0	0	0	0
2033	1,290	338	0	1,629	3,033	0	0	0	0	0
2034	0	0	0	0	3,094	0	0	0	0	0
2035	0	0	0	0	3,153	0	0	0	0	0
2036	0	0	0	0	3,260	0	0	0	0	0
2037	0	0	0	0	3,325	0	0	0	0	0
2038	1,022	237	0	1,259	3,388	0	0	0	0	0
2039	1,147	259	0	1,407	3,455	0	0	0	0	0
2040	1,227	271	0	1,498	3,502	0	0	0	0	0
2041	1,415	305	0	1,720	3,562	0	0	0	0	0
2042	1,612	338	0	1,950	3,598	0	0	0	0	0
2043	0	0	0	0	3,709	0	0	0	0	0
2044	0	0	0	0	3,792	0	0	0	0	0
2045	0	0	0	0	3,856	0	0	0	0	0
2046	0	0	0	0	3,923	0	0	0	0	0
2047	1,276	237	0	1,513	3,985	0	0	0	0	0
2048	1,433	259	0	1,692	4,053	0	0	0	0	0
2049	1,533	271	0	1,803	4,122	0	0	0	0	0
2050	1,767	305	0	2,072	4,193	0	0	0	0	0
2051	2,013	338	0	2,351	4,266	0	0	0	0	0
2052	0	0	0	0	4,340	0	0	0	0	0
2053	0	0	0	0	4,417	0	0	0	0	0
2054	0	0	0	0	4,496	0	0	0	0	0
2055	0	0	0	0	4,576	0	0	0	0	0
2056	1,594	237	0	1,831	4,659	0	0	0	0	0
2057	1,789	259	0	2,049	4,745	0	0	0	0	0
2058	1,914	271	0	2,185	4,832	0	0	0	0	0
2059	2,207	305	0	2,512	4,920	0	0	0	0	0
2060	2,514	338	0	2,852	5,010	0	0	0	0	0
2061	0	0	0	0	5,103	0	0	0	0	0
2062	0	0	0	0	5,198	0	0	0	0	0
2063	0	0	0	0	5,298	0	0	0	0	0
2064	0	0	0	0	5,396	0	0	0	0	0
2065	1,991	237	0	2,228	5,494	0	0	0	0	0
NOM	35,715	7,288	0	43,003	163,132	0	0	0	0	0
NPV	8,123	2,219	0	10,342	30,461	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Residential Low Income

RESIDENTIAL LOW INCOME

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	9.70	0.00	0.00
2020	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.97	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.92	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.92	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.05	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.16	0.00	0.00
2026	2.50	2.50	2.50	2.48	49.26	2.00	11.35	0.00	0.00
2027	2.50	2.50	2.50	2.62	81.53	2.00	11.54	0.00	0.00
2028	2.50	2.50	2.50	2.74	78.00	2.00	11.80	0.00	0.00
2029	2.50	2.50	2.85	2.85	74.20	2.00	12.02	0.00	0.00
2030	2.50	2.50	3.01	3.01	60.41	2.00	12.19	0.00	0.00
2031	2.50	2.50	3.11	3.11	56.03	2.00	12.40	0.00	0.00
2032	2.50	2.50	3.19	3.19	55.78	2.00	12.65	0.00	0.00
2033	2.50	2.50	3.14	3.14	76.71	2.00	12.90	0.00	0.00
2034	2.50	2.50	3.20	3.20	77.40	2.00	13.16	0.00	0.00
2035	2.50	2.50	3.26	3.26	77.41	2.00	13.41	0.00	0.00
2036	2.50	2.50	3.31	3.31	80.60	2.00	13.87	0.00	0.00
2037	2.50	2.50	3.37	3.37	82.52	2.00	14.14	0.00	0.00
2038	2.50	2.50	3.43	3.43	82.40	2.00	14.41	0.00	0.00
2039	2.50	2.50	3.50	3.50	82.89	2.00	14.70	0.00	0.00
2040	2.50	2.50	3.56	3.56	83.40	2.00	14.90	0.00	0.00
2041	2.50	2.50	3.60	3.60	85.24	2.00	15.15	0.00	0.00
2042	2.50	2.50	3.64	3.64	85.14	2.00	15.31	0.00	0.00
2043	2.50	2.50	3.67	3.67	87.14	2.00	15.78	0.00	0.00
2044	2.50	2.50	3.71	3.71	87.66	2.00	16.13	0.00	0.00
2045	2.50	2.50	3.75	3.75	88.02	2.00	16.40	0.00	0.00
2046	2.50	2.50	3.79	3.79	87.75	2.00	16.69	0.00	0.00
2047	2.50	2.50	3.83	3.83	88.56	2.00	16.95	0.00	0.00
2048	2.50	2.50	3.87	3.87	88.14	2.00	17.24	0.00	0.00
2049	2.50	2.50	3.92	3.92	91.34	2.00	17.54	0.00	0.00
2050	2.50	2.50	4.03	4.03	91.34	2.00	17.84	0.00	0.00
2051	2.50	2.50	4.16	4.16	91.34	2.00	18.15	0.00	0.00
2052	2.50	2.50	4.28	4.28	91.34	2.00	18.46	0.00	0.00
2053	2.50	2.50	4.41	4.41	91.34	2.00	18.79	0.00	0.00
2054	2.50	2.50	4.54	4.54	91.34	2.00	19.13	0.00	0.00
2055	2.50	2.50	4.68	4.68	91.34	2.00	19.47	0.00	0.00
2056	2.50	2.50	4.82	4.82	91.34	2.00	19.82	0.00	0.00
2057	2.50	2.50	4.96	4.96	91.34	2.00	20.19	0.00	0.00
2058	2.50	2.50	5.11	5.11	91.34	2.00	20.55	0.00	0.00
2059	2.50	2.50	5.26	5.26	91.34	2.00	20.93	0.00	0.00
2060	2.50	2.50	5.42	5.42	91.34	2.00	21.32	0.00	0.00
2061	2.50	2.50	5.58	5.58	91.34	2.00	21.71	0.00	0.00
2062	2.50	2.50	5.75	5.75	91.34	2.00	22.11	0.00	0.00
2063	2.50	2.50	5.92	5.92	91.34	2.00	22.54	0.00	0.00
2064	2.50	2.50	6.10	6.10	91.34	2.00	22.95	0.00	0.00
2065	2.50	2.50	6.29	6.29	91.34	2.00	23.37	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

PROGRAM NAME: Residential Low Income  
CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	7,459	144	0	469	97	129	4	187	67	0	1,096	1,096	1,096	7,473
2027	7,214	140	0	454	182	125	4	187	(23)	0	1,068	991	2,087	7,286
2028	6,943	134	0	437	256	122	4	187	(103)	0	1,036	893	2,980	7,099
2029	6,680	129	0	420	321	119	4	187	(174)	0	1,006	804	3,784	6,912
2030	6,427	124	0	404	377	116	4	187	(236)	0	976	725	4,509	6,726
2031	6,182	120	0	389	426	112	3	187	(290)	0	947	653	5,161	6,539
2032	5,945	115	0	374	468	109	3	187	(337)	0	920	588	5,750	6,352
2033	5,715	111	0	359	503	106	3	187	(377)	0	892	530	6,279	6,165
2034	5,489	106	0	345	537	103	3	187	(415)	0	866	477	6,756	5,978
2035	5,263	102	0	331	571	100	3	187	(454)	0	839	429	7,186	5,792
2036	5,038	97	0	317	605	96	3	187	(493)	0	812	386	7,571	5,605
2037	4,812	93	0	303	639	93	3	187	(532)	0	786	346	7,917	5,418
2038	4,587	89	0	288	673	90	3	187	(570)	0	759	310	8,228	5,231
2039	4,361	84	0	274	706	87	3	187	(609)	0	732	278	8,506	5,044
2040	4,135	80	0	260	740	84	3	187	(648)	0	706	249	8,755	4,857
2041	3,910	76	0	246	774	80	2	187	(687)	0	679	222	8,977	4,671
2042	3,684	71	0	232	808	77	2	187	(725)	0	652	198	9,175	4,484
2043	3,459	67	0	217	842	74	2	187	(764)	0	626	176	9,351	4,297
2044	3,233	63	0	203	876	71	2	187	(803)	0	599	157	9,508	4,110
2045	3,008	58	0	189	910	67	2	187	(842)	0	572	139	9,647	3,923
2046	2,803	54	0	176	903	64	2	187	(881)	0	548	123	9,770	3,736
2047	2,639	51	0	166	855	61	2	187	(919)	0	527	110	9,881	3,550
2048	2,497	48	0	157	808	58	2	187	(951)	0	509	99	9,980	3,363
2049	2,354	46	0	148	761	55	2	187	(977)	0	491	89	10,068	3,176
2050	2,211	43	0	139	714	51	2	187	(1002)	0	473	79	10,147	2,989
2051	2,069	40	0	130	667	48	1	187	(1028)	0	455	71	10,218	2,802
2052	1,926	37	0	121	619	45	1	187	(1054)	0	437	63	10,281	2,616
2053	1,783	35	0	112	572	42	1	187	(1079)	0	419	56	10,337	2,429
2054	1,641	32	0	103	525	39	1	187	(1104)	0	401	50	10,387	2,242
2055	1,498	29	0	94	478	35	1	187	(1129)	0	383	44	10,431	2,055
2056	1,355	26	0	85	431	32	1	187	(1154)	0	365	39	10,470	1,868
2057	1,213	23	0	76	383	29	1	187	(1179)	0	347	34	10,505	1,681
2058	1,070	21	0	67	336	26	1	187	(1204)	0	328	30	10,535	1,495
2059	927	18	0	58	289	26	1	187	(1229)	0	314	27	10,562	1,495
2060	785	15	0	49	242	26	1	187	(1254)	0	299	24	10,586	1,495
2061	642	12	0	40	195	26	1	187	(1279)	0	284	21	10,607	1,495
2062	499	10	0	31	147	26	1	187	(1304)	0	269	18	10,625	1,495
2063	357	7	0	22	100	26	1	187	(1329)	0	255	16	10,641	1,495
2064	214	4	0	13	53	26	1	187	(1354)	0	240	14	10,655	1,495
2065	71	1	0	4	6	26	1	187	(1379)	0	225	12	10,668	1,495

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	7,473
IN SERVICE YEAR	2026
BOOK LIFE (YRS)	40
EFFECT. TAX RATE	25.345%
DISCOUNT RATE	7.73%
PROPERTY TAX	1.72%
PROPERTY INSURANCE	0.053%

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION (\$000)	ACCUMULATED TAX DEPRECIATION (\$000)	BOOK DEPRECIATION (\$000)	ACCUMULATED BOOK DEPRECIATION (\$000)	BOOK DEPRECIATION FOR DEFERRED TAX (\$000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX (\$000)	DEFERRED TAX DUE TO DEPRECIATION (\$000)	TOTAL EQUITY AFUDC (\$000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE (\$000)	SALVAGE TAX RATE (\$000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) (\$000)	ACCUMULATED DEFERRED TAX (\$000)
2026	3.75%	275	275	187	187	187	187	67	504	0	0	0	67	159
2027	7.22%	529	804	187	374	187	374	(23)	504	0	0	0	(23)	136
2028	6.68%	490	1,294	187	560	187	560	(103)	504	0	0	0	(103)	32
2029	6.18%	453	1,747	187	747	187	747	(174)	504	0	0	0	(174)	(141)
2030	5.71%	419	2,166	187	934	187	934	(236)	504	0	0	0	(236)	(377)
2031	5.29%	388	2,553	187	1,121	187	1,121	(290)	504	0	0	0	(290)	(667)
2032	4.89%	358	2,912	187	1,308	187	1,308	(337)	504	0	0	0	(337)	(1,004)
2033	4.52%	332	3,243	187	1,495	187	1,495	(377)	504	0	0	0	(377)	(1,380)
2034	4.46%	327	3,571	187	1,681	187	1,681	(415)	504	0	0	0	(415)	(1,796)
2035	4.46%	327	3,898	187	1,868	187	1,868	(454)	504	0	0	0	(454)	(2,250)
2036	4.46%	327	4,225	187	2,055	187	2,055	(493)	504	0	0	0	(493)	(2,743)
2037	4.46%	327	4,552	187	2,242	187	2,242	(532)	504	0	0	0	(532)	(3,274)
2038	4.46%	327	4,879	187	2,429	187	2,429	(570)	504	0	0	0	(570)	(3,845)
2039	4.46%	327	5,206	187	2,616	187	2,616	(609)	504	0	0	0	(609)	(4,454)
2040	4.46%	327	5,534	187	2,802	187	2,802	(648)	504	0	0	0	(648)	(5,101)
2041	4.46%	327	5,861	187	2,989	187	2,989	(687)	504	0	0	0	(687)	(5,788)
2042	4.46%	327	6,188	187	3,176	187	3,176	(725)	504	0	0	0	(725)	(6,514)
2043	4.46%	327	6,515	187	3,363	187	3,363	(764)	504	0	0	0	(764)	(7,278)
2044	4.46%	327	6,842	187	3,550	187	3,550	(803)	504	0	0	0	(803)	(8,081)
2045	4.46%	327	7,169	187	3,736	187	3,736	(842)	504	0	0	0	(842)	(8,922)
2046	2.23%	164	7,333	187	3,923	187	3,923	(839)	504	0	0	0	(839)	(9,761)
2047	0.00%	0	7,333	187	4,110	187	4,110	(795)	504	0	0	0	(795)	(10,556)
2048	0.00%	0	7,333	187	4,297	187	4,297	(751)	504	0	0	0	(751)	(11,307)
2049	0.00%	0	7,333	187	4,484	187	4,484	(707)	504	0	0	0	(707)	(12,013)
2050	0.00%	0	7,333	187	4,671	187	4,671	(662)	504	0	0	0	(662)	(12,676)
2051	0.00%	0	7,333	187	4,857	187	4,857	(618)	504	0	0	0	(618)	(13,294)
2052	0.00%	0	7,333	187	5,044	187	5,044	(574)	504	0	0	0	(574)	(13,868)
2053	0.00%	0	7,333	187	5,231	187	5,231	(530)	504	0	0	0	(530)	(14,398)
2054	0.00%	0	7,333	187	5,418	187	5,418	(486)	504	0	0	0	(486)	(14,883)
2055	0.00%	0	7,333	187	5,605	187	5,605	(442)	504	0	0	0	(442)	(15,325)
2056	0.00%	0	7,333	187	5,792	187	5,792	(397)	504	0	0	0	(397)	(15,722)
2057	0.00%	0	7,333	187	5,978	187	5,978	(353)	504	0	0	0	(353)	(16,076)
2058	0.00%	0	7,333	187	6,165	187	6,165	(309)	504	0	0	0	(309)	(16,385)
2059	0.00%	0	7,333	187	6,352	187	6,352	(265)	504	0	0	0	(265)	(16,650)
2060	0.00%	0	7,333	187	6,539	187	6,539	(221)	504	0	0	0	(221)	(16,870)
2061	0.00%	0	7,333	187	6,726	187	6,726	(177)	504	0	0	0	(177)	(17,047)
2062	0.00%	0	7,333	187	6,912	187	6,912	(132)	504	0	0	0	(132)	(17,179)
2063	0.00%	0	7,333	187	7,099	187	7,099	(88)	504	0	0	0	(88)	(17,268)
2064	0.00%	0	7,333	187	7,286	187	7,286	(44)	504	0	0	0	(44)	(17,312)
2065	0.00%	0	7,333	187	7,473	187	7,473	0	504	0	0	0	0	(17,312)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE/COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	92
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	504
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2026	3.75%	275	67	7,286	187	159	7,565	7,353	7,459
2027	7.22%	529	(23)	7,099	374	136	7,353	7,076	7,214
2028	6.68%	450	(103)	6,912	560	32	7,076	6,809	6,943
2029	6.18%	493	(174)	6,726	747	(141)	6,809	6,552	6,680
2030	5.71%	419	(236)	6,539	934	(377)	6,552	6,303	6,427
2031	5.29%	388	(290)	6,352	1,121	(667)	6,303	6,062	6,182
2032	4.89%	358	(337)	6,165	1,308	(1,004)	6,062	5,829	5,945
2033	4.52%	332	(377)	5,978	1,495	(1,380)	5,829	5,602	5,715
2034	4.46%	327	(415)	5,792	1,681	(1,796)	5,602	5,376	5,489
2035	4.46%	327	(454)	5,605	1,868	(2,250)	5,376	5,151	5,263
2036	4.46%	327	(493)	5,418	2,055	(2,743)	5,151	4,925	5,038
2037	4.46%	327	(532)	5,231	2,242	(3,274)	4,925	4,699	4,812
2038	4.46%	327	(570)	5,044	2,429	(3,845)	4,699	4,474	4,587
2039	4.46%	327	(609)	4,857	2,616	(4,454)	4,474	4,248	4,361
2040	4.46%	327	(648)	4,671	2,802	(5,101)	4,248	4,023	4,135
2041	4.46%	327	(687)	4,484	2,989	(5,788)	4,023	3,797	3,910
2042	4.46%	327	(725)	4,297	3,176	(6,514)	3,797	3,572	3,684
2043	4.46%	327	(764)	4,110	3,363	(7,278)	3,572	3,346	3,459
2044	4.46%	327	(803)	3,923	3,550	(8,081)	3,346	3,120	3,233
2045	4.46%	327	(842)	3,736	3,736	(8,922)	3,120	2,895	3,008
2046	2.23%	164	(839)	3,550	3,923	(9,761)	2,895	2,711	2,803
2047	0.00%	0	(795)	3,363	4,110	(10,556)	2,711	2,568	2,639
2048	0.00%	0	(751)	3,176	4,297	(11,307)	2,568	2,425	2,497
2049	0.00%	0	(707)	2,989	4,484	(12,013)	2,425	2,283	2,354
2050	0.00%	0	(662)	2,802	4,671	(12,676)	2,283	2,140	2,211
2051	0.00%	0	(618)	2,616	4,857	(13,294)	2,140	1,997	2,069
2052	0.00%	0	(574)	2,429	5,044	(13,868)	1,997	1,855	1,926
2053	0.00%	0	(530)	2,242	5,231	(14,398)	1,855	1,712	1,783
2054	0.00%	0	(486)	2,055	5,418	(14,883)	1,712	1,569	1,641
2055	0.00%	0	(442)	1,868	5,605	(15,325)	1,569	1,427	1,498
2056	0.00%	0	(397)	1,681	5,792	(15,722)	1,427	1,284	1,355
2057	0.00%	0	(353)	1,495	5,978	(16,076)	1,284	1,141	1,213
2058	0.00%	0	(309)	1,308	6,165	(16,385)	1,141	999	1,070
2059	0.00%	0	(265)	1,121	6,352	(16,650)	999	856	927
2060	0.00%	0	(221)	934	6,539	(16,870)	856	713	785
2061	0.00%	0	(177)	747	6,726	(17,047)	713	571	642
2062	0.00%	0	(132)	560	6,912	(17,179)	571	428	499
2063	0.00%	0	(88)	374	7,099	(17,268)	428	285	357
2064	0.00%	0	(44)	187	7,286	(17,312)	285	143	214
2065	0.00%	0	0	(0)	7,473	(17,312)	143	(0)	71

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.93	0.93	0.75	0.75	0.14	0.14	0.00	32.07
2023	-3	103.15	1.26	6.15	7.08	4.90	5.64	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	25.46	14.46	20.10	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	58.43	25.41	45.52	4.73	8.51	233.05	689.05

11.96 58.43 45.52 8.51 689.05

IN-SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF. TAX	TAX BASIS
CONSTRUCTION CASH	6,839	6,839
EQUITY AFUDC	504	
DEBT AFUDC	130	494
CPI	130	
ITC Basis Reduction (Solar)	7,473	7,333
TOTAL	6,969	7,333

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	5,250	5,250	1.80	1.96	1.84	0.00	1.00	1.00
2021	11,000	11,000	1.83	2.18	1.89	0.00	1.00	1.00
2022	17,000	17,000	1.80	1.99	1.85	0.00	1.00	1.00
2023	23,750	23,750	1.95	2.18	2.00	0.00	1.00	1.00
2024	31,250	31,250	2.14	2.35	2.19	0.00	1.00	1.00
2025	31,250	31,250	2.32	2.54	2.37	0.00	1.00	1.00
2026	31,250	31,250	2.54	2.80	2.59	2.63	1.00	1.00
2027	31,250	31,250	2.67	2.97	2.73	2.76	1.00	1.00
2028	31,250	31,250	2.75	3.01	2.80	2.85	1.00	1.00
2029	31,250	31,250	3.00	3.27	3.07	3.09	1.00	1.00
2030	31,250	31,250	3.10	3.38	3.19	3.09	1.00	1.00
2031	31,250	31,250	3.04	3.31	3.10	2.97	1.00	1.00
2032	31,250	31,250	3.26	3.71	3.35	3.07	1.00	1.00
2033	31,250	31,250	3.14	3.42	3.19	3.34	1.00	1.00
2034	31,250	31,250	3.19	3.41	3.25	3.46	1.00	1.00
2035	31,250	31,250	3.22	3.48	3.26	3.47	1.00	1.00
2036	31,250	31,250	3.27	3.55	3.32	3.52	1.00	1.00
2037	31,250	31,250	3.33	3.59	3.37	3.62	1.00	1.00
2038	31,250	31,250	3.40	3.66	3.45	3.66	1.00	1.00
2039	31,250	31,250	3.47	3.73	3.51	3.75	1.00	1.00
2040	31,250	31,250	3.54	3.80	3.59	3.85	1.00	1.00
2041	31,250	31,250	3.61	3.88	3.66	3.88	1.00	1.00
2042	31,250	31,250	3.66	3.95	3.72	3.93	1.00	1.00
2043	31,250	31,250	3.71	4.01	3.77	3.99	1.00	1.00
2044	31,250	31,250	3.76	4.11	3.83	4.04	1.00	1.00
2045	31,250	31,250	3.80	4.05	3.86	4.08	1.00	1.00
2046	31,250	31,250	3.84	4.12	3.90	4.14	1.00	1.00
2047	31,250	31,250	3.89	4.16	3.95	4.20	1.00	1.00
2048	31,250	31,250	3.94	4.26	4.01	4.22	1.00	1.00
2049	31,250	31,250	3.98	4.27	4.05	4.28	1.00	1.00
2050	31,250	31,250	5.03	5.37	5.13	4.41	1.00	1.00
2051	31,250	31,250	5.13	5.47	5.23	4.55	1.00	1.00
2052	31,250	31,250	5.23	5.58	5.34	4.68	1.00	1.00
2053	31,250	31,250	5.34	5.69	5.44	4.83	1.00	1.00
2054	31,250	31,250	5.44	5.81	5.55	4.97	1.00	1.00
2055	31,250	31,250	5.55	5.92	5.66	5.12	1.00	1.00
2056	31,250	31,250	5.66	6.04	5.78	5.28	1.00	1.00
2057	31,250	31,250	5.78	6.16	5.89	5.44	1.00	1.00
2058	31,250	31,250	5.89	6.29	6.01	5.61	1.00	1.00
2059	31,250	31,250	6.01	6.41	6.13	5.78	1.00	1.00
2060	31,250	31,250	6.13	6.54	6.25	5.95	1.00	1.00
2061	31,250	31,250	6.25	6.67	6.38	6.13	1.00	1.00
2062	31,250	31,250	6.38	6.80	6.51	6.32	1.00	1.00
2063	31,250	31,250	6.50	6.94	6.64	6.51	1.00	1.00
2064	31,250	31,250	6.63	7.08	6.77	6.71	1.00	1.00
2065	31,250	31,250	6.77	7.22	6.90	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Low Income

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	1,096	305	7	1161	1233	1337
2027	1,068	313	12	2031	2139	1284
2028	1,056	321	12	2053	2114	1287
2029	1,006	329	12	2008	2181	1172
2030	976	337	10	1725	1771	1277
2031	947	345	9	1657	1583	1376
2032	920	354	9	1689	1629	1343
2033	892	363	13	2285	2434	1119
2034	866	372	14	2351	2546	1056
2035	839	381	14	2398	2549	1084
2036	812	391	15	2537	2692	1063
2037	786	401	16	2640	2837	1004
2038	759	411	16	2685	2863	1007
2039	732	421	17	2753	2957	966
2040	706	431	17	2821	3048	927
2041	679	442	18	2914	3142	911
2042	652	453	18	2943	3178	889
2043	626	463	19	3038	3305	842
2044	599	476	20	3089	3367	817
2045	572	488	20	3134	3412	803
2046	548	500	21	3159	3450	778
2047	523	513	22	3221	3535	748
2048	509	526	22	3242	3531	768
2049	491	539	23	3399	3715	738
2050	473	552	24	3501	3828	723
2051	455	566	25	3606	3944	708
2052	437	580	25	3714	4064	693
2053	419	595	26	3826	4187	677
2054	401	610	26	3940	4315	662
2055	383	625	27	4058	4446	647
2056	365	640	28	4180	4581	632
2057	347	656	28	4306	4720	617
2058	328	673	29	4435	4864	601
2059	314	690	30	4568	5012	589
2060	299	707	31	4705	5164	577
2061	284	725	31	4846	5322	565
2062	269	743	32	4991	5483	552
2063	255	761	33	5141	5650	540
2064	240	780	34	5295	5822	527
2065	225	800	35	5454	5999	514

NOM	24,135	20,381	839	131,479	142,611	34,423
NPV	6,333.44	3,223.03	120	19,611	20,948	8,339

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	36	0
2021	88	13	100	16	7	23	126	0
2022	184	23	206	34	12	46	194	0
2023	284	34	318	53	71	124	311	0
2024	398	46	445	74	25	99	450	0
2025	527	54	581	99	29	128	552	0
2026	510	55	566	96	30	126	610	0
2027	494	57	551	94	31	125	647	0
2028	479	58	537	91	32	123	654	0
2029	464	60	523	89	33	121	709	0
2030	449	61	510	86	33	120	735	0
2031	434	63	497	84	34	118	718	0
2032	420	64	484	82	35	117	816	0
2033	405	66	471	80	36	115	741	0
2034	391	68	459	77	37	114	736	0
2035	377	69	446	75	38	113	753	0
2036	362	71	433	73	39	112	770	0
2037	349	73	422	71	40	110	775	0
2038	336	75	411	68	41	109	792	0
2039	325	76	402	66	42	108	805	0
2040	315	78	394	64	43	107	823	0
2041	306	80	387	62	44	105	840	0
2042	298	82	380	60	45	104	855	0
2043	290	84	374	58	46	104	868	0
2044	281	87	368	56	47	103	893	0
2045	273	89	361	54	48	103	873	0
2046	264	91	355	53	49	102	892	0
2047	256	93	349	51	51	102	899	0
2048	247	95	343	50	52	102	923	0
2049	239	98	337	49	53	102	924	0
2050	231	100	331	47	55	102	1,157	0
2051	222	103	325	46	56	102	1,180	0
2052	214	105	319	45	57	102	1,204	0
2053	205	108	313	43	59	102	1,228	0
2054	197	111	308	42	60	102	1,253	0
2055	188	114	302	40	62	102	1,278	0
2056	180	116	296	39	63	102	1,303	0
2057	172	119	291	38	65	103	1,330	0
2058	164	122	286	36	67	103	1,356	0
2059	156	125	281	35	68	103	1,383	0
2060	149	128	277	34	70	103	1,411	0
2061	142	132	273	32	72	104	1,439	0
2062	135	135	270	31	73	104	1,468	0
2063	128	138	266	29	75	105	1,497	0
2064	121	142	263	28	77	105	1,527	0
2065	101	145	246	27	79	106	1,558	0
NOM	12,750	3,907,988	16,658	2,557	2,128	4,685	42,293	0
NPV	3,961	706	4,667	767	384	1,152	7,629	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential Low Income

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	0	0	0	0	0
2028	0	0	0	0	0
2029	0	0	0	0	0
2030	0	0	0	0	0
2031	0	0	0	0	0
2032	0	0	0	0	0
2033	0	0	0	0	0
2034	0	0	0	0	0
2035	0	0	0	0	0
2036	0	0	0	0	0
2037	0	0	0	0	0
2038	0	0	0	0	0
2039	0	0	0	0	0
2040	0	0	0	0	0
2041	0	0	0	0	0
2042	0	0	0	0	0
2043	0	0	0	0	0
2044	0	0	0	0	0
2045	0	0	0	0	0
2046	0	0	0	0	0
2047	0	0	0	0	0
2048	0	0	0	0	0
2049	0	0	0	0	0
2050	0	0	0	0	0
2051	0	0	0	0	0
2052	0	0	0	0	0
2053	0	0	0	0	0
2054	0	0	0	0	0
2055	0	0	0	0	0
2056	0	0	0	0	0
2057	0	0	0	0	0
2058	0	0	0	0	0
2059	0	0	0	0	0
2060	0	0	0	0	0
2061	0	0	0	0	0
2062	0	0	0	0	0
2063	0	0	0	0	0
2064	0	0	0	0	0
2065	0	0	0	0	0

NOM	12	14	4	2	0	2
NPV	2	2	1	0	0	1

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	655	0	0	655	0	0	36	0	36	(619)	(575)
2021	0	736	0	0	736	0	123	126	0	249	(486)	(994)
2022	0	787	0	0	787	0	253	194	0	447	(340)	(1,266)
2023	0	907	0	0	907	0	389	311	0	700	(207)	(1,420)
2024	0	1,033	0	0	1,033	0	545	450	0	994	(39)	(1,447)
2025	0	0	0	0	0	0	709	552	0	1,261	1,261	(640)
2026	0	0	0	0	0	1,337	692	610	0	2,639	2,639	927
2027	0	0	0	0	0	1,284	676	647	0	2,607	2,607	2,364
2028	0	0	0	0	0	1,287	660	654	0	2,601	2,601	3,694
2029	0	818	0	0	818	1,172	645	709	0	2,526	1,708	4,505
2030	0	919	0	0	919	1,277	630	735	0	2,642	1,723	5,265
2031	0	983	0	0	983	1,376	615	718	0	2,709	1,726	5,971
2032	0	1,133	0	0	1,133	1,343	601	816	0	2,760	1,627	6,589
2033	0	1,290	0	0	1,290	1,119	587	741	0	2,448	1,157	6,997
2034	0	0	0	0	0	1,056	573	736	0	2,365	2,365	7,771
2035	0	0	0	0	0	1,084	559	753	0	2,395	2,395	8,498
2036	0	0	0	0	0	1,063	545	770	0	2,379	2,379	9,169
2037	0	0	0	0	0	1,004	532	775	0	2,311	2,311	9,774
2038	0	1,022	0	0	1,022	966	520	792	0	2,320	1,298	10,089
2039	0	1,147	0	0	1,147	966	509	805	0	2,281	1,134	10,344
2040	0	1,227	0	0	1,227	927	500	823	0	2,250	1,023	10,558
2041	0	1,415	0	0	1,415	911	492	840	0	2,243	828	10,719
2042	0	1,612	0	0	1,612	889	485	855	0	2,229	618	10,831
2043	0	0	0	0	0	842	478	868	0	2,188	2,188	11,197
2044	0	0	0	0	0	817	471	893	0	2,181	2,181	11,536
2045	0	0	0	0	0	803	464	873	0	2,141	2,141	11,844
2046	0	0	0	0	0	778	457	892	0	2,128	2,128	12,129
2047	0	1,276	0	0	1,276	748	451	899	0	2,098	822	12,231
2048	0	1,433	0	0	1,433	768	445	923	0	2,136	703	12,312
2049	0	1,533	0	0	1,533	738	439	924	0	2,100	568	12,373
2050	0	1,767	0	0	1,767	723	433	924	0	2,313	546	12,427
2051	0	2,013	0	0	2,013	708	427	1,180	0	2,315	302	12,455
2052	0	0	0	0	0	693	421	1,204	0	2,318	2,318	12,654
2053	0	0	0	0	0	677	415	1,228	0	2,321	2,321	12,838
2054	0	0	0	0	0	662	410	1,253	0	2,325	2,325	13,010
2055	0	0	0	0	0	647	404	1,278	0	2,329	2,329	13,169
2056	0	1,594	0	0	1,594	632	399	1,303	0	2,334	740	13,216
2057	0	1,789	0	0	1,789	617	394	1,330	0	2,340	550	13,248
2058	0	1,914	0	0	1,914	601	389	1,356	0	2,346	432	13,272
2059	0	2,207	0	0	2,207	589	385	1,383	0	2,357	150	13,280
2060	0	2,514	0	0	2,514	577	381	1,411	0	2,368	(145)	13,273
2061	0	0	0	0	0	565	377	1,439	0	2,381	2,381	13,377
2062	0	0	0	0	0	552	374	1,468	0	2,394	2,394	13,475
2063	0	0	0	0	0	540	371	1,497	0	2,408	2,408	13,565
2064	0	0	0	0	0	527	368	1,527	0	2,423	2,423	13,650
2065	0	1,991	0	0	1,991	514	352	1,558	0	2,424	434	13,664

NOM	0	35,715	0	0	0	34,423.26	21,342	42,293	2	98,061	62,347	
NPV	0	8,123	0	0	0	8,339	5,818	7,629	1	21,787.37	13,664	

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(11) / Col(6)): 2.68

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	221	0	237	0	458	0	0	0	0	458	425
2021	686	0	259	0	946	0	0	0	0	946	1,240
2022	1,177	0	271	0	1,448	0	0	0	0	1,448	2,398
2023	1,886	0	305	0	2,190	0	0	0	0	2,190	4,024
2024	2,575	0	338	0	2,913	0	0	0	0	2,913	6,031
2025	2,956	0	0	0	2,956	0	0	0	0	2,956	7,922
2026	3,007	0	0	0	3,007	0	0	0	0	3,007	9,707
2027	3,056	0	0	0	3,056	0	0	0	0	3,056	11,391
2028	3,125	0	0	0	3,125	0	0	0	0	3,125	12,990
2029	3,184	0	237	0	3,421	0	0	0	0	3,421	14,614
2030	3,230	0	259	0	3,489	0	0	0	0	3,489	16,391
2031	3,271	0	271	0	3,542	0	0	0	0	3,542	18,071
2032	3,306	0	305	0	3,611	0	0	0	0	3,611	19,673
2033	3,336	0	338	0	3,674	0	0	0	0	3,674	21,199
2034	3,361	0	0	0	3,361	0	0	0	0	3,361	22,531
2035	3,381	0	0	0	3,381	0	0	0	0	3,381	23,791
2036	3,397	0	0	0	3,397	0	0	0	0	3,397	25,000
2037	3,410	0	0	0	3,410	0	0	0	0	3,410	26,144
2038	3,420	0	237	0	3,657	0	0	0	0	3,657	27,285
2039	3,426	0	259	0	3,685	0	0	0	0	3,685	28,368
2040	3,429	0	271	0	3,700	0	0	0	0	3,700	29,389
2041	3,429	0	305	0	3,734	0	0	0	0	3,734	30,359
2042	3,426	0	338	0	3,764	0	0	0	0	3,764	31,273
2043	3,420	0	0	0	3,420	0	0	0	0	3,420	32,090
2044	3,410	0	0	0	3,410	0	0	0	0	3,410	32,865
2045	3,400	0	0	0	3,400	0	0	0	0	3,400	33,597
2046	3,388	0	0	0	3,388	0	0	0	0	3,388	34,288
2047	3,374	0	237	0	3,611	0	0	0	0	3,611	34,969
2048	3,357	0	259	0	3,616	0	0	0	0	3,616	35,614
2049	3,337	0	271	0	3,608	0	0	0	0	3,608	36,223
2050	3,313	0	305	0	3,618	0	0	0	0	3,618	36,802
2051	3,285	0	338	0	3,623	0	0	0	0	3,623	37,351
2052	3,253	0	0	0	3,253	0	0	0	0	3,253	37,840
2053	3,216	0	0	0	3,216	0	0	0	0	3,216	38,302
2054	3,174	0	0	0	3,174	0	0	0	0	3,174	38,738
2055	3,127	0	0	0	3,127	0	0	0	0	3,127	39,150
2056	3,075	0	237	0	3,312	0	0	0	0	3,312	39,555
2057	3,018	0	259	0	3,277	0	0	0	0	3,277	39,939
2058	2,956	0	271	0	3,227	0	0	0	0	3,227	40,302
2059	2,890	0	305	0	3,195	0	0	0	0	3,195	40,646
2060	2,819	0	338	0	3,157	0	0	0	0	3,157	40,973
2061	2,744	0	0	0	2,744	0	0	0	0	2,744	41,267
2062	2,665	0	0	0	2,665	0	0	0	0	2,665	41,545
2063	2,582	0	0	0	2,582	0	0	0	0	2,582	41,808
2064	2,495	0	0	0	2,495	0	0	0	0	2,495	42,057
2065	2,404	0	237	0	2,641	0	0	0	0	2,641	42,300

NOM	214,647	0	7,288	0	221,935	0	0	0	0	0	221,935
NPV	40,081	0	2,219	0	42,300	0	0	0	0	0	42,300

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) )

2026  
7.73%  
Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential Low Income

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	655	0	168	0	1,060	36	0	0	0	36	(1,024)	(951)
2021	0	736	259	895	0	1,517	126	123	0	0	249	(1,267)	(2,043)
2022	0	787	271	895	0	1,952	194	253	0	0	447	(3,247)	(3,247)
2023	0	907	305	1,433	0	2,645	311	389	0	0	700	(1,945)	(4,691)
2024	0	1,033	338	1,957	0	3,329	450	545	0	0	994	(2,334)	(6,299)
2025	0	0	0	2,247	0	2,247	552	709	0	0	1,261	(985)	(6,929)
2026	0	0	0	2,285	0	2,285	1,947	692	0	0	2,639	354	(6,719)
2027	0	0	0	2,322	0	2,322	1,951	676	0	0	2,607	284	(6,562)
2028	0	0	0	2,375	0	2,375	1,942	660	0	0	2,601	226	(6,447)
2029	0	818	0	2,420	0	3,475	1,881	645	0	0	2,526	(949)	(6,897)
2030	0	919	259	2,866	0	4,044	2,012	630	0	0	2,642	(1,402)	(7,515)
2031	0	983	271	2,915	0	4,169	2,094	615	0	0	2,709	(1,460)	(8,113)
2032	0	1,133	305	2,974	0	4,412	2,159	601	0	0	2,760	(1,651)	(8,740)
2033	0	1,290	338	3,033	0	4,662	1,861	587	0	0	2,448	(2,214)	(9,520)
2034	0	0	0	3,094	0	3,094	1,793	573	0	0	2,365	(729)	(9,759)
2035	0	0	0	3,153	0	3,153	1,836	559	0	0	2,395	(758)	(9,989)
2036	0	0	0	3,260	0	3,260	1,834	545	0	0	2,379	(881)	(10,237)
2037	0	0	0	3,325	0	3,325	1,780	532	0	0	2,311	(1,013)	(10,502)
2038	0	1,022	237	3,388	0	4,647	1,800	520	0	0	2,320	(2,327)	(11,068)
2039	0	1,147	259	3,455	0	4,862	1,771	509	0	0	2,281	(2,581)	(11,649)
2040	0	1,227	271	3,502	0	4,999	1,750	500	0	0	2,250	(2,750)	(12,225)
2041	0	1,415	305	3,562	0	5,282	1,751	492	0	0	2,243	(3,039)	(12,815)
2042	0	1,612	338	3,598	0	5,548	1,744	485	0	0	2,229	(3,319)	(13,414)
2043	0	0	0	3,709	0	3,709	1,710	478	0	0	2,188	(3,521)	(13,668)
2044	0	0	0	3,792	0	3,792	1,710	471	0	0	2,181	(3,719)	(13,919)
2045	0	0	0	3,856	0	3,856	1,677	464	0	0	2,141	(3,915)	(14,166)
2046	0	0	0	3,923	0	3,923	1,670	457	0	0	2,128	(4,166)	(14,406)
2047	0	1,276	237	3,985	0	5,498	1,647	451	0	0	2,098	(4,400)	(14,829)
2048	0	1,433	259	4,053	0	5,745	1,691	445	0	0	2,136	(4,625)	(15,245)
2049	0	1,533	271	4,122	0	5,925	1,661	439	0	0	2,100	(4,825)	(15,654)
2050	0	1,767	305	4,193	0	6,265	1,880	433	0	0	2,313	(3,952)	(16,047)
2051	0	2,013	338	4,266	0	6,617	1,888	427	0	0	2,315	(4,302)	(16,444)
2052	0	0	0	4,340	0	4,340	1,897	421	0	0	2,318	(4,623)	(16,817)
2053	0	0	0	4,417	0	4,417	1,906	415	0	0	2,321	(4,946)	(17,184)
2054	0	0	0	4,496	0	4,496	1,915	410	0	0	2,325	(5,271)	(17,594)
2055	0	0	0	4,576	0	4,576	1,925	404	0	0	2,329	(5,600)	(17,998)
2056	0	1,594	237	4,659	0	6,490	1,935	399	0	0	2,334	(5,934)	(18,402)
2057	0	1,789	259	4,745	0	6,794	1,946	394	0	0	2,340	(6,274)	(18,806)
2058	0	1,914	271	4,832	0	7,016	1,957	389	0	0	2,346	(6,619)	(19,210)
2059	0	2,207	305	4,920	0	7,432	1,972	385	0	0	2,357	(6,968)	(19,614)
2060	0	2,514	338	5,010	0	7,862	1,988	381	0	0	2,368	(7,322)	(20,018)
2061	0	0	0	5,103	0	5,103	2,004	377	0	0	2,381	(7,681)	(20,422)
2062	0	0	0	5,198	0	5,198	2,020	374	0	0	2,394	(8,045)	(20,826)
2063	0	0	0	5,298	0	5,298	2,037	371	0	0	2,408	(8,414)	(21,230)
2064	0	0	0	5,396	0	5,396	2,054	368	0	0	2,423	(8,788)	(21,634)
2065	0	1,991	237	5,494	0	7,722	2,072	352	0	0	2,424	(9,162)	(22,038)
NOM	0	35,715	7,288	163,132	0	206,135	76,716.54	21,342.39	0.00	2.28	98,061	(108,073)	(19,016)
NPV	0	8,123	2,219	30,461	0	40,803	15,968	5,818	0	1	21,787	(21,787)	(19,016)

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) : 7.73 %  
0.53



INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.85 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	1,1048 kW
(3) kW LINE LOSS PERCENTAGE .....	6.14 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	1.06 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,5926542 \$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/kW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23.68513279 \$/kW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/kW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/kW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	0.01281834 CENTS\$/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	2.5 %**
(15) GENERATOR CAPACITY FACTOR .....	49 ** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	2.481 CENTS/kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	5.68 %**

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS\$/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/kW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	1.192
(2) TRC TEST .....	3.234
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	65	23	0	87	0	0	0	0	0	0
2021	98	65	0	162	0	0	0	0	0	0
2022	123	99	0	222	0	0	0	0	0	0
2023	134	125	0	259	0	0	0	0	0	0
2024	143	144	0	287	0	0	0	0	0	0
2025	99	152	0	251	0	0	0	0	0	0
2026	68	152	0	220	0	0	0	0	0	0
2027	44	152	0	196	0	0	0	0	0	0
2028	28	152	0	180	0	0	0	0	0	0
2029	16	152	0	168	0	0	0	0	0	0
2030	16	152	0	168	0	0	0	0	0	0
2031	17	152	0	169	0	0	0	0	0	0
2032	17	152	0	169	0	0	0	0	0	0
2033	16	152	0	168	0	0	0	0	0	0
2034	16	152	0	168	0	0	0	0	0	0
2035	16	152	0	168	0	0	0	0	0	0
2036	16	152	0	168	0	0	0	0	0	0
2037	17	152	0	169	0	0	0	0	0	0
2038	17	152	0	169	0	0	0	0	0	0
2039	17	152	0	169	0	0	0	0	0	0
2040	119	152	0	272	0	0	0	0	0	0
2041	171	152	0	323	0	0	0	0	0	0
2042	208	152	0	360	0	0	0	0	0	0
2043	224	152	0	376	0	0	0	0	0	0
2044	236	152	0	388	0	0	0	0	0	0
2045	163	152	0	315	0	0	0	0	0	0
2046	112	152	0	264	0	0	0	0	0	0
2047	72	152	0	224	0	0	0	0	0	0
2048	46	152	0	198	0	0	0	0	0	0
2049	26	152	0	178	0	0	0	0	0	0
2050	26	152	0	178	0	0	0	0	0	0
2051	27	152	0	180	0	0	0	0	0	0
2052	27	152	0	179	0	0	0	0	0	0
2053	27	152	0	179	1	0	0	0	0	0
2054	27	152	0	179	1	0	0	0	0	0
2055	27	152	0	179	1	0	0	0	0	0
2056	26	152	0	178	1	0	0	0	0	0
2057	27	152	0	180	1	0	0	0	0	0
2058	28	152	0	180	1	0	0	0	0	0
2059	28	152	0	180	1	0	0	0	0	0
2060	196	152	0	348	1	0	0	0	0	0
2061	280	152	0	432	1	0	0	0	0	0
2062	341	152	0	493	1	0	0	0	0	0
2063	367	152	0	519	1	0	0	0	0	0
2064	387	152	0	539	1	0	0	0	0	0
2065	266	152	0	419	1	0	0	0	0	0

NOM	4,467	6,691	0	11,158	19	0	0	0	0	0
NPV	959	1,639	0	2,599	4	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	5.04	0.00	11.11
2020	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.18	0.00	11.44
2022	2.50	2.50	2.50	0.00	0.00	2.00	5.14	0.00	11.40
2023	2.50	2.50	2.50	0.00	0.00	2.00	5.54	0.00	12.84
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.61	0.00	12.98
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.74	0.00	12.90
2026	2.50	2.50	2.50	2.48	49.26	2.00	5.92	0.00	12.93
2027	2.50	2.50	2.50	2.62	81.53	2.00	6.04	0.00	13.10
2028	2.50	2.50	2.50	2.74	78.00	2.00	6.19	0.00	13.39
2029	2.50	2.50	2.50	2.85	74.20	2.00	6.34	0.00	13.59
2030	2.50	2.50	2.50	3.01	60.41	2.00	6.49	0.00	13.69
2031	2.50	2.50	2.50	3.11	56.03	2.00	6.63	0.00	13.87
2032	2.50	2.50	2.50	3.19	55.78	2.00	6.81	0.00	14.06
2033	2.50	2.50	2.50	3.14	76.71	2.00	6.98	0.00	14.28
2034	2.50	2.50	2.50	3.20	77.40	2.00	7.14	0.00	14.53
2035	2.50	2.50	2.50	3.26	77.41	2.00	7.34	0.00	14.69
2036	2.50	2.50	2.50	3.31	80.60	2.00	7.71	0.00	14.99
2037	2.50	2.50	2.50	3.37	82.52	2.00	7.91	0.00	15.19
2038	2.50	2.50	2.50	3.43	82.40	2.00	8.10	0.00	15.43
2039	2.50	2.50	2.50	3.50	82.89	2.00	8.27	0.00	15.72
2040	2.50	2.50	2.50	3.56	83.40	2.00	8.44	0.00	15.84
2041	2.50	2.50	2.50	3.60	85.24	2.00	8.62	0.00	16.05
2042	2.50	2.50	2.50	3.64	85.14	2.00	8.71	0.00	16.21
2043	2.50	2.50	2.50	3.67	87.14	2.00	9.09	0.00	16.52
2044	2.50	2.50	2.50	3.71	87.66	2.00	9.38	0.00	16.74
2045	2.50	2.50	2.50	3.75	88.02	2.00	9.58	0.00	16.94
2046	2.50	2.50	2.50	3.79	87.75	2.00	9.82	0.00	17.12
2047	2.50	2.50	2.50	3.83	88.56	2.00	10.07	0.00	17.21
2048	2.50	2.50	2.50	3.87	88.14	2.00	10.29	0.00	17.43
2049	2.50	2.50	2.50	3.92	91.34	2.00	10.51	0.00	17.65
2050	2.50	2.50	2.50	4.03	91.34	2.00	10.74	0.00	17.87
2051	2.50	2.50	2.50	4.16	91.34	2.00	10.98	0.00	18.10
2052	2.50	2.50	2.50	4.28	91.34	2.00	11.22	0.00	18.33
2053	2.50	2.50	2.50	4.41	91.34	2.00	11.47	0.00	18.57
2054	2.50	2.50	2.50	4.54	91.34	2.00	11.72	0.00	18.82
2055	2.50	2.50	2.50	4.68	91.34	2.00	11.99	0.00	19.07
2056	2.50	2.50	2.50	4.82	91.34	2.00	12.26	0.00	19.33
2057	2.50	2.50	2.50	4.96	91.34	2.00	12.55	0.00	19.58
2058	2.50	2.50	2.50	5.11	91.34	2.00	12.84	0.00	19.83
2059	2.50	2.50	2.50	5.26	91.34	2.00	13.14	0.00	20.08
2060	2.50	2.50	2.50	5.42	91.34	2.00	13.45	0.00	20.33
2061	2.50	2.50	2.50	5.58	91.34	2.00	13.77	0.00	20.58
2062	2.50	2.50	2.50	5.75	91.34	2.00	14.10	0.00	20.84
2063	2.50	2.50	2.50	5.92	91.34	2.00	14.45	0.00	21.10
2064	2.50	2.50	2.50	6.10	91.34	2.00	14.79	0.00	21.36
2065	2.50	2.50	2.50	6.29	91.34	2.00	15.14	0.00	21.62

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	2,774	54	0	174	36	48	1	69	25	0	408	408	408	2,779
2027	2,683	52	0	169	68	47	1	69	(9)	0	397	368	776	2,709
2028	2,582	50	0	162	95	45	1	69	(38)	0	385	332	1,108	2,640
2029	2,484	48	0	156	119	44	1	69	(65)	0	374	299	1,407	2,570
2030	2,390	46	0	150	140	43	1	69	(88)	0	363	269	1,676	2,501
2031	2,299	44	0	145	158	42	1	69	(108)	0	352	243	1,919	2,431
2032	2,211	43	0	139	174	41	1	69	(125)	0	342	219	2,138	2,362
2033	2,125	41	0	134	187	39	1	69	(140)	0	332	197	2,335	2,292
2034	2,041	39	0	128	200	38	1	69	(154)	0	322	177	2,512	2,223
2035	1,957	38	0	123	212	37	1	69	(169)	0	312	160	2,672	2,153
2036	1,873	36	0	118	225	36	1	69	(183)	0	302	143	2,815	2,084
2037	1,789	35	0	113	237	35	1	69	(198)	0	292	129	2,944	2,015
2038	1,705	33	0	107	250	33	1	69	(212)	0	282	115	3,059	1,945
2039	1,622	31	0	102	263	32	1	69	(226)	0	272	103	3,163	1,876
2040	1,538	30	0	97	275	31	1	69	(241)	0	262	92	3,255	1,806
2041	1,454	28	0	91	288	30	1	69	(255)	0	252	83	3,338	1,737
2042	1,370	27	0	86	301	29	1	69	(270)	0	243	74	3,412	1,667
2043	1,286	25	0	81	313	27	1	69	(284)	0	233	66	3,477	1,598
2044	1,202	23	0	76	326	26	1	69	(299)	0	223	58	3,535	1,528
2045	1,118	22	0	70	338	25	1	69	(313)	0	213	52	3,587	1,459
2046	1,042	20	0	66	336	24	1	69	(312)	0	204	46	3,633	1,389
2047	981	19	0	62	318	23	1	69	(296)	0	196	41	3,674	1,320
2048	928	18	0	58	301	22	1	69	(279)	0	189	37	3,711	1,250
2049	875	17	0	55	283	20	1	69	(263)	0	183	33	3,744	1,181
2050	822	16	0	52	265	19	1	69	(246)	0	176	29	3,773	1,111
2051	769	15	0	48	248	18	1	69	(230)	0	169	26	3,799	1,042
2052	716	14	0	45	230	17	1	69	(213)	0	162	23	3,823	973
2053	663	13	0	42	213	16	1	69	(197)	0	156	21	3,844	903
2054	610	12	0	38	195	14	0	69	(181)	0	149	19	3,862	834
2055	557	11	0	35	178	13	0	69	(164)	0	142	16	3,879	764
2056	504	10	0	32	160	12	0	69	(148)	0	136	15	3,893	695
2057	451	9	0	28	143	11	0	69	(131)	0	129	13	3,906	625
2058	398	8	0	25	125	10	0	69	(115)	0	122	11	3,917	556
2059	345	7	0	22	107	10	0	69	(99)	0	117	10	3,927	486
2060	292	6	0	18	90	10	0	69	(82)	0	111	9	3,936	416
2061	239	5	0	15	72	10	0	69	(66)	0	106	8	3,944	346
2062	186	4	0	12	55	10	0	69	(49)	0	100	7	3,951	276
2063	133	3	0	8	37	10	0	69	(33)	0	95	6	3,957	206
2064	80	2	0	5	20	10	0	69	(16)	0	89	5	3,962	136
2065	27	1	0	2	2	10	0	69	0	0	84	5	3,967	66

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)

IN SERVICE YEAR	2,779
BOOK LIFE (YRS)	206
EFFEC. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.73%
PROPERTY INSURANCE	1.72%
	0.053%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42750

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9)*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2026		3.75%	102	102	69	69	69	25	187	0	0	0	25	59
2027		7.22%	299	299	69	69	139	(9)	187	0	0	0	(9)	50
2028		6.68%	481	481	69	69	208	(38)	187	0	0	0	(38)	12
2029		6.18%	650	650	69	69	278	(65)	187	0	0	0	(65)	(53)
2030		5.71%	805	805	69	69	347	(88)	187	0	0	0	(88)	(140)
2031		5.29%	949	949	69	69	417	(108)	187	0	0	0	(108)	(248)
2032		4.89%	1083	1083	69	69	486	(125)	187	0	0	0	(125)	(373)
2033		4.52%	1206	1206	69	69	556	(140)	187	0	0	0	(140)	(513)
2034		4.46%	1328	1328	69	69	625	(154)	187	0	0	0	(154)	(668)
2035		4.46%	1449	1449	69	69	695	(169)	187	0	0	0	(169)	(837)
2036		4.46%	1571	1571	69	69	764	(183)	187	0	0	0	(183)	(1,020)
2037		4.46%	1693	1693	69	69	834	(198)	187	0	0	0	(198)	(1,217)
2038		4.46%	1,814	1,814	69	69	903	(212)	187	0	0	0	(212)	(1,430)
2039		4.46%	1,936	1,936	69	69	973	(226)	187	0	0	0	(226)	(1,656)
2040		4.46%	2,058	2,058	69	69	1,042	(241)	187	0	0	0	(241)	(1,897)
2041		4.46%	2,179	2,179	69	69	1,111	(255)	187	0	0	0	(255)	(2,152)
2042		4.46%	2,301	2,301	69	69	1,181	(270)	187	0	0	0	(270)	(2,422)
2043		4.46%	2,422	2,422	69	69	1,250	(284)	187	0	0	0	(284)	(2,706)
2044		4.46%	2,544	2,544	69	69	1,320	(299)	187	0	0	0	(299)	(3,005)
2045		4.46%	2,666	2,666	69	69	1,389	(313)	187	0	0	0	(313)	(3,318)
2046		2.23%	2,727	2,727	69	69	1,459	(312)	187	0	0	0	(312)	(3,630)
2047		0.00%	2,727	2,727	69	69	1,528	(296)	187	0	0	0	(296)	(3,925)
2048		0.00%	2,727	2,727	69	69	1,598	(279)	187	0	0	0	(279)	(4,204)
2049		0.00%	2,727	2,727	69	69	1,667	(263)	187	0	0	0	(263)	(4,467)
2050		0.00%	2,727	2,727	69	69	1,737	(246)	187	0	0	0	(246)	(4,713)
2051		0.00%	2,727	2,727	69	69	1,806	(230)	187	0	0	0	(230)	(4,943)
2052		0.00%	2,727	2,727	69	69	1,876	(213)	187	0	0	0	(213)	(5,157)
2053		0.00%	2,727	2,727	69	69	1,945	(197)	187	0	0	0	(197)	(5,354)
2054		0.00%	2,727	2,727	69	69	2,015	(181)	187	0	0	0	(181)	(5,534)
2055		0.00%	2,727	2,727	69	69	2,084	(164)	187	0	0	0	(164)	(5,698)
2056		0.00%	2,727	2,727	69	69	2,153	(148)	187	0	0	0	(148)	(5,846)
2057		0.00%	2,727	2,727	69	69	2,223	(131)	187	0	0	0	(131)	(5,977)
2058		0.00%	2,727	2,727	69	69	2,292	(115)	187	0	0	0	(115)	(6,092)
2059		0.00%	2,727	2,727	69	69	2,362	(99)	187	0	0	0	(99)	(6,191)
2060		0.00%	2,727	2,727	69	69	2,431	(82)	187	0	0	0	(82)	(6,273)
2061		0.00%	2,727	2,727	69	69	2,501	(66)	187	0	0	0	(66)	(6,339)
2062		0.00%	2,727	2,727	69	69	2,570	(49)	187	0	0	0	(49)	(6,388)
2063		0.00%	2,727	2,727	69	69	2,640	(33)	187	0	0	0	(33)	(6,421)
2064		0.00%	2,727	2,727	69	69	2,709	(16)	187	0	0	0	(16)	(6,437)
2065		0.00%	2,727	2,727	69	69	2,779	0	187	0	0	0	0	(6,437)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	34
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	187
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$(000)	(4) DEFERRED TAX \$(000)	(5) END OF YEAR NET PLANT IN SERVICE \$(000)	(5a)* ACCUMULATED DEPRECIATION \$(000)	(5b)* ACCUMULATED DEF TAXES \$(000)	(6) BEGINNING YEAR RATE BASE \$(000)	(7) ENDING OF YEAR RATE BASE \$(000)	(8) MID-YEAR RATE BASE \$(000)
2026	3.75%	102	25	2,709	69	59	2,813	2,734	2,774
2027	7.22%	197	(9)	2,640	139	50	2,734	2,631	2,683
2028	6.68%	182	(38)	2,570	208	12	2,631	2,532	2,582
2029	6.18%	168	(65)	2,501	278	(53)	2,532	2,436	2,484
2030	5.71%	156	(88)	2,431	347	(140)	2,436	2,344	2,390
2031	5.29%	144	(108)	2,362	417	(248)	2,344	2,254	2,299
2032	4.89%	133	(125)	2,292	486	(373)	2,254	2,167	2,211
2033	4.52%	123	(140)	2,223	556	(513)	2,167	2,083	2,125
2034	4.46%	122	(154)	2,153	625	(668)	2,083	1,999	2,041
2035	4.46%	122	(169)	2,084	695	(837)	1,999	1,915	1,957
2036	4.46%	122	(183)	2,015	764	(1,020)	1,915	1,831	1,873
2037	4.46%	122	(198)	1,945	834	(1,217)	1,831	1,747	1,789
2038	4.46%	122	(212)	1,876	903	(1,430)	1,747	1,664	1,705
2039	4.46%	122	(226)	1,806	973	(1,656)	1,664	1,580	1,622
2040	4.46%	122	(241)	1,737	1,042	(1,897)	1,580	1,496	1,538
2041	4.46%	122	(255)	1,667	1,111	(2,152)	1,496	1,412	1,454
2042	4.46%	122	(270)	1,598	1,181	(2,422)	1,412	1,328	1,370
2043	4.46%	122	(284)	1,528	1,250	(2,706)	1,328	1,244	1,286
2044	4.46%	122	(299)	1,459	1,320	(3,005)	1,244	1,160	1,202
2045	4.46%	122	(313)	1,389	1,389	(3,318)	1,160	1,076	1,118
2046	2.23%	61	(312)	1,320	1,459	(3,630)	1,076	1,008	1,042
2047	0.00%	0	(296)	1,250	1,528	(3,925)	1,008	955	981
2048	0.00%	0	(279)	1,181	1,598	(4,204)	955	902	928
2049	0.00%	0	(263)	1,111	1,667	(4,467)	902	849	875
2050	0.00%	0	(246)	1,042	1,737	(4,713)	849	796	822
2051	0.00%	0	(230)	973	1,806	(4,943)	796	743	769
2052	0.00%	0	(213)	903	1,876	(5,157)	743	690	716
2053	0.00%	0	(197)	834	1,945	(5,354)	690	637	663
2054	0.00%	0	(181)	764	2,015	(5,534)	637	584	610
2055	0.00%	0	(164)	695	2,084	(5,698)	584	530	557
2056	0.00%	0	(148)	625	2,153	(5,846)	530	477	504
2057	0.00%	0	(131)	556	2,223	(5,977)	477	424	451
2058	0.00%	0	(115)	486	2,292	(6,092)	424	371	398
2059	0.00%	0	(99)	417	2,362	(6,191)	371	318	345
2060	0.00%	0	(82)	347	2,431	(6,273)	318	265	292
2061	0.00%	0	(66)	278	2,501	(6,339)	265	212	239
2062	0.00%	0	(49)	208	2,570	(6,388)	212	159	186
2063	0.00%	0	(33)	139	2,640	(6,421)	159	106	133
2064	0.00%	0	(16)	69	2,709	(6,437)	106	53	80
2065	0.00%	0	0	0	2,779	(6,437)	53	0	27

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE DEFERRED TAXES (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.19	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	1.45	6.15	4.90	0.92	1.06	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	18.38	14.46	2.71	3.78	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	32.97	25.41	4.73	8.51	8.51	233.05	689.05

11.96

58.43

45.52

8.51

689.05

IN SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	2,543	2,543
EQUITY AFUDC	187	
DEBT AFUDC	48	184
CPI		
ITC Basis Reduction (Solar)		
TOTAL	2,779	2,727

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	1,100	1,100	1.80	2.75	1.80	0.00	1.00	1.00
2021	2,000	2,000	1.83	5.59	1.83	0.00	1.00	1.00
2022	2,750	2,750	1.80	2.750	1.80	0.00	1.00	1.00
2023	3,250	3,250	1.80	2.750	1.80	0.00	1.00	1.00
2024	3,650	3,650	1.95	3.26	1.95	0.00	1.00	1.00
2025	3,650	3,650	2.14	2.69	2.14	0.00	1.00	1.00
2026	3,650	3,650	2.32	2.83	2.32	0.00	1.00	1.00
2027	3,650	3,650	2.54	3.05	2.54	2.63	1.00	1.00
2028	3,650	3,650	2.67	3.16	2.67	2.76	1.00	1.00
2029	3,650	3,650	2.75	3.26	2.75	2.85	1.00	1.00
2030	3,650	3,650	3.00	3.48	3.00	3.09	1.00	1.00
2031	3,650	3,650	3.10	3.23	3.10	3.09	1.00	1.00
2032	3,650	3,650	3.04	3.53	3.04	2.97	1.00	1.00
2033	3,650	3,650	3.26	3.78	3.26	3.07	1.00	1.00
2034	3,650	3,650	3.14	3.71	3.14	3.34	1.00	1.00
2035	3,650	3,650	3.19	3.74	3.19	3.46	1.00	1.00
2036	3,650	3,650	3.22	3.81	3.22	3.47	1.00	1.00
2037	3,650	3,650	3.27	3.78	3.27	3.52	1.00	1.00
2038	3,650	3,650	3.33	3.85	3.33	3.62	1.00	1.00
2039	3,650	3,650	3.40	3.96	3.40	3.66	1.00	1.00
2040	3,650	3,650	3.47	4.01	3.47	3.75	1.00	1.00
2041	3,650	3,650	3.54	4.06	3.54	3.85	1.00	1.00
2042	3,650	3,650	3.61	4.27	3.61	3.88	1.00	1.00
2043	3,650	3,650	3.66	4.19	3.66	3.93	1.00	1.00
2044	3,650	3,650	3.71	5.33	3.71	3.99	1.00	1.00
2045	3,650	3,650	3.76	5.53	3.76	4.04	1.00	1.00
2046	3,650	3,650	3.80	4.36	3.80	4.08	1.00	1.00
2047	3,650	3,650	3.84	4.44	3.84	4.14	1.00	1.00
2048	3,650	3,650	3.89	4.52	3.89	4.20	1.00	1.00
2049	3,650	3,650	3.94	4.54	3.94	4.22	1.00	1.00
2050	3,650	3,650	3.98	4.63	3.98	4.28	1.00	1.00
2051	3,650	3,650	5.03	6.71	5.03	4.41	1.00	1.00
2052	3,650	3,650	5.13	6.84	5.13	4.55	1.00	1.00
2053	3,650	3,650	5.23	6.98	5.23	4.68	1.00	1.00
2054	3,650	3,650	5.34	7.12	5.34	4.83	1.00	1.00
2055	3,650	3,650	5.44	7.26	5.44	4.97	1.00	1.00
2056	3,650	3,650	5.55	7.41	5.55	5.12	1.00	1.00
2057	3,650	3,650	5.66	7.55	5.66	5.28	1.00	1.00
2058	3,650	3,650	5.78	7.70	5.78	5.44	1.00	1.00
2059	3,650	3,650	5.89	7.86	5.89	5.61	1.00	1.00
2060	3,650	3,650	6.01	8.02	6.01	5.78	1.00	1.00
2061	3,650	3,650	6.13	8.18	6.13	5.95	1.00	1.00
2062	3,650	3,650	6.25	8.34	6.25	6.13	1.00	1.00
2063	3,650	3,650	6.38	8.51	6.38	6.32	1.00	1.00
2064	3,650	3,650	6.50	8.68	6.50	6.51	1.00	1.00
2065	3,650	3,650	6.63	8.85	6.63	6.71	1.00	1.00
2065	3,650	3,650	6.77	9.03	6.77	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.



page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	408	114	3	432	458	497
2027	397	116	4	755	795	478
2028	385	119	4	756	786	479
2029	374	122	4	746	811	436
2030	363	125	4	641	658	475
2031	352	128	3	616	589	511
2032	342	132	3	628	606	499
2033	332	135	5	849	905	416
2034	322	138	5	874	947	393
2035	312	142	5	892	948	403
2036	302	145	6	943	1001	395
2037	292	149	6	982	1055	373
2038	282	153	6	998	1065	375
2039	272	157	6	1024	1099	359
2040	262	160	6	1049	1133	345
2041	252	164	7	1083	1168	339
2042	243	169	7	1094	1182	331
2043	233	173	7	1129	1229	313
2044	223	177	7	1149	1252	304
2045	213	182	8	1165	1269	299
2046	204	186	8	1175	1283	289
2047	196	191	8	1198	1314	278
2048	189	195	8	1206	1313	286
2049	183	200	9	1264	1381	274
2050	176	205	9	1302	1423	269
2051	169	210	9	1341	1467	263
2052	162	216	9	1381	1511	258
2053	156	221	10	1422	1557	252
2054	149	227	10	1465	1604	246
2055	142	232	10	1509	1653	241
2056	136	238	10	1554	1703	235
2057	129	244	11	1601	1755	229
2058	122	250	11	1649	1809	224
2059	117	256	11	1698	1864	219
2060	111	263	11	1749	1920	215
2061	106	269	12	1802	1979	210
2062	100	276	12	1856	2039	205
2063	95	283	12	1912	2101	201
2064	89	290	13	1969	2165	196
2065	84	297	13	2028	2231	191

NOM	8,974	7,653	312	48,889	53,028	12,800
NPV	2,355.00	1,198.44	45	7,292	7,789	3,101

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0
2043	0	0	0	0	0	0	0	0
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
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
2065	0	0	0	0	0	0	0	0

NOM	0	0.00	0	0	0	0	0	0
NPV	0	0	0	0	0	0	9	2

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.



TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	65	0	0	65	0	0	0	0	0	(65)	(60)
2021	0	98	0	0	98	0	0	0	0	0	0	(97)
2022	0	123	0	0	123	0	0	0	0	0	(123)	(144)
2023	0	134	0	0	134	0	0	0	0	0	(134)	(242)
2024	0	143	0	0	143	0	0	0	0	0	(143)	(341)
2025	0	99	0	0	99	0	0	0	0	0	(99)	(440)
2026	0	68	0	0	68	497	0	0	0	497	429	(503)
2027	0	44	0	0	44	478	0	0	0	478	434	(248)
2028	0	28	0	0	28	479	0	0	0	479	451	(9)
2029	0	16	0	0	16	436	0	0	0	436	420	221
2030	0	16	0	0	16	475	0	0	0	475	420	421
2031	0	17	0	0	17	511	0	0	0	512	459	623
2032	0	17	0	0	17	499	0	0	0	500	495	826
2033	0	16	0	0	16	416	0	0	0	500	483	1,009
2034	0	16	0	0	16	393	0	0	0	416	400	1,150
2035	0	16	0	0	16	403	0	0	0	393	377	1,273
2036	0	16	0	0	16	395	0	0	0	403	387	1,391
2037	0	17	0	0	17	373	0	0	0	395	380	1,498
2038	0	17	0	0	17	375	0	0	0	374	357	1,591
2039	0	17	0	0	17	359	0	0	0	375	358	1,678
2040	0	119	0	0	119	345	0	0	0	345	343	1,755
2041	0	171	0	0	171	339	0	0	0	345	225	1,802
2042	0	208	0	0	208	331	0	0	0	339	168	1,835
2043	0	224	0	0	224	313	0	0	0	331	122	1,857
2044	0	236	0	0	236	304	0	0	0	313	89	1,872
2045	0	163	0	0	163	299	0	0	0	304	68	1,883
2046	0	112	0	0	112	289	0	0	0	299	136	1,902
2047	0	72	0	0	72	278	0	0	0	290	178	1,926
2048	0	46	0	0	46	286	0	0	0	278	206	1,952
2049	0	26	0	0	26	274	0	0	0	286	240	1,979
2050	0	26	0	0	26	269	0	0	0	240	248	2,006
2051	0	27	0	0	27	263	0	0	0	274	243	2,030
2052	0	27	0	0	27	258	0	0	0	269	236	2,052
2053	0	27	0	0	27	252	0	0	0	263	230	2,072
2054	0	27	0	0	27	246	0	0	0	258	225	2,089
2055	0	27	0	0	27	241	0	0	0	252	220	2,106
2056	0	26	0	0	26	235	0	0	0	247	220	2,120
2057	0	27	0	0	27	229	0	0	0	241	214	2,134
2058	0	28	0	0	28	224	0	0	0	235	209	2,134
2059	0	196	0	0	196	219	0	0	0	230	202	2,146
2060	0	280	0	0	280	215	0	0	0	224	196	2,156
2061	0	341	0	0	341	210	0	0	0	219	192	2,166
2062	0	367	0	0	367	205	0	0	0	215	19	2,167
2063	0	387	0	0	387	201	0	0	0	210	(70)	2,164
2064	0	266	0	0	266	196	0	0	0	206	(136)	2,158
2065	0	266	0	0	266	191	0	0	0	201	(166)	2,152
										196	(191)	2,145
										192	(75)	2,143

NOM	0	4,467	0	0	4,467	12,799.78	0	9	(1)	12,809	8,342
NPV	0	959	0	0	959	3,101	0	2	(0)	3,102.45	2,143

Discount Rate: 3.23 %  
Benefit/Cost Ratio (Col(11) / Col(6)):

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	23	0	23	0	0	0	0	23	21
2021	0	0	65	0	65	0	0	0	0	65	77
2022	0	0	99	0	99	0	0	0	0	99	156
2023	0	0	125	0	125	0	0	0	0	125	249
2024	0	0	144	0	144	0	0	0	0	144	349
2025	0	0	152	0	152	0	0	0	0	152	446
2026	0	0	152	0	152	0	0	0	0	152	537
2027	0	0	152	0	152	0	0	0	0	152	621
2028	0	0	152	0	152	0	0	0	0	152	699
2029	0	0	152	0	152	0	0	0	0	152	771
2030	0	0	152	0	152	0	0	0	0	152	838
2031	0	0	152	0	152	0	0	0	0	152	901
2032	0	0	152	0	152	0	0	0	0	152	958
2033	0	0	152	0	152	0	0	0	0	152	1012
2034	0	0	152	0	152	0	0	0	0	152	1062
2035	0	0	152	0	152	0	0	0	0	152	1108
2036	0	0	152	0	152	0	0	0	0	152	1151
2037	0	0	152	0	152	0	0	0	0	152	1191
2038	0	0	152	0	152	0	0	0	0	152	1228
2039	0	0	152	0	152	0	0	0	0	152	1263
2040	0	0	152	0	152	0	0	0	0	152	1295
2041	0	0	152	0	152	0	0	0	0	152	1324
2042	0	0	152	0	152	0	0	0	0	152	1352
2043	0	0	152	0	152	0	0	0	0	152	1377
2044	1	0	152	0	153	0	0	0	0	153	1401
2045	1	0	152	0	153	0	0	0	0	153	1423
2046	1	0	152	0	153	0	0	0	0	153	1443
2047	1	0	152	0	153	0	0	0	0	153	1462
2048	1	0	152	0	153	0	0	0	0	153	1480
2049	1	0	152	0	153	0	0	0	0	153	1496
2050	1	0	152	0	153	0	0	0	0	153	1512
2051	1	0	152	0	153	0	0	0	0	153	1526
2052	1	0	152	0	153	0	0	0	0	153	1539
2053	1	0	152	0	153	0	0	0	0	153	1551
2054	1	0	152	0	153	0	0	0	0	153	1562
2055	1	0	152	0	153	0	0	0	0	153	1573
2056	1	0	152	0	153	0	0	0	0	153	1582
2057	1	0	152	0	153	0	0	0	0	153	1591
2058	1	0	152	0	153	0	0	0	0	153	1600
2059	1	0	152	0	153	0	0	0	0	153	1607
2060	1	0	152	0	153	0	0	0	0	153	1615
2061	1	0	152	0	153	0	0	0	0	153	1621
2062	1	0	152	0	153	0	0	0	0	153	1628
2063	1	0	152	0	153	0	0	0	0	153	1633
2064	1	0	152	0	153	0	0	0	0	153	1639
2065	1	0	152	0	153	0	0	0	0	153	1644

NOM	23	0	6,691	0	6,714	0	0	0	0	0	6,714
NPV	4	0	1,639	0	1,644	0	0	0	0	0	1,644

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) ): Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	65	23	0	0	88	0	0	0	0	0	(87)	(81)
2021	0	98	162	0	0	162	0	0	0	0	0	(162)	(221)
2022	0	123	99	0	0	222	0	0	0	0	0	(222)	(398)
2023	0	134	125	0	0	259	0	0	0	0	0	(259)	(591)
2024	0	143	144	0	0	287	0	0	0	0	0	(287)	(788)
2025	0	99	152	0	0	251	0	0	0	0	0	(251)	(949)
2026	0	68	152	0	0	220	497	0	0	0	497	277	(784)
2027	0	44	152	0	0	196	478	0	0	0	478	281	(629)
2028	0	28	152	0	0	181	479	0	0	0	479	298	(477)
2029	0	16	152	0	0	168	436	0	0	0	436	268	(350)
2030	0	16	152	0	0	168	475	0	0	0	475	306	(215)
2031	0	17	152	0	0	169	512	0	0	0	512	342	(75)
2032	0	17	152	0	0	169	500	0	0	0	500	331	51
2033	0	16	152	0	0	169	416	0	0	0	416	248	138
2034	0	16	152	0	0	169	393	0	0	0	393	224	212
2035	0	16	152	0	0	169	403	0	0	0	403	234	283
2036	0	16	152	0	0	168	396	0	0	0	396	227	347
2037	0	17	152	0	0	169	374	0	0	0	374	204	400
2038	0	17	152	0	0	170	375	0	0	0	375	205	430
2039	0	17	152	0	0	169	359	0	0	0	359	190	493
2040	0	119	152	0	0	272	345	0	0	0	345	345	508
2041	0	171	152	0	0	323	339	0	0	0	339	16	511
2042	0	208	152	0	0	361	331	0	0	0	331	(30)	506
2043	0	224	152	0	0	376	313	0	0	0	313	(63)	495
2044	0	236	152	0	0	389	304	0	0	0	304	(85)	482
2045	0	163	152	0	0	315	299	0	0	0	299	(16)	480
2046	0	112	152	0	0	265	290	0	0	0	290	25	483
2047	0	72	152	0	0	225	278	0	0	0	278	53	490
2048	0	46	152	0	0	199	286	0	0	0	286	87	500
2049	0	26	152	0	0	179	274	0	0	0	274	96	510
2050	0	26	152	0	0	179	269	0	0	0	269	90	519
2051	0	27	152	0	0	180	263	0	0	0	263	83	527
2052	0	27	152	0	0	180	258	0	0	0	258	78	533
2053	0	27	152	1	0	179	252	0	0	0	252	73	539
2054	0	27	152	1	0	179	247	0	0	0	247	67	544
2055	0	27	152	1	0	179	241	0	0	0	241	62	548
2056	0	26	152	1	0	178	235	0	0	0	235	57	552
2057	0	27	152	1	0	180	230	0	0	0	230	49	555
2058	0	28	152	1	0	181	224	0	0	0	224	43	557
2059	0	28	152	1	0	180	219	0	0	0	219	39	559
2060	0	196	152	1	0	348	215	0	0	0	215	(134)	553
2061	0	280	152	1	0	433	210	0	0	0	210	(222)	543
2062	0	341	152	1	0	494	206	0	0	0	206	(288)	532
2063	0	367	152	1	0	520	201	0	0	0	201	(319)	520
2064	0	387	152	1	0	540	196	0	0	0	196	(344)	508
2065	0	266	152	1	0	419	192	0	0	0	192	(228)	500
NOM	0	4,467	6,091	19	0	11,177	12,809.23	0.00	0.00	(0.64)	12,809	1,632	
NPV	0	959	1,639	4	0	2,602	3,103	0	0	(0)	3,102	500	

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(12) / Col(7)) : 1.19

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(12) / Col(7)) : 1.19

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER .....	0.95 kW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	1,2296 kW
(3) KW LINE LOSS PERCENTAGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	11.56 kwh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 kwh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** \$/CUSTYR
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,5926542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23.68513279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	0.01281834 CENTS\$/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	2.5 %**
(15) GENERATOR CAPACITY FACTOR .....	49 ** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	2.481 CENTS\$/kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	5.68 %**

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS\$/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	1.357
(2) TRC TEST .....	49.261
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	90	418	0	508	2	0	0	0	0	0
2021	101	1,268	0	1,369	7	0	0	0	0	0
2022	112	1,491	0	1,603	12	0	0	0	0	0
2023	120	2,096	0	2,216	19	0	0	0	0	0
2024	130	2,697	0	2,828	24	0	0	0	0	0
2025	36	2,998	0	3,034	28	0	0	0	0	0
2026	37	2,998	0	3,035	29	0	0	0	0	0
2027	38	2,998	0	3,036	29	0	0	0	0	0
2028	39	2,998	0	3,037	30	0	0	0	0	0
2029	40	2,998	0	3,038	31	0	0	0	0	0
2030	41	2,998	0	3,039	32	0	0	0	0	0
2031	42	2,998	0	3,040	32	0	0	0	0	0
2032	43	2,998	0	3,041	33	0	0	0	0	0
2033	44	2,998	0	3,042	34	0	0	0	0	0
2034	45	2,998	0	3,043	35	0	0	0	0	0
2035	46	2,998	0	3,044	36	0	0	0	0	0
2036	48	2,998	0	3,045	38	0	0	0	0	0
2037	49	2,998	0	3,047	39	0	0	0	0	0
2038	50	2,998	0	3,048	40	0	0	0	0	0
2039	51	2,998	0	3,049	40	0	0	0	0	0
2040	52	2,998	0	3,050	41	0	0	0	0	0
2041	54	2,998	0	3,052	42	0	0	0	0	0
2042	55	2,998	0	3,053	43	0	0	0	0	0
2043	56	2,998	0	3,054	45	0	0	0	0	0
2044	58	2,998	0	3,056	46	0	0	0	0	0
2045	59	2,998	0	3,057	47	0	0	0	0	0
2046	61	2,998	0	3,059	48	0	0	0	0	0
2047	62	2,998	0	3,060	49	0	0	0	0	0
2048	64	2,998	0	3,062	51	0	0	0	0	0
2049	65	2,998	0	3,063	52	0	0	0	0	0
2050	67	2,998	0	3,065	53	0	0	0	0	0
2051	69	2,998	0	3,067	54	0	0	0	0	0
2052	71	2,998	0	3,068	55	0	0	0	0	0
2053	72	2,998	0	3,070	56	0	0	0	0	0
2054	74	2,998	0	3,072	58	0	0	0	0	0
2055	76	2,998	0	3,074	59	0	0	0	0	0
2056	78	2,998	0	3,076	60	0	0	0	0	0
2057	80	2,998	0	3,078	62	0	0	0	0	0
2058	82	2,998	0	3,080	63	0	0	0	0	0
2059	84	2,998	0	3,082	65	0	0	0	0	0
2060	311	2,998	0	3,309	66	0	0	0	0	0
2061	325	2,998	0	3,323	68	0	0	0	0	0
2062	336	2,998	0	3,334	70	0	0	0	0	0
2063	342	2,998	0	3,340	71	0	0	0	0	0
2064	350	2,998	0	3,348	73	0	0	0	0	0
2065	97	2,998	0	3,095	75	0	0	0	0	0

NOM	4,305	130,886	0	135,191	2,044	0	0	0	0	0
NPV	904	31,542	0	32,446	372	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS



INPUT DATA - PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: CDR

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	5.04	0.00	11.11
2020	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.18	0.00	11.44
2022	2.50	2.50	2.50	0.00	0.00	2.00	5.14	0.00	11.40
2023	2.50	2.50	2.50	0.00	0.00	2.00	5.54	0.00	12.84
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.61	0.00	12.98
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.74	0.00	12.90
2026	2.50	2.50	2.48	49.26	2.00	2.00	5.92	0.00	12.93
2027	2.50	2.50	2.62	81.53	2.00	2.00	6.04	0.00	13.10
2028	2.50	2.50	2.74	78.00	2.00	2.00	6.19	0.00	13.39
2029	2.50	2.50	2.85	74.20	2.00	2.00	6.34	0.00	13.59
2030	2.50	2.50	3.01	60.41	2.00	2.00	6.49	0.00	13.69
2031	2.50	2.50	3.11	56.03	2.00	2.00	6.63	0.00	13.87
2032	2.50	2.50	3.19	55.78	2.00	2.00	6.81	0.00	14.06
2033	2.50	2.50	3.14	76.71	2.00	2.00	6.98	0.00	14.28
2034	2.50	2.50	3.20	77.40	2.00	2.00	7.14	0.00	14.53
2035	2.50	2.50	3.26	77.41	2.00	2.00	7.34	0.00	14.69
2036	2.50	2.50	3.31	80.60	2.00	2.00	7.71	0.00	14.99
2037	2.50	2.50	3.37	82.52	2.00	2.00	7.91	0.00	15.19
2038	2.50	2.50	3.43	82.40	2.00	2.00	8.10	0.00	15.43
2039	2.50	2.50	3.50	82.89	2.00	2.00	8.27	0.00	15.72
2040	2.50	2.50	3.56	83.40	2.00	2.00	8.44	0.00	15.84
2041	2.50	2.50	3.60	85.24	2.00	2.00	8.62	0.00	16.05
2042	2.50	2.50	3.64	85.14	2.00	2.00	8.71	0.00	16.21
2043	2.50	2.50	3.67	87.14	2.00	2.00	9.09	0.00	16.52
2044	2.50	2.50	3.71	87.66	2.00	2.00	9.38	0.00	16.74
2045	2.50	2.50	3.75	88.02	2.00	2.00	9.58	0.00	16.94
2046	2.50	2.50	3.79	87.75	2.00	2.00	9.82	0.00	17.12
2047	2.50	2.50	3.83	88.56	2.00	2.00	10.07	0.00	17.21
2048	2.50	2.50	3.87	88.14	2.00	2.00	10.29	0.00	17.43
2049	2.50	2.50	3.92	91.34	2.00	2.00	10.51	0.00	17.65
2050	2.50	2.50	4.03	91.34	2.00	2.00	10.74	0.00	17.87
2051	2.50	2.50	4.16	91.34	2.00	2.00	10.98	0.00	18.10
2052	2.50	2.50	4.28	91.34	2.00	2.00	11.22	0.00	18.33
2053	2.50	2.50	4.41	91.34	2.00	2.00	11.47	0.00	18.57
2054	2.50	2.50	4.54	91.34	2.00	2.00	11.72	0.00	18.82
2055	2.50	2.50	4.68	91.34	2.00	2.00	11.99	0.00	19.07
2056	2.50	2.50	4.82	91.34	2.00	2.00	12.26	0.00	19.33
2057	2.50	2.50	4.96	91.34	2.00	2.00	12.55	0.00	19.58
2058	2.50	2.50	5.11	91.34	2.00	2.00	12.84	0.00	19.83
2059	2.50	2.50	5.26	91.34	2.00	2.00	13.14	0.00	20.08
2060	2.50	2.50	5.42	91.34	2.00	2.00	13.45	0.00	20.33
2061	2.50	2.50	5.58	91.34	2.00	2.00	13.77	0.00	20.58
2062	2.50	2.50	5.75	91.34	2.00	2.00	14.10	0.00	20.84
2063	2.50	2.50	5.92	91.34	2.00	2.00	14.45	0.00	21.10
2064	2.50	2.50	6.10	91.34	2.00	2.00	14.79	0.00	21.36
2065	2.50	2.50	6.29	91.34	2.00	2.00	15.14	0.00	21.62

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
<b>Column (2) used for:</b>	Customer Equipment
<b>Column (3) used for:</b>	Supply Costs
<b>Column (4) used for:</b>	Customer O&M Cost
<b>Column (5) used for:</b>	Generator Fixed O&M
<b>Column (6) used for:</b>	T&D Fixed O&M
<b>Column (7) used for:</b>	Generator Variable O&M
<b>Column (8) used for:</b>	Gen. Trans. & Dist Cost

PROGRAM NAME: CDR  
 CALCULATION OF GEN K-FACTOR  
 PROGRAM METHOD SELECTED REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	39,620	767	0	2,491	514	683	21	992	354	0	5,823	5,823	5,823	39,694
2027	38,321	742	0	2,410	964	666	21	992	(124)	0	5,670	5,263	11,086	38,702
2028	36,877	714	0	2,319	1,358	649	20	992	(548)	0	5,503	4,742	15,828	37,710
2029	35,485	687	0	2,231	1,704	632	19	992	(924)	0	5,342	4,272	20,100	36,717
2030	34,140	661	0	2,147	2,005	614	19	992	(1,253)	0	5,185	3,849	23,949	35,725
2031	32,840	636	0	2,065	2,264	597	18	992	(1,540)	0	5,032	3,468	27,416	34,733
2032	31,580	611	0	1,986	2,485	580	18	992	(1,788)	0	4,884	3,124	30,540	33,740
2033	30,358	587	0	1,909	2,671	563	17	992	(2,000)	0	4,740	2,814	33,354	32,748
2034	29,156	564	0	1,833	2,851	546	17	992	(2,206)	0	4,598	2,534	35,888	31,756
2035	27,958	541	0	1,758	3,031	529	16	992	(2,412)	0	4,456	2,280	38,168	30,763
2036	26,760	518	0	1,683	3,212	512	16	992	(2,618)	0	4,315	2,049	40,217	29,771
2037	25,562	495	0	1,607	3,392	495	15	992	(2,824)	0	4,173	1,839	42,056	28,778
2038	24,363	471	0	1,532	3,572	478	15	992	(3,030)	0	4,031	1,649	43,786	27,786
2039	23,165	448	0	1,457	3,753	461	14	992	(3,235)	0	3,889	1,477	45,182	26,794
2040	21,967	425	0	1,381	3,933	444	14	992	(3,441)	0	3,748	1,321	46,503	25,801
2041	20,769	402	0	1,306	4,113	427	13	992	(3,647)	0	3,606	1,180	47,683	24,809
2042	19,570	379	0	1,231	4,294	410	13	992	(3,853)	0	3,464	1,052	48,735	23,817
2043	18,372	356	0	1,155	4,474	393	12	992	(4,059)	0	3,323	937	49,672	22,824
2044	17,174	332	0	1,080	4,654	376	12	992	(4,265)	0	3,181	832	50,504	21,832
2045	15,976	309	0	1,005	4,834	358	11	992	(4,471)	0	3,039	738	51,242	20,840
2046	14,887	288	0	936	4,977	341	11	992	(4,656)	0	2,909	656	51,898	19,847
2047	14,020	271	0	882	4,544	324	10	992	(4,222)	0	2,801	586	52,484	18,855
2048	13,262	257	0	834	4,293	307	9	992	(3,987)	0	2,705	526	53,010	17,862
2049	12,504	242	0	786	4,042	290	9	992	(3,753)	0	2,609	470	53,480	16,870
2050	11,746	227	0	739	3,792	273	8	992	(3,518)	0	2,513	421	53,901	15,878
2051	10,988	213	0	691	3,541	256	8	992	(3,284)	0	2,417	376	54,277	14,885
2052	10,230	198	0	643	3,290	239	7	992	(3,049)	0	2,321	335	54,611	13,893
2053	9,473	183	0	596	3,040	222	7	992	(2,815)	0	2,225	298	54,909	12,901
2054	8,715	169	0	548	2,789	205	6	992	(2,580)	0	2,129	265	55,174	11,908
2055	7,957	154	0	500	2,538	188	6	992	(2,345)	0	2,033	234	55,408	10,916
2056	7,199	139	0	453	2,287	171	5	992	(2,111)	0	1,937	207	55,615	9,924
2057	6,441	125	0	405	2,037	154	5	992	(1,876)	0	1,841	183	55,798	8,931
2058	5,684	110	0	357	1,786	137	4	992	(1,642)	0	1,745	161	55,959	7,939
2059	4,926	95	0	310	1,535	137	4	992	(1,407)	0	1,666	143	56,102	7,939
2060	4,168	81	0	262	1,284	137	4	992	(1,173)	0	1,588	126	56,228	7,939
2061	3,410	66	0	214	1,034	137	4	992	(938)	0	1,509	111	56,339	7,939
2062	2,652	51	0	167	783	137	4	992	(704)	0	1,431	98	56,437	7,939
2063	1,895	37	0	119	532	137	4	992	(469)	0	1,352	86	56,523	7,939
2064	1,137	22	0	71	282	137	4	992	(235)	0	1,274	75	56,598	7,939
2065	379	7	0	24	31	137	4	992	0	0	1,195	65	56,664	7,939

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)

39,694
2026
40
25,345%
7.73%
1.72%
0.053%

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ

YEAR	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)	
2026			1,461	992	992	992	992	354	2,677	0	0	0	354	844	
2027	3.75%	2,812	4,272	992	1,985	992	1,985	(124)	0	0	0	0	(124)	721	
2028	7.22%	2,601	6,873	992	2,977	992	2,977	(548)	0	0	0	0	(548)	172	
2029	6.18%	2,406	9,279	992	3,969	992	3,969	(924)	0	0	0	0	(924)	(751)	
2030	5.71%	2,225	11,504	992	4,962	992	4,962	(1,253)	0	0	0	0	(1,253)	(2,004)	
2031	5.29%	2,059	13,563	992	5,954	992	5,954	(1,540)	0	0	0	0	(1,540)	(3,544)	
2032	4.89%	1,904	15,467	992	6,947	992	6,947	(1,788)	0	0	0	0	(1,788)	(5,333)	
2033	4.52%	1,761	17,228	992	7,939	992	7,939	(2,000)	0	0	0	0	(2,000)	(7,333)	
2034	4.46%	1,738	18,966	992	8,931	992	8,931	(2,206)	0	0	0	0	(2,206)	(9,539)	
2035	4.46%	1,738	20,704	992	9,924	992	9,924	(2,412)	0	0	0	0	(2,412)	(11,950)	
2036	4.46%	1,738	22,442	992	10,916	992	10,916	(2,618)	0	0	0	0	(2,618)	(14,568)	
2037	4.46%	1,738	24,179	992	11,908	992	11,908	(2,824)	0	0	0	0	(2,824)	(17,392)	
2038	4.46%	1,738	25,917	992	12,901	992	12,901	(3,030)	0	0	0	0	(3,030)	(20,421)	
2039	4.46%	1,738	27,655	992	13,893	992	13,893	(3,235)	0	0	0	0	(3,235)	(23,657)	
2040	4.46%	1,738	29,393	992	14,885	992	14,885	(3,441)	0	0	0	0	(3,441)	(27,098)	
2041	4.46%	1,738	31,130	992	15,878	992	15,878	(3,647)	0	0	0	0	(3,647)	(30,745)	
2042	4.46%	1,738	32,868	992	16,870	992	16,870	(3,853)	0	0	0	0	(3,853)	(34,598)	
2043	4.46%	1,738	34,606	992	17,862	992	17,862	(4,059)	0	0	0	0	(4,059)	(38,657)	
2044	4.46%	1,738	36,344	992	18,855	992	18,855	(4,265)	0	0	0	0	(4,265)	(42,922)	
2045	4.46%	1,738	38,081	992	19,847	992	19,847	(4,471)	0	0	0	0	(4,471)	(47,393)	
2046	2.23%	869	38,950	992	20,840	992	20,840	(4,456)	0	0	0	0	(4,456)	(51,849)	
2047	0.00%	0	38,950	992	21,832	992	21,832	(4,222)	0	0	0	0	(4,222)	(56,071)	
2048	0.00%	0	38,950	992	22,824	992	22,824	(3,987)	0	0	0	0	(3,987)	(60,058)	
2049	0.00%	0	38,950	992	23,817	992	23,817	(3,753)	0	0	0	0	(3,753)	(63,811)	
2050	0.00%	0	38,950	992	24,809	992	24,809	(3,518)	0	0	0	0	(3,518)	(67,329)	
2051	0.00%	0	38,950	992	25,801	992	25,801	(3,284)	0	0	0	0	(3,284)	(70,613)	
2052	0.00%	0	38,950	992	26,794	992	26,794	(3,049)	0	0	0	0	(3,049)	(73,662)	
2053	0.00%	0	38,950	992	27,786	992	27,786	(2,815)	0	0	0	0	(2,815)	(76,477)	
2054	0.00%	0	38,950	992	28,778	992	28,778	(2,580)	0	0	0	0	(2,580)	(79,057)	
2055	0.00%	0	38,950	992	29,771	992	29,771	(2,345)	0	0	0	0	(2,345)	(81,402)	
2056	0.00%	0	38,950	992	30,763	992	30,763	(2,111)	0	0	0	0	(2,111)	(83,513)	
2057	0.00%	0	38,950	992	31,756	992	31,756	(1,876)	0	0	0	0	(1,876)	(85,390)	
2058	0.00%	0	38,950	992	32,748	992	32,748	(1,642)	0	0	0	0	(1,642)	(87,031)	
2059	0.00%	0	38,950	992	33,740	992	33,740	(1,407)	0	0	0	0	(1,407)	(88,439)	
2060	0.00%	0	38,950	992	34,733	992	34,733	(1,173)	0	0	0	0	(1,173)	(89,612)	
2061	0.00%	0	38,950	992	35,725	992	35,725	(938)	0	0	0	0	(938)	(90,550)	
2062	0.00%	0	38,950	992	36,717	992	36,717	(704)	0	0	0	0	(704)	(91,253)	
2063	0.00%	0	38,950	992	37,710	992	37,710	(469)	0	0	0	0	(469)	(91,722)	
2064	0.00%	0	38,950	992	38,702	992	38,702	(235)	0	0	0	0	(235)	(91,957)	
2065	0.00%	0	38,950	992	39,694	992	39,694	0	0	0	0	0	0	0	(91,957)

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	490
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	2,677
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF. TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2026	3.75%	1,461	354	38,702	992	844	40,184	39,056	39,620
2027	7.22%	2,812	(124)	37,710	1,985	721	39,056	37,586	38,321
2028	6.68%	2,601	(548)	36,717	2,977	172	37,586	36,169	36,877
2029	6.18%	2,406	(924)	35,725	3,969	(751)	36,169	34,801	35,485
2030	5.71%	2,225	(1,253)	34,733	4,962	(2,004)	34,801	33,480	34,140
2031	5.29%	2,059	(1,540)	33,740	5,954	(3,544)	33,480	32,200	32,840
2032	4.89%	1,904	(1,788)	32,748	6,947	(5,333)	32,200	30,960	31,580
2033	4.52%	1,761	(2,000)	31,756	7,939	(7,333)	30,960	29,755	30,358
2034	4.46%	1,738	(2,206)	30,763	8,931	(9,539)	29,755	28,557	29,156
2035	4.46%	1,738	(2,412)	29,771	9,924	(11,950)	28,557	27,359	27,958
2036	4.46%	1,738	(2,618)	28,778	10,916	(14,568)	27,359	26,161	26,760
2037	4.46%	1,738	(2,824)	27,786	11,908	(17,392)	26,161	24,962	25,562
2038	4.46%	1,738	(3,030)	26,794	12,901	(20,421)	24,962	23,764	24,363
2039	4.46%	1,738	(3,235)	25,801	13,893	(23,657)	23,764	22,566	23,165
2040	4.46%	1,738	(3,441)	24,809	14,885	(27,098)	22,566	21,368	21,967
2041	4.46%	1,738	(3,647)	23,817	15,878	(30,745)	21,368	20,169	20,769
2042	4.46%	1,738	(3,853)	22,824	16,870	(34,598)	20,169	18,971	19,570
2043	4.46%	1,738	(4,059)	21,832	17,862	(38,657)	18,971	17,773	18,372
2044	4.46%	1,738	(4,265)	20,840	18,855	(42,922)	17,773	16,575	17,174
2045	4.46%	1,738	(4,471)	19,847	19,847	(47,393)	16,575	15,376	15,976
2046	2.23%	869	(4,456)	18,855	20,840	(51,849)	15,376	14,398	14,887
2047	0.00%	0	(4,222)	17,862	21,832	(56,071)	14,398	13,641	14,020
2048	0.00%	0	(3,987)	16,870	22,824	(60,058)	13,641	12,883	13,262
2049	0.00%	0	(3,753)	15,878	23,817	(63,811)	12,883	12,125	12,504
2050	0.00%	0	(3,518)	14,885	24,809	(67,329)	12,125	11,367	11,746
2051	0.00%	0	(3,284)	13,893	25,801	(70,613)	11,367	10,609	10,988
2052	0.00%	0	(3,049)	12,901	26,794	(73,662)	10,609	9,852	10,230
2053	0.00%	0	(2,815)	11,908	27,786	(76,477)	9,852	9,094	9,473
2054	0.00%	0	(2,580)	10,916	28,778	(79,057)	9,094	8,336	8,715
2055	0.00%	0	(2,345)	9,924	29,771	(81,402)	8,336	7,578	7,957
2056	0.00%	0	(2,111)	8,931	30,763	(83,513)	7,578	6,820	7,199
2057	0.00%	0	(1,876)	7,939	31,756	(85,390)	6,820	6,062	6,441
2058	0.00%	0	(1,642)	6,947	32,748	(87,031)	6,062	5,305	5,684
2059	0.00%	0	(1,407)	5,954	33,740	(88,439)	5,305	4,547	4,926
2060	0.00%	0	(1,173)	4,962	34,733	(89,612)	4,547	3,789	4,168
2061	0.00%	0	(938)	3,969	35,725	(90,550)	3,789	3,031	3,410
2062	0.00%	0	(704)	2,977	36,717	(91,253)	3,031	2,273	2,652
2063	0.00%	0	(469)	1,985	37,710	(91,722)	2,273	1,516	1,895
2064	0.00%	0	(235)	992	38,702	(91,957)	1,516	758	1,137
2065	0.00%	0	0	0	39,694	(91,957)	758	0	379

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.19	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	1.45	6.15	4.90	5.64	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	18.38	14.46	20.10	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	32.97	25.41	45.52	4.73	8.51	233.05	689.05

11.96

58.43

45.52

8.51

689.05

IN-SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF. TAX	TAX BASIS
CONSTRUCTION CASH	36,328	36,328
EQUITY AFUDC	2,677	
DEBT AFUDC	689	
CPI	689	2,622
ITC Basis Reduction (Solar)		
TOTAL	39,694	38,950

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	9,150	9,150	1.80	2.75	1.80	0.00	1.00	1.00
2021	18,550	18,550	1.83	5.59	1.83	0.00	1.00	1.00
2022	28,050	28,050	1.80	2.40	1.80	0.00	1.00	1.00
2023	37,450	37,450	1.95	3.26	1.95	0.00	1.00	1.00
2024	46,850	46,850	2.14	2.69	2.14	0.00	1.00	1.00
2025	46,850	46,850	2.32	2.83	2.32	0.00	1.00	1.00
2026	46,850	46,850	2.54	3.05	2.54	2.63	1.00	1.00
2027	46,850	46,850	2.67	3.16	2.67	2.76	1.00	1.00
2028	46,850	46,850	2.75	3.26	2.75	2.85	1.00	1.00
2029	46,850	46,850	3.00	3.48	3.00	3.09	1.00	1.00
2030	46,850	46,850	3.10	3.23	3.10	3.09	1.00	1.00
2031	46,850	46,850	3.04	3.53	3.04	2.97	1.00	1.00
2032	46,850	46,850	3.26	3.78	3.26	3.07	1.00	1.00
2033	46,850	46,850	3.14	3.71	3.14	3.34	1.00	1.00
2034	46,850	46,850	3.19	3.74	3.19	3.46	1.00	1.00
2035	46,850	46,850	3.22	3.81	3.22	3.47	1.00	1.00
2036	46,850	46,850	3.27	3.78	3.27	3.52	1.00	1.00
2037	46,850	46,850	3.33	3.85	3.33	3.62	1.00	1.00
2038	46,850	46,850	3.40	3.96	3.40	3.66	1.00	1.00
2039	46,850	46,850	3.47	4.01	3.47	3.75	1.00	1.00
2040	46,850	46,850	3.54	4.06	3.54	3.85	1.00	1.00
2041	46,850	46,850	3.61	4.27	3.61	3.88	1.00	1.00
2042	46,850	46,850	3.66	4.19	3.66	3.93	1.00	1.00
2043	46,850	46,850	3.71	5.33	3.71	3.99	1.00	1.00
2044	46,850	46,850	3.76	5.53	3.76	4.04	1.00	1.00
2045	46,850	46,850	3.80	4.36	3.80	4.08	1.00	1.00
2046	46,850	46,850	3.84	4.44	3.84	4.14	1.00	1.00
2047	46,850	46,850	3.89	4.52	3.89	4.20	1.00	1.00
2048	46,850	46,850	3.94	4.54	3.94	4.22	1.00	1.00
2049	46,850	46,850	3.98	4.63	3.98	4.28	1.00	1.00
2050	46,850	46,850	5.03	6.71	5.03	4.41	1.00	1.00
2051	46,850	46,850	5.13	6.84	5.13	4.55	1.00	1.00
2052	46,850	46,850	5.23	6.98	5.23	4.68	1.00	1.00
2053	46,850	46,850	5.34	7.12	5.34	4.83	1.00	1.00
2054	46,850	46,850	5.44	7.26	5.44	4.97	1.00	1.00
2055	46,850	46,850	5.55	7.41	5.55	5.12	1.00	1.00
2056	46,850	46,850	5.66	7.55	5.66	5.28	1.00	1.00
2057	46,850	46,850	5.78	7.70	5.78	5.44	1.00	1.00
2058	46,850	46,850	5.89	7.86	5.89	5.61	1.00	1.00
2059	46,850	46,850	6.01	8.02	6.01	5.78	1.00	1.00
2060	46,850	46,850	6.13	8.18	6.13	5.95	1.00	1.00
2061	46,850	46,850	6.25	8.34	6.25	6.13	1.00	1.00
2062	46,850	46,850	6.38	8.51	6.38	6.32	1.00	1.00
2063	46,850	46,850	6.50	8.68	6.50	6.51	1.00	1.00
2064	46,850	46,850	6.63	8.85	6.63	6.71	1.00	1.00
2065	46,850	46,850	6.77	9.03	6.77	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	5,823	1,622	38	6167	6548	7102
2027	5,670	1,662	64	10788	11362	6823
2028	5,503	1,704	63	10798	11280	6838
2029	5,342	1,747	61	10664	11585	6228
2030	5,185	1,790	51	9160	9405	6782
2031	5,032	1,835	49	8800	8409	7307
2032	4,884	1,881	50	8974	8653	7135
2033	4,740	1,928	70	12135	12928	5945
2034	4,598	1,976	73	12488	13523	5611
2035	4,456	2,026	74	12739	13539	5757
2036	4,315	2,076	79	13475	14297	5648
2037	4,173	2,128	83	14022	15072	5334
2038	4,031	2,181	85	14262	15210	5350
2039	3,889	2,236	88	14624	15705	5132
2040	3,748	2,292	91	14986	16192	4924
2041	3,606	2,349	95	15478	16688	4840
2042	3,464	2,408	97	15634	16881	4722
2043	3,323	2,468	102	16135	17553	4474
2044	3,181	2,530	105	16408	17884	4340
2045	3,039	2,593	108	16648	18122	4266
2046	2,909	2,658	111	16782	18325	4134
2047	2,801	2,724	114	17109	18776	3973
2048	2,705	2,792	117	17221	18754	4082
2049	2,609	2,862	124	18054	19732	3918
2050	2,513	2,934	127	18596	20331	3838
2051	2,417	3,007	130	19154	20949	3759
2052	2,321	3,082	133	19728	21586	3679
2053	2,225	3,159	137	20320	22243	3598
2054	2,129	3,238	140	20930	22919	3518
2055	2,033	3,319	144	21558	23616	3437
2056	1,937	3,402	147	22205	24334	3356
2057	1,841	3,487	151	22871	25074	3275
2058	1,745	3,574	155	23557	25837	3194
2059	1,666	3,664	159	24263	26623	3129
2060	1,588	3,755	163	24991	27432	3064
2061	1,509	3,849	167	25741	28267	2999
2062	1,431	3,945	171	26513	29127	2933
2063	1,352	4,044	175	27309	30013	2867
2064	1,274	4,145	179	28128	30926	2800
2065	1,195	4,249	184	28972	31867	2733

NOM	128,202	109,320	4,454	698,387	757,515	182,849
NPV	33,641.80	17,119.99	639	104,168	111,272	44,297

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	2	0
2021	0	0	0	0	0	0	10	0
2022	0	0	0	0	0	0	7	0
2023	0	0	0	0	0	0	13	0
2024	0	0	0	0	0	0	14	0
2025	0	0	0	0	0	0	16	0
2026	0	0	0	0	0	0	17	0
2027	0	0	0	0	0	0	18	0
2028	0	0	0	0	0	0	18	0
2029	0	0	0	0	0	0	19	0
2030	0	0	0	0	0	0	18	0
2031	0	0	0	0	0	0	20	0
2032	0	0	0	0	0	0	21	0
2033	0	0	0	0	0	0	21	0
2034	0	0	0	0	0	0	21	0
2035	0	0	0	0	0	0	21	0
2036	0	0	0	0	0	0	21	0
2037	0	0	0	0	0	0	21	0
2038	0	0	0	0	0	0	22	0
2039	0	0	0	0	0	0	22	0
2040	0	0	0	0	0	0	23	0
2041	0	0	0	0	0	0	24	0
2042	0	0	0	0	0	0	23	0
2043	0	0	0	0	0	0	31	0
2044	0	0	0	0	0	0	32	0
2045	0	0	0	0	0	0	24	0
2046	0	0	0	0	0	0	25	0
2047	0	0	0	0	0	0	25	0
2048	0	0	0	0	0	0	25	0
2049	0	0	0	0	0	0	26	0
2050	0	0	0	0	0	0	38	0
2051	0	0	0	0	0	0	39	0
2052	0	0	0	0	0	0	40	0
2053	0	0	0	0	0	0	41	0
2054	0	0	0	0	0	0	41	0
2055	0	0	0	0	0	0	42	0
2056	0	0	0	0	0	0	43	0
2057	0	0	0	0	0	0	44	0
2058	0	0	0	0	0	0	45	0
2059	0	0	0	0	0	0	46	0
2060	0	0	0	0	0	0	47	0
2061	0	0	0	0	0	0	47	0
2062	0	0	0	0	0	0	48	0
2063	0	0	0	0	0	0	49	0
2064	0	0	0	0	0	0	50	0
2065	0	0	0	0	0	0	51	0
NOM	0	0.00	0	0	0	0	1,311	0
NPV	0	0	0	0	0	0	231	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.



AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	1	1	0	0	(0)
2027	2	2	0	0	(0)
2028	2	2	0	0	(0)
2029	1	2	0	0	(0)
2030	1	1	0	0	(0)
2031	1	1	0	0	(0)
2032	1	1	0	0	(0)
2033	1	2	0	0	(0)
2034	1	2	0	0	(0)
2035	1	2	0	0	(0)
2036	2	2	0	0	(0)
2037	2	2	0	0	(0)
2038	2	2	0	0	(0)
2039	2	2	0	0	(0)
2040	2	2	0	0	(0)
2041	2	2	0	0	(0)
2042	2	2	0	0	(0)
2043	2	2	0	0	(0)
2044	2	2	0	0	(0)
2045	2	2	0	0	(0)
2046	2	2	0	0	(0)
2047	2	2	0	0	(0)
2048	2	2	0	0	(0)
2049	2	2	0	0	(0)
2050	2	2	0	0	(0)
2051	2	2	0	0	(0)
2052	2	2	0	0	(0)
2053	2	2	0	0	(0)
2054	2	2	0	0	(0)
2055	2	2	0	0	(0)
2056	2	2	0	0	(0)
2057	2	2	0	0	(0)
2058	2	2	0	0	(0)
2059	2	2	0	0	(0)
2060	2	2	0	0	(0)
2061	2	2	0	0	(0)
2062	2	2	0	0	(0)
2063	2	2	0	0	(0)
2064	2	2	0	0	(0)
2065	2	2	0	0	(0)

NOM	65	74	0	0	(9)
NPV	12	13	0	0	(2)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	90	0	0	0	0	0	2	0	2	(89)	(82)
2021	0	101	0	0	0	0	0	10	0	10	(91)	(161)
2022	0	112	0	0	0	0	0	7	0	7	(105)	(245)
2023	0	120	0	0	0	0	0	13	0	13	(107)	(324)
2024	0	130	0	0	0	0	0	14	0	14	(117)	(405)
2025	0	36	0	0	0	0	0	16	0	16	(20)	(418)
2026	0	37	0	0	0	7,102	0	17	0	7,119	7,082	3,787
2027	0	38	0	0	0	6,823	0	18	0	6,840	6,802	7,535
2028	0	39	0	0	0	6,838	0	18	0	6,856	6,817	11,023
2029	0	40	0	0	0	6,228	0	18	0	6,246	6,207	13,970
2030	0	41	0	0	0	6,782	0	18	0	6,799	6,758	16,949
2031	0	42	0	0	0	7,307	0	20	0	7,326	7,284	19,929
2032	0	43	0	0	0	7,135	0	21	0	7,156	7,113	22,630
2033	0	44	0	0	0	5,945	0	21	0	5,966	5,922	24,717
2034	0	45	0	0	0	5,611	0	21	0	5,632	5,587	26,545
2035	0	46	0	0	0	5,757	0	21	0	5,778	5,732	28,286
2036	0	48	0	0	0	5,648	0	21	0	5,668	5,621	29,870
2037	0	49	0	0	0	5,334	0	21	0	5,355	5,307	31,259
2038	0	50	0	0	0	5,350	0	22	0	5,372	5,322	32,552
2039	0	51	0	0	0	5,132	0	22	0	5,154	5,103	33,702
2040	0	52	0	0	0	4,924	0	23	0	4,947	4,894	34,727
2041	0	54	0	0	0	4,840	0	24	0	4,864	4,810	35,661
2042	0	55	0	0	0	4,722	0	23	0	4,746	4,690	36,507
2043	0	56	0	0	0	4,474	0	31	0	4,504	4,448	37,251
2044	0	58	0	0	0	4,340	0	32	0	4,372	4,314	37,921
2045	0	59	0	0	0	4,266	0	24	0	4,290	4,231	38,531
2046	0	61	0	0	0	4,134	0	25	0	4,159	4,098	39,080
2047	0	62	0	0	0	3,973	0	25	0	3,998	3,936	39,569
2048	0	64	0	0	0	4,082	0	25	0	4,107	4,043	40,035
2049	0	65	0	0	0	3,918	0	26	0	3,944	3,878	40,450
2050	0	67	0	0	0	3,838	0	38	0	3,876	3,809	40,829
2051	0	69	0	0	0	3,759	0	39	0	3,797	3,728	41,173
2052	0	71	0	0	0	3,679	0	40	0	3,718	3,648	41,485
2053	0	72	0	0	0	3,598	0	41	0	3,639	3,566	41,769
2054	0	74	0	0	0	3,518	0	41	0	3,559	3,485	42,026
2055	0	76	0	0	0	3,437	0	42	0	3,479	3,403	42,259
2056	0	78	0	0	0	3,356	0	43	0	3,399	3,321	42,470
2057	0	80	0	0	0	3,275	0	44	0	3,319	3,239	42,661
2058	0	82	0	0	0	3,194	0	45	0	3,238	3,156	42,834
2059	0	84	0	0	0	3,129	0	46	0	3,175	3,091	42,991
2060	0	311	0	0	0	3,064	0	47	0	3,111	2,800	43,123
2061	0	325	0	0	0	2,999	0	47	0	3,046	2,721	43,242
2062	0	336	0	0	0	2,933	0	48	0	2,982	2,646	43,350
2063	0	342	0	0	0	2,867	0	49	0	2,916	2,575	43,447
2064	0	350	0	0	0	2,800	0	50	0	2,850	2,500	43,534
2065	0	97	0	0	0	2,733	0	51	0	2,784	2,687	43,622

NOM	0	4,305	0	0	0	182,848.50	0	1,311	0	184,151	179,846	
NPV	0	904	0	0	0	44,297	0	231	0	44,525.66	43,622	

Discount Rate: 7.73 %  
Benefit/Cost Ratio (Col(11) / Col(6)):

49.26

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	3	0	418	0	421	0	0	0	0	421	390
2021	9	0	1,268	0	1,277	0	0	0	0	1,277	1,490
2022	15	0	1,491	0	1,506	0	0	0	0	1,506	2,695
2023	23	0	2,096	0	2,118	0	0	0	0	2,118	4,267
2024	29	0	2,697	0	2,727	0	0	0	0	2,727	6,146
2025	33	0	2,998	0	3,031	0	0	0	0	3,031	8,085
2026	35	0	2,998	0	3,033	0	0	0	0	3,033	9,886
2027	35	0	2,998	0	3,033	0	0	0	0	3,033	11,557
2028	36	0	2,998	0	3,034	0	0	0	0	3,034	13,109
2029	37	0	2,998	0	3,035	0	0	0	0	3,035	14,550
2030	38	0	2,998	0	3,036	0	0	0	0	3,036	15,889
2031	39	0	2,998	0	3,037	0	0	0	0	3,037	17,131
2032	40	0	2,998	0	3,038	0	0	0	0	3,038	18,285
2033	41	0	2,998	0	3,039	0	0	0	0	3,039	19,356
2034	42	0	2,998	0	3,040	0	0	0	0	3,040	20,350
2035	43	0	2,998	0	3,041	0	0	0	0	3,041	21,274
2036	45	0	2,998	0	3,043	0	0	0	0	3,043	22,132
2037	47	0	2,998	0	3,045	0	0	0	0	3,045	22,929
2038	48	0	2,998	0	3,046	0	0	0	0	3,046	23,668
2039	49	0	2,998	0	3,047	0	0	0	0	3,047	24,355
2040	50	0	2,998	0	3,048	0	0	0	0	3,048	24,993
2041	51	0	2,998	0	3,049	0	0	0	0	3,049	25,585
2042	51	0	2,998	0	3,049	0	0	0	0	3,049	26,135
2043	54	0	2,998	0	3,052	0	0	0	0	3,052	26,646
2044	55	0	2,998	0	3,053	0	0	0	0	3,053	27,120
2045	57	0	2,998	0	3,055	0	0	0	0	3,055	27,561
2046	58	0	2,998	0	3,056	0	0	0	0	3,056	27,970
2047	60	0	2,998	0	3,058	0	0	0	0	3,058	28,350
2048	61	0	2,998	0	3,059	0	0	0	0	3,059	28,703
2049	62	0	2,998	0	3,060	0	0	0	0	3,060	29,030
2050	64	0	2,998	0	3,062	0	0	0	0	3,062	29,334
2051	65	0	2,998	0	3,063	0	0	0	0	3,063	29,617
2052	67	0	2,998	0	3,065	0	0	0	0	3,065	29,879
2053	68	0	2,998	0	3,066	0	0	0	0	3,066	30,123
2054	70	0	2,998	0	3,068	0	0	0	0	3,068	30,349
2055	71	0	2,998	0	3,069	0	0	0	0	3,069	30,559
2056	73	0	2,998	0	3,071	0	0	0	0	3,071	30,755
2057	75	0	2,998	0	3,073	0	0	0	0	3,073	30,936
2058	76	0	2,998	0	3,074	0	0	0	0	3,074	31,104
2059	78	0	2,998	0	3,076	0	0	0	0	3,076	31,261
2060	80	0	2,998	0	3,078	0	0	0	0	3,078	31,406
2061	82	0	2,998	0	3,080	0	0	0	0	3,080	31,541
2062	84	0	2,998	0	3,082	0	0	0	0	3,082	31,666
2063	86	0	2,998	0	3,084	0	0	0	0	3,084	31,782
2064	88	0	2,998	0	3,086	0	0	0	0	3,086	31,890
2065	90	0	2,998	0	3,088	0	0	0	0	3,088	31,991

NOM	2,462	0	130,886	0	133,348	0	0	0	0	133,348	0
NPV	449	0	31,542	0	31,991	0	0	0	0	31,991	0

In Service of Gen Unit:  
Discount Rate: 7.73%  
Benefit/Cost Ratio ( Col(6) / Col(10) ): Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: CDR

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	90	0	418	0	510	2	0	0	0	2	(509)	(472)
2021	0	101	1,268	7	0	1,376	10	0	0	0	10	(1,366)	(1,649)
2022	0	1491	2,096	19	0	1,615	7	0	0	0	7	(1,608)	(2,936)
2023	0	120	2,096	12	0	2,235	13	0	0	0	13	(2,222)	(4,585)
2024	0	130	2,697	28	0	2,852	14	0	0	0	14	(2,838)	(6,541)
2025	0	36	2,998	24	0	3,062	16	0	0	0	16	(3,046)	(8,489)
2026	0	37	2,998	29	0	3,064	7,119	0	0	0	7,119	4,055	(6,082)
2027	0	38	2,998	29	0	3,065	6,840	0	0	0	6,840	3,775	(4,001)
2028	0	30	2,998	30	0	3,067	6,857	0	0	0	6,857	3,789	(2,063)
2029	0	40	2,998	31	0	3,069	6,247	0	0	0	6,247	3,178	(554)
2030	0	41	2,998	32	0	3,070	6,799	0	0	0	6,799	3,729	1,090
2031	0	42	2,998	32	0	3,072	7,326	0	0	0	7,326	4,254	2,830
2032	0	43	2,998	33	0	3,074	7,156	0	0	0	7,156	4,082	4,380
2033	0	44	2,998	34	0	3,076	5,966	0	0	0	5,966	2,890	5,399
2034	0	45	2,998	35	0	3,078	5,632	0	0	0	5,632	2,554	6,234
2035	0	46	2,998	36	0	3,080	5,778	0	0	0	5,778	2,698	7,054
2036	0	48	2,998	38	0	3,083	5,669	0	0	0	5,669	2,585	7,783
2037	0	49	2,998	39	0	3,085	5,355	0	0	0	5,355	2,270	8,376
2038	0	50	2,998	40	0	3,087	5,372	0	0	0	5,372	2,284	8,931
2039	0	51	2,998	40	0	3,090	5,155	0	0	0	5,154	2,065	9,397
2040	0	52	2,998	41	0	3,092	4,947	0	0	0	4,947	1,855	9,785
2041	0	54	2,998	42	0	3,094	4,864	0	0	0	4,864	1,770	10,129
2042	0	55	2,998	43	0	3,096	4,746	0	0	0	4,746	1,650	10,426
2043	0	56	2,998	45	0	3,099	4,505	0	0	0	4,504	1,405	10,662
2044	0	58	2,998	46	0	3,102	4,372	0	0	0	4,372	1,270	10,859
2045	0	59	2,998	47	0	3,104	4,291	0	0	0	4,290	1,186	11,030
2046	0	61	2,998	48	0	3,107	4,159	0	0	0	4,159	1,052	11,171
2047	0	62	2,998	49	0	3,110	3,998	0	0	0	3,998	888	11,281
2048	0	64	2,998	51	0	3,112	4,107	0	0	0	4,107	994	11,396
2049	0	65	2,998	52	0	3,115	3,944	0	0	0	3,944	828	11,485
2050	0	67	2,998	53	0	3,118	3,877	0	0	0	3,876	758	11,560
2051	0	69	2,998	54	0	3,121	3,798	0	0	0	3,797	676	11,622
2052	0	71	2,998	55	0	3,124	3,718	0	0	0	3,718	594	11,673
2053	0	72	2,998	56	0	3,127	3,639	0	0	0	3,639	512	11,714
2054	0	74	2,998	58	0	3,130	3,559	0	0	0	3,559	429	11,746
2055	0	76	2,998	59	0	3,133	3,480	0	0	0	3,479	346	11,769
2056	0	78	2,998	60	0	3,136	3,399	0	0	0	3,399	263	11,786
2057	0	80	2,998	62	0	3,140	3,319	0	0	0	3,319	179	11,797
2058	0	82	2,998	63	0	3,143	3,238	0	0	0	3,238	95	11,802
2059	0	84	2,998	65	0	3,147	3,175	0	0	0	3,175	28	11,803
2060	0	311	2,998	66	0	3,176	3,111	0	0	0	3,111	(265)	11,791
2061	0	325	2,998	68	0	3,391	3,047	0	0	0	3,046	(345)	11,776
2062	0	336	2,998	70	0	3,404	2,982	0	0	0	2,982	(422)	11,758
2063	0	342	2,998	71	0	3,411	2,917	0	0	0	2,916	(495)	11,740
2064	0	350	2,998	73	0	3,422	2,851	0	0	0	2,850	(571)	11,720
2065	0	97	2,998	75	0	3,170	2,784	0	0	0	2,784	(386)	11,707

NOM	0	4,305	130,886	2,044	0	137,234	184,150.87	0.00	0.00	(9.08)	184.151	46,916	
NPV	0	904	31,542	372	0	32,818	44,527	0	0	(2)	44,526	11,707	

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) : 7.73 %  
1.36

INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.95 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	1,2296 kW
(3) kW LINE LOSS PERCENTAGE .....	6.14 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	804.08 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,592,6542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	317,705,2925 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	78,230,14236 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23,68513279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	4,302,507237 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	3,045,109073 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	49 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	2,481 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	5.68 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.676
(2) TRC TEST .....	1.173
(3) PARTICIPANT TEST .....	1.82

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business HVAC

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	419	6,547	0	6,965	199	687	16,812	42	16,854	16,854
2021	433	6,609	0	7,042	603	2,064	17,394	44	17,438	17,438
2022	456	6,794	0	7,250	1,007	3,455	18,329	46	18,375	18,375
2023	489	7,103	0	7,592	1,536	5,526	19,641	50	19,691	19,691
2024	516	7,319	0	7,835	2,031	7,303	20,745	52	20,797	20,797
2025	0	0	0	0	2,326	8,128	0	0	0	0
2026	0	0	0	0	2,401	8,148	0	0	0	0
2027	0	0	0	0	2,453	8,253	0	0	0	0
2028	0	0	0	0	2,515	8,435	0	0	0	0
2029	0	0	0	0	2,577	8,560	0	0	0	0
2030	0	0	0	0	2,637	8,623	0	0	0	0
2031	0	0	0	0	2,697	8,733	0	0	0	0
2032	0	0	0	0	2,772	8,856	0	0	0	0
2033	0	0	0	0	2,839	8,998	0	0	0	0
2034	0	0	0	0	2,908	9,154	0	0	0	0
2035	0	0	0	0	2,991	9,257	0	0	0	0
2036	0	0	0	0	3,143	9,448	0	0	0	0
2037	0	0	0	0	3,229	9,576	0	0	0	0
2038	0	0	0	0	3,306	9,726	0	0	0	0
2039	0	0	0	0	3,377	9,908	0	0	0	0
2040	0	0	0	0	3,445	9,985	0	0	0	0
2041	0	0	0	0	3,523	10,119	0	0	0	0
2042	0	0	0	0	3,559	10,221	0	0	0	0
2043	0	0	0	0	3,717	10,417	0	0	0	0
2044	0	0	0	0	3,838	10,557	0	0	0	0
2045	0	0	0	0	3,922	10,685	0	0	0	0
2046	0	0	0	0	4,021	10,799	0	0	0	0
2047	0	0	0	0	4,127	10,856	0	0	0	0
2048	0	0	0	0	4,218	10,992	0	0	0	0
2049	0	0	0	0	4,311	11,131	0	0	0	0
2050	0	0	0	0	4,406	11,271	0	0	0	0
2051	0	0	0	0	4,504	11,416	0	0	0	0
2052	0	0	0	0	4,605	11,564	0	0	0	0
2053	945	6,547	0	7,492	4,709	11,714	37,975	96	38,071	38,071
2054	978	6,609	0	7,587	4,815	11,867	39,291	99	39,391	39,391
2055	1,031	6,794	0	7,825	4,925	12,024	41,403	104	41,507	41,507
2056	1,105	7,103	0	8,207	5,037	12,186	44,367	112	44,479	44,479
2057	1,167	7,319	0	8,486	5,158	12,342	46,860	118	46,978	46,978
2058	0	0	0	0	5,281	12,498	0	0	0	0
2059	0	0	0	0	5,407	12,654	0	0	0	0
2060	0	0	0	0	5,537	12,811	0	0	0	0
2061	0	0	0	0	5,671	12,970	0	0	0	0
2062	0	0	0	0	5,809	13,132	0	0	0	0
2063	0	0	0	0	5,955	13,297	0	0	0	0
2064	0	0	0	0	6,098	13,462	0	0	0	0
2065	0	0	0	0	6,243	13,627	0	0	0	0
NOM	7,539	68,742	0	76,281	170,390	457,434	302,818	764	303,582	303,582
NPV	2,202	29,877	0	32,079	31,019	94,580	88,463	223	88,686	88,686

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business HVAC

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	5.04	0.00	11.11
2020	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.18	0.00	11.44
2022	2.50	2.50	2.50	0.00	0.00	2.00	5.14	0.00	11.40
2023	2.50	2.50	2.50	0.00	0.00	2.00	5.54	0.00	12.84
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.61	0.00	12.98
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.74	0.00	12.90
2026	2.50	2.50	2.50	2.48	49.26	2.00	5.92	0.00	12.93
2027	2.50	2.50	2.50	2.62	81.53	2.00	6.04	0.00	13.10
2028	2.50	2.50	2.50	2.74	78.00	2.00	6.19	0.00	13.39
2029	2.50	2.50	2.50	2.85	74.20	2.00	6.34	0.00	13.59
2030	2.50	2.50	2.50	3.01	60.41	2.00	6.49	0.00	13.69
2031	2.50	2.50	2.50	3.11	56.03	2.00	6.63	0.00	13.87
2032	2.50	2.50	2.50	3.19	55.78	2.00	6.81	0.00	14.06
2033	2.50	2.50	2.50	3.14	76.71	2.00	6.98	0.00	14.28
2034	2.50	2.50	2.50	3.20	77.40	2.00	7.14	0.00	14.53
2035	2.50	2.50	2.50	3.26	77.41	2.00	7.34	0.00	14.69
2036	2.50	2.50	2.50	3.31	80.60	2.00	7.71	0.00	14.99
2037	2.50	2.50	2.50	3.37	82.52	2.00	7.91	0.00	15.19
2038	2.50	2.50	2.50	3.43	82.40	2.00	8.10	0.00	15.43
2039	2.50	2.50	2.50	3.50	82.89	2.00	8.27	0.00	15.72
2040	2.50	2.50	2.50	3.56	83.40	2.00	8.44	0.00	15.84
2041	2.50	2.50	2.50	3.60	85.24	2.00	8.62	0.00	16.05
2042	2.50	2.50	2.50	3.64	85.14	2.00	8.71	0.00	16.21
2043	2.50	2.50	2.50	3.67	87.14	2.00	9.09	0.00	16.52
2044	2.50	2.50	2.50	3.71	87.66	2.00	9.38	0.00	16.74
2045	2.50	2.50	2.50	3.75	88.02	2.00	9.58	0.00	16.94
2046	2.50	2.50	2.50	3.79	87.75	2.00	9.82	0.00	17.12
2047	2.50	2.50	2.50	3.83	88.56	2.00	10.07	0.00	17.21
2048	2.50	2.50	2.50	3.87	88.14	2.00	10.29	0.00	17.43
2049	2.50	2.50	2.50	3.92	91.34	2.00	10.51	0.00	17.65
2050	2.50	2.50	2.50	4.03	91.34	2.00	10.74	0.00	17.87
2051	2.50	2.50	2.50	4.16	91.34	2.00	10.98	0.00	18.10
2052	2.50	2.50	2.50	4.28	91.34	2.00	11.22	0.00	18.33
2053	2.50	2.50	2.50	4.41	91.34	2.00	11.47	0.00	18.57
2054	2.50	2.50	2.50	4.54	91.34	2.00	11.72	0.00	18.82
2055	2.50	2.50	2.50	4.68	91.34	2.00	11.99	0.00	19.07
2056	2.50	2.50	2.50	4.82	91.34	2.00	12.26	0.00	19.33
2057	2.50	2.50	2.50	4.96	91.34	2.00	12.55	0.00	19.58
2058	2.50	2.50	2.50	5.11	91.34	2.00	12.84	0.00	19.83
2059	2.50	2.50	2.50	5.26	91.34	2.00	13.14	0.00	20.08
2060	2.50	2.50	2.50	5.42	91.34	2.00	13.45	0.00	20.33
2061	2.50	2.50	2.50	5.58	91.34	2.00	13.77	0.00	20.58
2062	2.50	2.50	2.50	5.75	91.34	2.00	14.10	0.00	20.84
2063	2.50	2.50	2.50	5.92	91.34	2.00	14.45	0.00	21.10
2064	2.50	2.50	2.50	6.10	91.34	2.00	14.79	0.00	21.36
2065	2.50	2.50	2.50	6.29	91.34	2.00	15.14	0.00	21.62

**Legend:**

**Column (1) used for:** Utility Cost  
 Customer Equipment  
 Supply Costs

**Column (3) used for:** Customer O&M Cost  
 Generator Fixed O&M  
 T&D Fixed O&M  
 Generator Variable O&M  
 Gen. Trans. & Dist Cost

PROGRAM NAME: **Business HVAC**  
CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED: REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	47,062	911	0	2,959	611	811	25	1,179	421	0	6,916	6,916	6,916	47,150
2027	45,519	881	0	2,862	1,146	791	24	1,179	(147)	0	6,736	6,252	13,168	45,972
2028	43,804	848	0	2,754	1,613	770	24	1,179	(651)	0	6,532	5,632	18,801	44,793
2029	42,151	816	0	2,650	2,024	750	23	1,179	(1,097)	0	6,345	5,074	23,875	43,614
2030	40,553	785	0	2,550	2,381	730	22	1,179	(1,488)	0	6,158	4,572	28,447	42,435
2031	39,008	755	0	2,453	2,689	710	22	1,179	(1,829)	0	5,978	4,119	32,566	41,257
2032	37,512	726	0	2,359	2,952	689	21	1,179	(2,124)	0	5,802	3,711	36,277	40,078
2033	36,060	698	0	2,267	3,172	669	21	1,179	(2,376)	0	5,630	3,343	39,619	38,899
2034	34,653	670	0	2,178	3,387	649	20	1,179	(2,620)	0	5,462	3,010	42,629	37,720
2035	33,210	643	0	2,088	3,601	629	19	1,179	(2,865)	0	5,293	2,708	45,337	36,542
2036	31,786	615	0	1,999	3,815	608	19	1,179	(3,109)	0	5,125	2,433	47,771	35,363
2037	30,363	588	0	1,909	4,029	588	18	1,179	(3,354)	0	4,957	2,185	49,955	34,184
2038	28,940	560	0	1,820	4,243	568	17	1,179	(3,599)	0	4,788	1,959	51,914	33,005
2039	27,516	532	0	1,730	4,457	547	17	1,179	(3,843)	0	4,620	1,754	53,669	31,826
2040	26,093	505	0	1,641	4,672	527	16	1,179	(4,088)	0	4,452	1,569	55,238	30,648
2041	24,670	477	0	1,551	4,886	507	16	1,179	(4,332)	0	4,283	1,401	56,639	29,469
2042	23,246	450	0	1,462	5,100	487	15	1,179	(4,577)	0	4,115	1,250	57,889	28,290
2043	21,823	422	0	1,372	5,314	466	14	1,179	(4,821)	0	3,947	1,113	59,002	27,111
2044	20,400	395	0	1,283	5,528	446	14	1,179	(5,066)	0	3,778	989	59,990	25,933
2045	18,976	367	0	1,193	5,743	426	13	1,179	(5,310)	0	3,610	877	60,867	24,754
2046	17,684	342	0	1,112	5,958	405	12	1,179	(5,553)	0	3,455	779	61,646	23,575
2047	16,653	322	0	1,047	6,172	385	12	1,179	(5,797)	0	3,328	696	62,343	22,396
2048	15,753	305	0	990	6,386	365	11	1,179	(6,041)	0	3,214	624	62,967	21,218
2049	14,853	287	0	934	6,600	345	11	1,179	(6,285)	0	3,099	559	63,526	20,039
2050	13,952	270	0	877	6,814	324	10	1,179	(6,529)	0	2,985	500	64,026	18,860
2051	13,052	253	0	821	7,028	304	9	1,179	(6,773)	0	2,871	446	64,472	17,681
2052	12,152	235	0	764	7,242	284	9	1,179	(7,017)	0	2,757	398	64,869	16,503
2053	11,252	218	0	707	7,456	264	8	1,179	(7,261)	0	2,643	354	65,223	15,324
2054	10,352	200	0	651	7,670	243	7	1,179	(7,505)	0	2,529	314	65,537	14,145
2055	9,452	183	0	594	7,884	223	7	1,179	(7,749)	0	2,415	278	65,816	12,966
2056	8,551	165	0	538	8,098	203	6	1,179	(8,000)	0	2,300	246	66,062	11,788
2057	7,651	148	0	481	8,312	182	6	1,179	(8,251)	0	2,186	217	66,279	10,609
2058	6,751	131	0	424	8,526	162	5	1,179	(8,502)	0	2,072	191	66,470	9,430
2059	5,851	113	0	368	8,740	142	5	1,179	(8,753)	0	1,979	169	66,640	9,430
2060	4,951	96	0	311	8,954	122	5	1,179	(9,004)	0	1,886	150	66,790	9,430
2061	4,051	78	0	255	9,168	102	5	1,179	(9,255)	0	1,793	132	66,922	9,430
2062	3,151	61	0	198	9,382	82	5	1,179	(9,506)	0	1,699	116	67,038	9,430
2063	2,250	44	0	141	9,596	62	5	1,179	(9,757)	0	1,606	102	67,140	9,430
2064	1,350	26	0	85	9,810	42	5	1,179	(10,008)	0	1,513	89	67,229	9,430
2065	450	9	0	28	10,024	22	5	1,179	(10,259)	0	1,420	78	67,307	9,430

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)

IN SERVICE YEAR	47,150
BOOK LIFE (YRS)	2026
EFFEC. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.73%
PROPERTY INSURANCE	1.72%
	0.053%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42750



DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2026			1,735	1,735	1,179	1,179	1,179	1,179	421	3,180	0	0	0	421	1,003
2027	3.75%		3,340	5,075	1,179	2,338	1,179	2,338	(147)	3,180	0	0	0	(147)	856
2028	7.22%		3,089	8,164	1,179	3,536	1,179	3,536	(651)	3,180	0	0	0	(651)	205
2029	6.68%		2,858	11,022	1,179	4,715	1,179	4,715	(1,097)	3,180	0	0	0	(1,097)	892
2030	6.18%		2,643	13,665	1,179	5,894	1,179	5,894	(1,488)	3,180	0	0	0	(1,488)	(2,381)
2031	5.79%		2,445	16,111	1,179	7,073	1,179	7,073	(1,829)	3,180	0	0	0	(1,829)	(4,210)
2032	4.89%		2,262	18,372	1,179	8,251	1,179	8,251	(2,124)	3,180	0	0	0	(2,124)	(6,334)
2033	4.52%		2,092	20,464	1,179	9,430	1,179	9,430	(2,376)	3,180	0	0	0	(2,376)	(8,710)
2034	4.46%		2,064	22,529	1,179	10,609	1,179	10,609	(2,620)	3,180	0	0	0	(2,620)	(11,330)
2035	4.46%		2,064	24,593	1,179	11,788	1,179	11,788	(2,865)	3,180	0	0	0	(2,865)	(14,195)
2036	4.46%		2,064	26,657	1,179	12,966	1,179	12,966	(3,109)	3,180	0	0	0	(3,109)	(17,305)
2037	4.46%		2,064	28,721	1,179	14,145	1,179	14,145	(3,354)	3,180	0	0	0	(3,354)	(20,658)
2038	4.46%		2,064	30,785	1,179	15,324	1,179	15,324	(3,599)	3,180	0	0	0	(3,599)	(24,257)
2039	4.46%		2,064	32,849	1,179	16,503	1,179	16,503	(3,843)	3,180	0	0	0	(3,843)	(28,100)
2040	4.46%		2,064	34,914	1,179	17,681	1,179	17,681	(4,088)	3,180	0	0	0	(4,088)	(32,188)
2041	4.46%		2,064	36,978	1,179	18,860	1,179	18,860	(4,332)	3,180	0	0	0	(4,332)	(36,520)
2042	4.46%		2,064	39,042	1,179	20,039	1,179	20,039	(4,577)	3,180	0	0	0	(4,577)	(41,097)
2043	4.46%		2,064	41,106	1,179	21,218	1,179	21,218	(4,821)	3,180	0	0	0	(4,821)	(45,918)
2044	4.46%		2,064	43,170	1,179	22,396	1,179	22,396	(5,066)	3,180	0	0	0	(5,066)	(50,984)
2045	4.46%		2,064	45,234	1,179	23,575	1,179	23,575	(5,310)	3,180	0	0	0	(5,310)	(56,295)
2046	2.23%		1,032	46,267	1,179	24,754	1,179	24,754	(5,293)	3,180	0	0	0	(5,293)	(61,588)
2047	0.00%		0	46,267	1,179	25,933	1,179	25,933	(5,015)	3,180	0	0	0	(5,015)	(66,603)
2048	0.00%		0	46,267	1,179	27,111	1,179	27,111	(4,736)	3,180	0	0	0	(4,736)	(71,339)
2049	0.00%		0	46,267	1,179	28,290	1,179	28,290	(4,458)	3,180	0	0	0	(4,458)	(75,797)
2050	0.00%		0	46,267	1,179	29,469	1,179	29,469	(4,179)	3,180	0	0	0	(4,179)	(79,976)
2051	0.00%		0	46,267	1,179	30,648	1,179	30,648	(3,900)	3,180	0	0	0	(3,900)	(83,877)
2052	0.00%		0	46,267	1,179	31,826	1,179	31,826	(3,622)	3,180	0	0	0	(3,622)	(87,498)
2053	0.00%		0	46,267	1,179	33,005	1,179	33,005	(3,343)	3,180	0	0	0	(3,343)	(90,842)
2054	0.00%		0	46,267	1,179	34,184	1,179	34,184	(3,065)	3,180	0	0	0	(3,065)	(93,906)
2055	0.00%		0	46,267	1,179	35,363	1,179	35,363	(2,786)	3,180	0	0	0	(2,786)	(96,692)
2056	0.00%		0	46,267	1,179	36,542	1,179	36,542	(2,507)	3,180	0	0	0	(2,507)	(99,200)
2057	0.00%		0	46,267	1,179	37,720	1,179	37,720	(2,229)	3,180	0	0	0	(2,229)	(101,429)
2058	0.00%		0	46,267	1,179	38,899	1,179	38,899	(1,950)	3,180	0	0	0	(1,950)	(103,379)
2059	0.00%		0	46,267	1,179	40,078	1,179	40,078	(1,672)	3,180	0	0	0	(1,672)	(105,051)
2060	0.00%		0	46,267	1,179	41,257	1,179	41,257	(1,393)	3,180	0	0	0	(1,393)	(106,444)
2061	0.00%		0	46,267	1,179	42,435	1,179	42,435	(1,114)	3,180	0	0	0	(1,114)	(107,558)
2062	0.00%		0	46,267	1,179	43,614	1,179	43,614	(836)	3,180	0	0	0	(836)	(108,394)
2063	0.00%		0	46,267	1,179	44,793	1,179	44,793	(557)	3,180	0	0	0	(557)	(108,951)
2064	0.00%		0	46,267	1,179	45,972	1,179	45,972	(279)	3,180	0	0	0	(279)	(109,230)
2065	0.00%		0	46,267	1,179	47,150	1,179	47,150	0	3,180	0	0	0	0	(109,230)

SALVAGE/REMOVAL COST	0.00%
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	582
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	3,180
BOOK DEPRECIATION RATE - USEFUL LIFE	2.30%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$ (000)	(4) DEFERRED TAX \$ (000)	(5) END OF YEAR NET PLANT IN SERVICE \$ (000)	(5a)* ACCUMULATED DEPRECIATION \$ (000)	(5b)* ACCUMULATED DEF. TAXES \$ (000)	(6) BEGINNING YEAR RATE BASE \$ (000)	(7) ENDING OF YEAR RATE BASE \$ (000)	(8) MID-YEAR RATE BASE \$ (000)
2026	3.75%	1,735	421	45,972	1,179	1,003	47,732	46,393	47,002
2027	7.22%	3,340	(147)	44,793	2,338	856	46,393	44,646	45,519
2028	6.68%	3,089	(651)	43,614	3,536	205	44,646	42,963	43,804
2029	6.18%	2,858	(1,097)	42,435	4,715	(892)	42,963	42,151	42,151
2030	5.71%	2,643	(1,488)	41,257	5,894	(2,381)	41,338	39,768	40,553
2031	5.29%	2,445	(1,829)	40,078	7,073	(4,210)	39,768	38,248	39,008
2032	4.89%	2,262	(2,124)	38,899	8,251	(6,334)	38,248	36,775	37,512
2033	4.52%	2,092	(2,376)	37,720	9,430	(8,710)	36,775	35,345	36,060
2034	4.46%	2,064	(2,620)	36,542	10,609	(11,330)	35,345	33,921	34,633
2035	4.46%	2,064	(2,865)	35,363	11,788	(14,195)	33,921	32,498	33,210
2036	4.46%	2,064	(3,109)	34,184	12,966	(17,305)	32,498	31,075	31,786
2037	4.46%	2,064	(3,354)	33,005	14,145	(20,658)	31,075	29,651	30,363
2038	4.46%	2,064	(3,599)	31,826	15,324	(24,257)	29,651	28,228	28,940
2039	4.46%	2,064	(3,843)	30,648	16,503	(28,100)	28,228	26,805	27,516
2040	4.46%	2,064	(4,088)	29,469	17,681	(32,188)	26,805	25,381	26,093
2041	4.46%	2,064	(4,332)	28,290	18,860	(36,520)	25,381	23,958	24,670
2042	4.46%	2,064	(4,577)	27,111	20,039	(41,097)	23,958	22,535	23,246
2043	4.46%	2,064	(4,821)	25,933	21,218	(45,918)	22,535	21,111	21,823
2044	4.46%	2,064	(5,066)	24,754	22,396	(50,984)	21,111	19,688	20,400
2045	4.46%	2,064	(5,310)	23,575	23,575	(56,295)	19,688	18,265	18,976
2046	2.23%	1,032	(5,293)	22,396	24,754	(61,588)	18,265	17,103	17,684
2047	0.00%	0	(5,015)	21,218	25,933	(66,603)	17,103	16,203	16,653
2048	0.00%	0	(4,736)	20,039	27,111	(71,339)	16,203	15,303	15,753
2049	0.00%	0	(4,458)	18,860	28,290	(75,797)	15,303	14,402	14,853
2050	0.00%	0	(4,179)	17,681	29,469	(79,976)	14,402	13,502	13,952
2051	0.00%	0	(3,900)	16,503	30,648	(83,877)	13,502	12,602	13,052
2052	0.00%	0	(3,622)	15,324	31,826	(87,498)	12,602	11,702	12,152
2053	0.00%	0	(3,343)	14,145	33,005	(90,842)	11,702	10,802	11,252
2054	0.00%	0	(3,065)	12,966	34,184	(93,906)	10,802	9,902	10,352
2055	0.00%	0	(2,786)	11,788	35,363	(96,692)	9,902	9,002	9,452
2056	0.00%	0	(2,507)	10,609	36,542	(99,200)	9,002	8,101	8,551
2057	0.00%	0	(2,229)	9,430	37,720	(101,429)	8,101	7,201	7,651
2058	0.00%	0	(1,950)	8,251	38,899	(103,379)	7,201	6,301	6,751
2059	0.00%	0	(1,672)	7,073	40,078	(105,051)	6,301	5,401	5,851
2060	0.00%	0	(1,393)	5,894	41,257	(106,444)	5,401	4,501	4,951
2061	0.00%	0	(1,114)	4,715	42,435	(107,558)	4,501	3,601	4,051
2062	0.00%	0	(836)	3,536	43,614	(108,394)	3,601	2,700	3,151
2063	0.00%	0	(557)	2,358	44,793	(108,951)	2,700	1,800	2,250
2064	0.00%	0	(279)	1,179	45,972	(109,230)	1,800	900	1,350
2065	0.00%	0	0	0	47,150	(109,230)	900	0	450

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2019	-7	0.0%	1.000	0.00	0.00	0.00
2020	-6	2.5%	1.025	0.00	0.00	0.00
2021	-5	2.5%	1.051	0.00	0.00	0.00
2022	-4	2.5%	1.077	5.19	31.14	15.57
2023	-3	2.5%	1.104	23.10	142.17	102.22
2024	-2	2.5%	1.131	40.77	257.23	301.92
2025	-1	2.5%	1.160	30.94	200.08	530.58

100.00 630.61

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2019	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-4	15.57	0.19	0.19	0.93	0.75	0.14	0.14	0.14	32.07	32.07
2023	-3	103.15	1.26	1.45	6.15	4.90	5.64	0.92	1.06	148.32	180.39
2024	-2	309.00	3.76	5.21	18.38	14.46	20.10	2.71	3.78	275.61	456.00
2025	-1	556.04	6.75	11.96	32.97	25.41	45.52	4.73	8.51	233.05	689.05

11.96

58.43

45.52

8.51

689.05

IN SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	43,152	43,152
EQUITY AFUDC	3,180	
DEBT AFUDC	818	
CPI	818	3,115
ITC Basis Reduction (Solar)		
TOTAL	47,150	46,267

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	10,600	10,600	1.80	2.16	1.81	0.00	1.00	1.00
2021	21,300	21,300	1.83	2.68	1.85	0.00	1.00	1.00
2022	32,300	32,300	1.80	2.13	1.82	0.00	1.00	1.00
2023	43,800	43,800	1.95	2.42	1.97	0.00	1.00	1.00
2024	55,650	55,650	2.14	2.44	2.16	0.00	1.00	1.00
2025	55,650	55,650	2.32	2.63	2.34	0.00	1.00	1.00
2026	55,650	55,650	2.54	2.85	2.56	2.63	1.00	1.00
2027	55,650	55,650	2.67	3.20	2.70	2.76	1.00	1.00
2028	55,650	55,650	2.75	3.24	2.77	2.85	1.00	1.00
2029	55,650	55,650	3.00	3.53	3.03	3.09	1.00	1.00
2030	55,650	55,650	3.10	3.53	3.13	3.09	1.00	1.00
2031	55,650	55,650	3.04	3.58	3.07	2.97	1.00	1.00
2032	55,650	55,650	3.26	4.08	3.30	3.07	1.00	1.00
2033	55,650	55,650	3.14	3.55	3.17	3.34	1.00	1.00
2034	55,650	55,650	3.19	3.55	3.22	3.46	1.00	1.00
2035	55,650	55,650	3.22	3.61	3.24	3.47	1.00	1.00
2036	55,650	55,650	3.27	3.61	3.29	3.52	1.00	1.00
2037	55,650	55,650	3.33	3.68	3.35	3.62	1.00	1.00
2038	55,650	55,650	3.40	3.77	3.42	3.66	1.00	1.00
2039	55,650	55,650	3.47	3.81	3.49	3.75	1.00	1.00
2040	55,650	55,650	3.54	3.89	3.56	3.85	1.00	1.00
2041	55,650	55,650	3.61	4.01	3.62	3.88	1.00	1.00
2042	55,650	55,650	3.66	4.01	3.67	3.93	1.00	1.00
2043	55,650	55,650	3.71	4.21	3.73	3.99	1.00	1.00
2044	55,650	55,650	3.76	4.28	3.78	4.04	1.00	1.00
2045	55,650	55,650	3.80	4.16	3.81	4.08	1.00	1.00
2046	55,650	55,650	3.84	4.26	3.86	4.14	1.00	1.00
2047	55,650	55,650	3.89	4.28	3.90	4.20	1.00	1.00
2048	55,650	55,650	3.94	4.31	3.96	4.22	1.00	1.00
2049	55,650	55,650	3.98	4.41	4.00	4.28	1.00	1.00
2050	55,650	55,650	5.03	5.56	5.06	4.41	1.00	1.00
2051	55,650	55,650	5.13	5.67	5.17	4.55	1.00	1.00
2052	55,650	55,650	5.23	5.79	5.27	4.68	1.00	1.00
2053	55,650	55,650	5.34	5.90	5.37	4.83	1.00	1.00
2054	55,650	55,650	5.44	6.02	5.48	4.97	1.00	1.00
2055	55,650	55,650	5.55	6.14	5.59	5.12	1.00	1.00
2056	55,650	55,650	5.66	6.27	5.70	5.28	1.00	1.00
2057	55,650	55,650	5.78	6.39	5.82	5.44	1.00	1.00
2058	55,650	55,650	5.89	6.52	5.93	5.61	1.00	1.00
2059	55,650	55,650	6.01	6.65	6.05	5.78	1.00	1.00
2060	55,650	55,650	6.13	6.78	6.17	5.95	1.00	1.00
2061	55,650	55,650	6.25	6.92	6.30	6.13	1.00	1.00
2062	55,650	55,650	6.38	7.06	6.42	6.32	1.00	1.00
2063	55,650	55,650	6.50	7.20	6.55	6.51	1.00	1.00
2064	55,650	55,650	6.63	7.34	6.68	6.71	1.00	1.00
2065	55,650	55,650	6.77	7.49	6.82	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	6,916	1,927	45	7,326	7,778	8,436
2027	6,736	1,975	76	1,2814	13,497	8,104
2028	6,537	2,024	75	1,2826	13,339	8,123
2029	6,345	2,075	73	1,2667	13,762	7,398
2030	6,158	2,127	61	1,0881	11,171	8,055
2031	5,978	2,180	58	10,452	9,988	8,679
2032	5,802	2,234	59	10,659	10,279	8,476
2033	5,630	2,290	83	14,415	15,356	7,062
2034	5,462	2,347	86	14,833	16,063	6,665
2035	5,293	2,406	88	15,132	16,082	6,838
2036	5,125	2,466	94	16,006	16,983	6,709
2037	4,957	2,528	99	16,655	17,903	6,356
2038	4,788	2,591	101	16,941	18,067	6,355
2039	4,620	2,656	104	17,371	18,655	6,096
2040	4,452	2,722	108	17,801	19,233	5,849
2041	4,283	2,790	113	18,385	19,822	5,749
2042	4,115	2,860	115	18,871	20,052	5,609
2043	3,947	2,931	121	19,165	20,850	5,314
2044	3,778	3,005	125	19,490	21,243	5,156
2045	3,610	3,080	129	19,775	21,526	5,068
2046	3,455	3,157	131	19,935	21,767	4,911
2047	3,328	3,236	136	20,322	22,302	4,719
2048	3,214	3,317	139	20,456	22,277	4,848
2049	3,099	3,400	147	21,446	23,438	4,654
2050	2,985	3,485	151	22,089	24,150	4,559
2051	2,871	3,572	155	22,572	24,884	4,465
2052	2,757	3,661	159	23,434	25,641	4,370
2053	2,643	3,753	162	24,137	26,421	4,274
2054	2,529	3,846	167	24,861	27,224	4,179
2055	2,415	3,942	171	25,607	28,052	4,083
2056	2,300	4,041	175	26,375	28,905	3,987
2057	2,186	4,142	179	27,167	29,784	3,890
2058	2,072	4,246	184	27,982	30,690	3,793
2059	1,979	4,352	188	28,821	31,623	3,717
2060	1,886	4,461	193	29,686	32,585	3,640
2061	1,793	4,572	198	30,576	33,576	3,563
2062	1,699	4,686	203	31,493	34,598	3,484
2063	1,606	4,804	208	32,438	35,650	3,406
2064	1,513	4,924	213	33,411	36,735	3,326
2065	1,420	5,047	219	34,414	37,852	3,246

NOM	152,282	129,854	5,291	829,568	899,801	217,194
NPV	39,960.85	20,335.70	759	123,734	132,172	52,617

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	95	0
2021	626	89	715	116	48	165	365	0
2022	1,259	153	1,412	234	83	317	472	0
2023	1,910	222	2,132	356	121	477	772	0
2024	2,593	298	2,890	485	162	647	1,001	0
2025	3,300	341	3,641	619	186	805	1,205	0
2026	3,197	350	3,547	603	191	793	1,305	0
2027	3,096	359	3,455	587	195	782	1,481	0
2028	2,999	368	3,366	571	200	771	1,497	0
2029	2,904	377	3,281	556	205	761	1,629	0
2030	2,812	386	3,199	541	210	752	1,617	0
2031	2,721	396	3,117	527	216	743	1,651	0
2032	2,630	406	3,036	513	221	734	1,903	0
2033	2,539	416	2,955	499	227	725	1,628	0
2034	2,448	426	2,874	485	232	717	1,620	0
2035	2,357	437	2,794	471	238	709	1,652	0
2036	2,268	448	2,716	457	244	700	1,649	0
2037	2,183	459	2,643	442	250	692	1,677	0
2038	2,106	471	2,577	428	256	685	1,723	0
2039	2,037	482	2,519	414	263	677	1,739	0
2040	1,975	494	2,470	400	269	669	1,773	0
2041	1,920	507	2,427	386	276	662	1,833	0
2042	1,867	520	2,387	373	283	656	1,827	0
2043	1,814	533	2,347	361	290	651	1,928	0
2044	1,761	546	2,307	350	297	647	1,961	0
2045	1,708	559	2,268	340	305	643	1,893	0
2046	1,655	573	2,229	331	312	643	1,945	0
2047	1,602	588	2,190	323	320	643	1,949	0
2048	1,549	602	2,152	314	328	642	1,963	0
2049	1,496	618	2,114	305	336	641	2,013	0
2050	1,443	633	2,076	297	345	641	2,538	0
2051	1,390	649	2,039	288	353	641	2,589	0
2052	1,337	665	2,002	279	362	641	2,641	0
2053	1,284	682	1,966	271	371	642	2,694	0
2054	1,231	699	1,930	262	380	642	2,748	0
2055	1,178	716	1,894	253	390	643	2,803	0
2056	1,125	734	1,859	245	400	644	2,859	0
2057	1,074	752	1,826	236	410	646	2,916	0
2058	1,024	771	1,795	227	420	647	2,974	0
2059	976	791	1,767	219	430	649	3,033	0
2060	930	810	1,741	210	441	651	3,094	0
2061	887	831	1,717	201	452	653	3,156	0
2062	844	851	1,695	193	464	656	3,219	0
2063	801	873	1,673	184	475	659	3,283	0
2064	757	894	1,652	176	487	663	3,349	0
2065	618	917	1,535	169	499	668	3,416	0

NOM	80,236	24,091.12	104,927	16,096	13,444	29,541	93,079	0
NPV	25,124	-4,481	29,605	4,867	2,440	7,307	17,041	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	1	1	0	0	0
2027	2	2	0	0	0
2028	2	2	0	0	0
2029	2	2	0	0	0
2030	1	2	0	0	0
2031	1	1	0	0	0
2032	1	1	0	0	0
2033	2	2	0	0	0
2034	2	2	0	0	0
2035	2	2	0	0	0
2036	2	2	0	0	0
2037	2	2	0	0	0
2038	2	2	0	0	0
2039	2	2	0	0	0
2040	2	2	0	0	0
2041	2	2	0	0	0
2042	2	2	0	0	0
2043	2	2	0	0	0
2044	2	2	0	0	0
2045	2	2	0	0	0
2046	2	2	0	0	0
2047	2	2	0	0	0
2048	2	2	0	0	0
2049	2	2	0	0	0
2050	2	2	0	0	0
2051	2	2	0	0	0
2052	2	2	0	0	0
2053	2	2	0	0	0
2054	2	2	0	0	0
2055	2	2	0	0	0
2056	2	2	0	0	0
2057	2	2	0	0	0
2058	2	2	0	0	0
2059	2	2	0	0	0
2060	2	2	0	0	0
2061	2	2	0	0	0
2062	2	2	0	0	0
2063	2	2	0	0	0
2064	2	2	0	0	0
2065	2	2	0	0	0

NOM	77	88	9	0	(2)
NPV	14	16	2	0	0

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	419	16,854	0	17,273	0	0	95	0	95	(17,177)	(15,945)
2021	0	433	17,438	0	17,871	0	879	365	0	1,245	(16,627)	(30,270)
2022	0	456	18,375	0	18,832	0	1,729	472	0	2,202	(16,630)	(43,570)
2023	0	489	19,691	0	20,180	0	2,609	772	0	3,381	(16,799)	(56,041)
2024	0	516	20,797	0	21,314	0	3,537	1,001	0	4,539	(16,775)	(67,600)
2025	0	0	0	0	0	0	4,446	1,205	0	5,651	(63,986)	(63,986)
2026	0	0	0	0	0	8,436	4,340	1,305	0	14,081	(48,009)	(55,625)
2027	0	0	0	0	0	8,104	4,237	1,481	0	13,821	(38,211)	(48,009)
2028	0	0	0	0	0	8,123	4,138	1,497	0	13,757	(40,971)	(40,971)
2029	0	0	0	0	0	7,398	4,043	1,629	0	13,069	(33,069)	(33,069)
2030	0	0	0	0	0	8,055	3,950	1,617	0	13,623	(28,761)	(28,761)
2031	0	0	0	0	0	8,679	3,860	1,651	0	14,190	(22,956)	(22,956)
2032	0	0	0	0	0	8,476	3,770	1,903	0	14,149	(17,583)	(17,583)
2033	0	0	0	0	0	7,062	3,680	1,628	0	12,370	(13,223)	(13,223)
2034	0	0	0	0	0	6,665	3,591	1,620	0	11,877	(9,337)	(9,337)
2035	0	0	0	0	0	6,838	3,503	1,652	0	11,993	(5,695)	(5,695)
2036	0	0	0	0	0	6,709	3,416	1,649	0	11,773	(2,376)	(2,376)
2037	0	0	0	0	0	6,336	3,335	1,677	0	11,348	594	594
2038	0	0	0	0	0	6,355	3,262	1,723	0	11,339	3,348	3,348
2039	0	0	0	0	0	6,096	3,196	1,739	0	11,031	5,835	5,835
2040	0	0	0	0	0	5,849	3,139	1,773	0	10,761	8,087	8,087
2041	0	0	0	0	0	5,749	3,089	1,833	0	10,672	10,160	10,160
2042	0	0	0	0	0	5,609	3,043	1,827	0	10,479	12,050	12,050
2043	0	0	0	0	0	5,314	2,998	1,928	0	10,240	13,764	13,764
2044	0	0	0	0	0	5,156	2,954	1,961	0	10,071	15,328	15,328
2045	0	0	0	0	0	5,068	2,913	1,893	0	9,873	16,752	16,752
2046	0	0	0	0	0	4,911	2,872	1,945	0	9,728	18,054	18,054
2047	0	0	0	0	0	4,719	2,833	1,949	0	9,501	19,235	19,235
2048	0	0	0	0	0	4,848	2,794	1,963	0	9,605	20,342	20,342
2049	0	0	0	0	0	4,654	2,755	2,013	0	9,422	21,351	21,351
2050	0	0	0	0	0	4,559	2,717	2,538	0	9,815	22,326	22,326
2051	0	0	0	0	0	4,465	2,680	2,589	0	9,734	23,224	23,224
2052	0	0	0	0	0	4,370	2,644	2,641	0	9,654	24,051	24,051
2053	0	945	38,071	0	39,016	4,274	2,608	2,694	0	29,440	(29,440)	(29,440)
2054	0	978	39,391	0	40,369	4,179	2,572	2,748	0	9,499	(30,870)	(30,870)
2055	0	1,031	41,507	0	42,538	4,083	2,538	2,803	0	9,423	(33,115)	(33,115)
2056	0	1,105	44,479	0	45,584	3,987	2,504	2,859	0	9,349	(36,234)	(36,234)
2057	0	1,167	46,978	0	48,145	3,890	2,472	2,916	0	9,278	(38,867)	(38,867)
2058	0	0	0	0	0	3,793	2,442	2,974	0	9,210	(41,166)	(41,166)
2059	0	0	0	0	0	3,717	2,416	3,033	0	9,166	(43,541)	(43,541)
2060	0	0	0	0	0	3,640	2,392	3,094	0	9,126	(45,969)	(45,969)
2061	0	0	0	0	0	3,563	2,371	3,156	0	9,089	(48,437)	(48,437)
2062	0	0	0	0	0	3,484	2,351	3,219	0	9,055	(50,922)	(50,922)
2063	0	0	0	0	0	3,406	2,333	3,283	0	9,022	(53,437)	(53,437)
2064	0	0	0	0	0	3,326	2,315	3,349	0	8,991	(55,991)	(55,991)
2065	0	0	0	0	0	3,246	2,203	3,416	0	8,865	(58,581)	(58,581)

Discount Rate:  
Benefit/Cost Ratio (Col(11) / Col(6)) :

7.73 %  
1.17

NOM	0	7,539	303,582	0	311,121	217,193.58	134,468	93,079	(2)	444,738	133,616	133,616
NPV	0	2,202	88,686	0	90,888	52,617	36,912	17,041	0	106,569.21	15,681	15,681



PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	927	0	6,547	0	7,474	16,812	42	0	16,854	(9,380)	(9,380)
2021	2,791	0	6,609	0	9,399	17,394	44	0	17,438	(8,039)	(15,633)
2022	4,669	0	6,794	0	11,462	18,329	46	0	18,375	(6,913)	(21,162)
2023	7,376	0	7,103	0	14,479	19,641	50	0	19,691	(5,212)	(25,031)
2024	9,750	0	7,319	0	17,069	20,745	52	0	20,797	(3,729)	(27,601)
2025	10,931	0	0	0	10,931	0	0	0	0	10,931	(20,609)
2026	11,041	0	0	0	11,041	0	0	0	0	11,041	(14,054)
2027	11,209	0	0	0	11,209	0	0	0	0	11,209	(7,877)
2028	11,465	0	0	0	11,465	0	0	0	0	11,465	(2,012)
2029	11,665	0	0	0	11,665	0	0	0	0	11,665	3,527
2030	11,800	0	0	0	11,800	0	0	0	0	11,800	8,727
2031	11,983	0	0	0	11,983	0	0	0	0	11,983	13,630
2032	12,195	0	0	0	12,195	0	0	0	0	12,195	18,261
2033	12,419	0	0	0	12,419	0	0	0	0	12,419	22,638
2034	12,658	0	0	0	12,658	0	0	0	0	12,658	26,780
2035	12,861	0	0	0	12,861	0	0	0	0	12,861	30,686
2036	13,235	0	0	0	13,235	0	0	0	0	13,235	34,417
2037	13,466	0	0	0	13,466	0	0	0	0	13,466	37,941
2038	13,710	0	0	0	13,710	0	0	0	0	13,710	41,271
2039	13,977	0	0	0	13,977	0	0	0	0	13,977	44,422
2040	14,136	0	0	0	14,136	0	0	0	0	14,136	47,380
2041	14,363	0	0	0	14,363	0	0	0	0	14,363	50,170
2042	14,509	0	0	0	14,509	0	0	0	0	14,509	52,786
2043	14,896	0	0	0	14,896	0	0	0	0	14,896	55,280
2044	15,181	0	0	0	15,181	0	0	0	0	15,181	57,638
2045	15,411	0	0	0	15,411	0	0	0	0	15,411	59,860
2046	15,643	0	0	0	15,643	0	0	0	0	15,643	61,954
2047	15,828	0	0	0	15,828	0	0	0	0	15,828	63,921
2048	16,074	0	0	0	16,074	0	0	0	0	16,074	65,775
2049	16,325	0	0	0	16,325	0	0	0	0	16,325	67,522
2050	16,580	0	0	0	16,580	0	0	0	0	16,580	69,170
2051	16,842	0	0	0	16,842	0	0	0	0	16,842	70,723
2052	17,112	0	0	0	17,112	0	0	0	0	17,112	72,189
2053	17,387	0	6,547	0	23,934	37,975	96	0	38,071	(14,137)	71,065
2054	17,669	0	6,609	0	24,277	39,291	99	0	39,391	(15,113)	69,950
2055	17,957	0	6,794	0	24,751	41,403	104	0	41,507	(16,757)	68,803
2056	18,255	0	7,103	0	25,358	44,367	112	0	44,479	(19,121)	67,588
2057	18,556	0	7,319	0	25,875	46,860	118	0	46,978	(21,103)	66,342
2058	18,861	0	0	0	18,861	0	0	0	0	18,861	67,375
2059	19,169	0	0	0	19,169	0	0	0	0	19,169	68,350
2060	19,481	0	0	0	19,481	0	0	0	0	19,481	69,269
2061	19,802	0	0	0	19,802	0	0	0	0	19,802	70,136
2062	20,130	0	0	0	20,130	0	0	0	0	20,130	70,955
2063	20,471	0	0	0	20,471	0	0	0	0	20,471	71,727
2064	20,809	0	0	0	20,809	0	0	0	0	20,809	72,456
2065	21,149	0	0	0	21,149	0	0	0	0	21,149	73,143

NOM	662,723	0	68,742	0	731,465	302,818	764	0	303,582	427,883
NPV	131,953	0	29,877	0	161,829	88,463	223	0	88,686	73,143

In Service of Gen Unit:  
Discount Rate: 7.73 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 1.82

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business HVAC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	419	6,547	886	0	7,851	95	0	0	0	95	(7,756)	(7,200)
2021	0	433	6,609	2,667	0	9,709	365	879	0	0	1,245	(8,464)	(14,492)
2022	0	456	6,794	4,462	0	11,713	472	1,729	0	0	2,202	(9,511)	(22,099)
2023	0	489	7,103	7,062	0	14,654	772	2,609	0	0	3,381	(11,272)	(30,467)
2024	0	516	7,319	9,334	0	17,169	1,001	3,537	0	0	4,539	(12,630)	(49,170)
2025	0	0	0	10,454	0	10,454	1,205	4,446	0	0	5,651	(4,803)	(42,242)
2026	0	0	0	10,549	0	10,549	9,741	4,340	0	0	14,081	3,532	(40,145)
2027	0	0	0	10,707	0	10,707	9,585	4,237	0	0	13,821	3,115	(38,429)
2028	0	0	0	10,950	0	10,950	9,619	4,138	0	0	13,757	2,807	(36,995)
2029	0	0	0	11,137	0	11,137	9,027	4,043	0	0	13,069	1,932	(36,075)
2030	0	0	0	11,259	0	11,259	9,673	3,950	0	0	13,623	2,363	(35,034)
2031	0	0	0	11,431	0	11,431	10,330	3,860	0	0	14,190	2,759	(33,905)
2032	0	0	0	11,627	0	11,627	10,379	3,770	0	0	14,149	2,521	(32,947)
2033	0	0	0	11,838	0	11,838	8,690	3,680	0	0	12,370	533	(32,759)
2034	0	0	0	12,062	0	12,062	8,285	3,591	0	0	11,877	(186)	(32,820)
2035	0	0	0	12,248	0	12,248	8,490	3,503	0	0	11,993	(235)	(32,898)
2036	0	0	0	12,591	0	12,591	8,357	3,416	0	0	11,773	(818)	(33,128)
2037	0	0	0	12,805	0	12,805	8,013	3,335	0	0	11,348	(1,457)	(33,510)
2038	0	0	0	13,033	0	13,033	8,078	3,262	0	0	11,339	(1,693)	(33,921)
2039	0	0	0	13,285	0	13,285	7,835	3,196	0	0	11,031	(2,254)	(34,429)
2040	0	0	0	13,430	0	13,430	7,622	3,139	0	0	10,761	(2,669)	(34,988)
2041	0	0	0	13,641	0	13,641	7,583	3,089	0	0	10,672	(2,969)	(35,564)
2042	0	0	0	13,780	0	13,780	7,437	3,043	0	0	10,479	(3,301)	(36,160)
2043	0	0	0	14,135	0	14,135	7,242	2,998	0	0	10,240	(3,895)	(36,812)
2044	0	0	0	14,395	0	14,395	7,116	2,954	0	0	10,071	(4,325)	(37,483)
2045	0	0	0	14,607	0	14,607	6,961	2,913	0	0	9,873	(4,734)	(38,166)
2046	0	0	0	14,819	0	14,819	6,856	2,872	0	0	9,728	(5,091)	(38,848)
2047	0	0	0	14,983	0	14,983	6,668	2,833	0	0	9,501	(5,482)	(39,529)
2048	0	0	0	15,210	0	15,210	6,812	2,794	0	0	9,605	(5,605)	(40,175)
2049	0	0	0	15,442	0	15,442	6,667	2,755	0	0	9,422	(6,021)	(40,820)
2050	0	0	0	15,677	0	15,677	7,098	2,717	0	0	9,815	(5,862)	(41,402)
2051	0	0	0	15,920	0	15,920	7,054	2,680	0	0	9,734	(6,186)	(41,973)
2052	0	0	0	16,169	0	16,169	7,011	2,644	0	0	9,654	(6,515)	(42,530)
2053	945	0	6,547	16,423	0	23,915	6,968	2,608	0	0	9,576	(6,844)	(43,670)
2054	978	0	6,609	16,682	0	24,269	6,927	2,572	0	0	9,499	(7,173)	(44,760)
2055	1,031	0	6,794	16,948	0	24,773	6,886	2,538	0	0	9,423	(7,502)	(45,811)
2056	1,105	0	7,103	17,223	0	25,430	6,846	2,504	0	0	9,349	(7,831)	(46,833)
2057	1,167	0	7,319	17,500	0	25,985	6,806	2,472	0	0	9,278	(8,160)	(47,818)
2058	0	0	0	17,779	0	17,779	6,768	2,442	0	0	9,210	(8,569)	(48,288)
2059	0	0	0	18,061	0	18,061	6,750	2,416	0	0	9,166	(8,895)	(48,740)
2060	0	0	0	18,347	0	18,347	6,734	2,392	0	0	9,126	(9,222)	(49,175)
2061	0	0	0	18,641	0	18,641	6,719	2,371	0	0	9,089	(9,551)	(49,595)
2062	0	0	0	18,941	0	18,941	6,704	2,351	0	0	9,055	(9,886)	(49,995)
2063	0	0	0	19,252	0	19,252	6,689	2,333	0	0	9,022	(10,230)	(50,381)
2064	0	0	0	19,560	0	19,560	6,675	2,315	0	0	8,991	(10,570)	(50,751)
2065	0	0	0	19,870	0	19,870	6,662	2,203	0	0	8,865	(11,005)	(51,109)
NOM	0	7,539	68,742	627,824	0	704,105	310,272.27	134,467.86	0.00	(2.40)	444,738	(259,368)	
NPV	0	2,202	29,877	125,599	0	157,678	69,658	36,912	0	0	106,569	(51,109)	

7.73 %  
0.68

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)):

INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER KW REDUCTION AT METER .....	0.95 kW
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	1,2296 kW
(3) KW LINE LOSS PERCENTAGE .....	6.14 %
(4) GENERATOR KWH REDUCTION PER CUSTOMER .....	5,264.87 kWh
(5) KWH LINE LOSS PERCENTAGE .....	4.86 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER KWH INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	47 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42750
(5) K FACTOR FOR T & D .....	1.38554

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.73 %
(11) UTILITY AFUDC RATE .....	5.97 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2019
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2026
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2021-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	557,592,6542 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	317,705,2925 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	78,230,14236 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	23,68513279 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	4,302,507237 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	3,045,109073 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	49 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	2,481 CENTS/KWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	5.68 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/KWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.619
(2) TRC TEST .....	2.155
(3) PARTICIPANT TEST .....	4.04

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business Lighting

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2019	0	0	0	0	0	0	0	0	0	0
2020	120	274	0	394	460	243	3,968	0	3,968	3,968
2021	131	293	0	424	1,424	744	4,338	0	4,338	4,338
2022	142	311	0	453	2,429	1,273	4,724	0	4,724	4,724
2023	153	326	0	479	3,760	2,066	5,070	0	5,070	5,070
2024	165	344	0	509	5,027	2,761	5,489	0	5,489	5,489
2025	0	0	0	0	5,789	0	0	0	0	0
2026	0	0	0	0	5,975	0	0	0	0	0
2027	0	0	0	0	6,105	0	0	0	0	0
2028	0	0	0	0	6,238	0	0	0	0	0
2029	0	0	0	0	6,413	0	0	0	0	0
2030	0	0	0	0	6,562	0	0	0	0	0
2031	0	0	0	0	6,712	0	0	0	0	0
2032	0	0	0	0	6,897	0	0	0	0	0
2033	0	0	0	0	7,066	0	0	0	0	0
2034	0	0	0	0	7,236	0	0	0	0	0
2035	173	274	0	448	7,444	0	5,746	0	5,746	5,746
2036	189	293	0	482	7,823	0	6,282	0	6,282	6,282
2037	206	311	0	517	8,036	0	6,842	0	6,842	6,842
2038	221	326	0	547	8,228	0	7,343	0	7,343	7,343
2039	240	344	0	584	8,404	0	7,949	0	7,949	7,949
2040	0	0	0	0	8,574	0	0	0	0	0
2041	0	0	0	0	8,766	0	0	0	0	0
2042	0	0	0	0	8,857	0	0	0	0	0
2043	0	0	0	0	9,251	0	0	0	0	0
2044	0	0	0	0	9,551	0	0	0	0	0
2045	0	0	0	0	9,761	0	0	0	0	0
2046	0	0	0	0	10,005	0	0	0	0	0
2047	0	0	0	0	10,271	0	0	0	0	0
2048	0	0	0	0	10,497	0	0	0	0	0
2049	0	0	0	0	10,729	0	0	0	0	0
2050	251	274	0	525	10,965	0	8,322	0	8,322	8,322
2051	274	293	0	567	11,209	0	9,099	0	9,099	9,099
2052	299	311	0	610	11,460	0	9,909	0	9,909	9,909
2053	321	326	0	646	11,717	0	10,655	0	10,655	10,655
2054	347	344	0	691	11,982	0	11,513	0	11,513	11,513
2055	0	0	0	0	12,255	0	0	0	0	0
2056	0	0	0	0	12,536	0	0	0	0	0
2057	0	0	0	0	12,836	0	0	0	0	0
2058	0	0	0	0	13,141	0	0	0	0	0
2059	0	0	0	0	13,455	0	0	0	0	0
2060	0	0	0	0	13,778	0	0	0	0	0
2061	0	0	0	0	14,111	0	0	0	0	0
2062	0	0	0	0	14,455	0	0	0	0	0
2063	0	0	0	0	14,818	0	0	0	0	0
2064	0	0	0	0	15,175	0	0	0	0	0
2065	363	274	0	638	15,536	0	12,053	0	12,053	12,053

NOM	3,596	4,919	0	8,514	423,737	173,702	119,282	0	0	119,282
NPV	971	1,780	0	2,751	76,967	35,827	32,228	0	0	32,228

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Business Lighting

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2019	2.50	2.50	2.50	0.00	0.00	2.00	5.04	0.00	11.11
2020	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.18	0.00	11.44
2022	2.50	2.50	2.50	0.00	0.00	2.00	5.14	0.00	11.40
2023	2.50	2.50	2.50	0.00	0.00	2.00	5.54	0.00	12.84
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.61	0.00	12.98
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.74	0.00	12.90
2026	2.50	2.50	2.50	2.48	49.26	2.00	5.92	0.00	12.93
2027	2.50	2.50	2.50	2.62	81.53	2.00	6.04	0.00	13.10
2028	2.50	2.50	2.50	2.74	78.00	2.00	6.19	0.00	13.39
2029	2.50	2.50	2.50	2.85	74.20	2.00	6.34	0.00	13.59
2030	2.50	2.50	2.50	3.01	60.41	2.00	6.49	0.00	13.69
2031	2.50	2.50	2.50	3.11	56.03	2.00	6.63	0.00	13.87
2032	2.50	2.50	2.50	3.19	55.78	2.00	6.81	0.00	14.06
2033	2.50	2.50	2.50	3.14	76.71	2.00	6.98	0.00	14.28
2034	2.50	2.50	2.50	3.20	77.40	2.00	7.14	0.00	14.53
2035	2.50	2.50	2.50	3.26	77.41	2.00	7.34	0.00	14.69
2036	2.50	2.50	2.50	3.31	80.60	2.00	7.71	0.00	14.99
2037	2.50	2.50	2.50	3.37	82.52	2.00	7.91	0.00	15.19
2038	2.50	2.50	2.50	3.43	82.40	2.00	8.10	0.00	15.43
2039	2.50	2.50	2.50	3.50	82.89	2.00	8.27	0.00	15.72
2040	2.50	2.50	2.50	3.56	83.40	2.00	8.44	0.00	15.84
2041	2.50	2.50	2.50	3.60	85.24	2.00	8.62	0.00	16.05
2042	2.50	2.50	2.50	3.64	85.14	2.00	8.71	0.00	16.21
2043	2.50	2.50	2.50	3.67	87.14	2.00	9.09	0.00	16.52
2044	2.50	2.50	2.50	3.71	87.66	2.00	9.38	0.00	16.74
2045	2.50	2.50	2.50	3.75	88.02	2.00	9.58	0.00	16.94
2046	2.50	2.50	2.50	3.79	87.75	2.00	9.82	0.00	17.12
2047	2.50	2.50	2.50	3.83	88.56	2.00	10.07	0.00	17.21
2048	2.50	2.50	2.50	3.87	88.14	2.00	10.29	0.00	17.43
2049	2.50	2.50	2.50	3.92	91.34	2.00	10.51	0.00	17.65
2050	2.50	2.50	2.50	4.03	91.34	2.00	10.74	0.00	17.87
2051	2.50	2.50	2.50	4.16	91.34	2.00	10.98	0.00	18.10
2052	2.50	2.50	2.50	4.28	91.34	2.00	11.22	0.00	18.33
2053	2.50	2.50	2.50	4.41	91.34	2.00	11.47	0.00	18.57
2054	2.50	2.50	2.50	4.54	91.34	2.00	11.72	0.00	18.82
2055	2.50	2.50	2.50	4.68	91.34	2.00	11.99	0.00	19.07
2056	2.50	2.50	2.50	4.82	91.34	2.00	12.26	0.00	19.33
2057	2.50	2.50	2.50	4.96	91.34	2.00	12.55	0.00	19.58
2058	2.50	2.50	2.50	5.11	91.34	2.00	12.84	0.00	19.83
2059	2.50	2.50	2.50	5.26	91.34	2.00	13.14	0.00	20.08
2060	2.50	2.50	2.50	5.42	91.34	2.00	13.45	0.00	20.33
2061	2.50	2.50	2.50	5.58	91.34	2.00	13.77	0.00	20.58
2062	2.50	2.50	2.50	5.75	91.34	2.00	14.10	0.00	20.84
2063	2.50	2.50	2.50	5.92	91.34	2.00	14.45	0.00	21.10
2064	2.50	2.50	2.50	6.10	91.34	2.00	14.79	0.00	21.36
2065	2.50	2.50	2.50	6.29	91.34	2.00	15.14	0.00	21.62

<b>Legend:</b>
<b>Column (1) used for:</b> Utility Cost
Customer Equipment
Supply Costs
<b>Column (3) used for:</b> Customer O&M Cost
Generator Fixed O&M
T&D Fixed O&M
Generator Variable O&M
Gen. Fam. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Business Lighting

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2026	17,886	346	0	1,125	232	308	9	448	160	0	2,629	2,629	2,629	17,920
2027	17,300	335	0	1,088	435	301	9	448	(56)	0	2,560	2,376	5,005	17,472
2028	16,648	322	0	1,047	613	293	9	448	(248)	0	2,484	2,141	7,145	17,024
2029	16,019	310	0	1,007	769	285	9	448	(417)	0	2,411	1,929	9,074	16,576
2030	15,412	298	0	969	905	277	9	448	(566)	0	2,341	1,738	10,811	16,128
2031	14,825	287	0	932	1,022	270	8	448	(697)	0	2,272	1,565	12,377	15,680
2032	14,256	276	0	896	1,122	262	8	448	(805)	0	2,205	1,410	13,787	15,232
2033	13,705	265	0	862	1,206	254	8	448	(903)	0	2,140	1,270	15,058	14,784
2034	13,162	255	0	828	1,287	247	8	448	(996)	0	2,076	1,144	16,201	14,336
2035	12,621	244	0	794	1,368	239	7	448	(1,089)	0	2,012	1,029	17,231	13,888
2036	12,080	234	0	760	1,450	231	7	448	(1,182)	0	1,948	925	18,155	13,440
2037	11,540	223	0	726	1,531	223	7	448	(1,275)	0	1,884	830	18,986	12,992
2038	10,999	213	0	692	1,613	216	7	448	(1,368)	0	1,820	745	19,730	12,544
2039	10,458	202	0	658	1,694	208	6	448	(1,461)	0	1,756	667	20,397	12,096
2040	9,917	192	0	624	1,776	200	6	448	(1,554)	0	1,692	596	20,993	11,648
2041	9,376	181	0	590	1,857	193	6	448	(1,646)	0	1,628	533	21,526	11,200
2042	8,835	171	0	556	1,938	185	6	448	(1,739)	0	1,564	475	22,001	10,752
2043	8,294	161	0	522	2,020	177	5	448	(1,832)	0	1,500	423	22,424	10,304
2044	7,753	150	0	487	2,101	170	5	448	(1,925)	0	1,436	376	22,800	9,856
2045	7,212	140	0	453	2,182	162	5	448	(2,018)	0	1,372	333	23,133	9,408
2046	6,721	130	0	423	2,166	154	5	448	(2,012)	0	1,313	296	23,429	8,960
2047	6,329	122	0	398	2,051	146	5	448	(1,906)	0	1,265	265	23,694	8,512
2048	5,987	116	0	376	1,938	139	4	448	(1,800)	0	1,221	237	23,931	8,064
2049	5,645	109	0	355	1,825	131	4	448	(1,694)	0	1,178	212	24,143	7,616
2050	5,303	103	0	333	1,712	123	4	448	(1,588)	0	1,135	190	24,333	7,168
2051	4,961	96	0	312	1,599	116	4	448	(1,482)	0	1,091	170	24,503	6,720
2052	4,618	89	0	290	1,485	108	3	448	(1,377)	0	1,048	151	24,654	6,272
2053	4,276	83	0	269	1,372	100	3	448	(1,271)	0	1,004	134	24,788	5,824
2054	3,934	76	0	247	1,259	92	3	448	(1,165)	0	961	119	24,908	5,376
2055	3,592	70	0	226	1,146	85	3	448	(1,059)	0	918	106	25,013	4,928
2056	3,250	63	0	204	1,033	77	2	448	(953)	0	874	94	25,107	4,480
2057	2,908	56	0	183	919	69	2	448	(847)	0	831	83	25,190	4,032
2058	2,566	50	0	161	806	62	2	448	(741)	0	788	73	25,262	3,584
2059	2,224	43	0	140	693	62	2	448	(635)	0	752	64	25,327	3,136
2060	1,882	36	0	118	580	62	2	448	(529)	0	717	57	25,384	2,688
2061	1,539	30	0	97	467	62	2	448	(424)	0	681	50	25,434	2,240
2062	1,197	23	0	75	353	62	2	448	(318)	0	646	44	25,478	1,792
2063	855	17	0	54	240	62	2	448	(212)	0	610	39	25,517	1,344
2064	513	10	0	32	127	62	2	448	(106)	0	575	34	25,551	896
2065	171	3	0	11	14	62	2	448	0	0	540	30	25,580	448

IN SERVICE COST (\$000)	WEIGHT
17,920	40.4%
2026	4.8%
40	0.0%
25,345%	59.6%
7.73%	0.0%
1.72%	10.55%
0.053%	

SOURCE	WEIGHT	COST
DEBT	40.4%	4.8%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

K-FACTOR = CPWFC / IN-SVC COST = 1.42750

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Business Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)-(13)) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2026	3.75%	659	659	448	448	448	448	160	1,209	0	0	0	160	381
2027	7.22%	1,269	1,929	448	896	448	896	(56)	1,209	0	0	0	(56)	325
2028	6.68%	1,174	3,103	448	1,344	448	1,344	(248)	1,209	0	0	0	(248)	78
2029	6.18%	1,086	4,189	448	1,792	448	1,792	(417)	1,209	0	0	0	(417)	339
2030	5.71%	1,005	5,194	448	2,240	448	2,240	(566)	1,209	0	0	0	(566)	905
2031	5.29%	929	6,123	448	2,688	448	2,688	(695)	1,209	0	0	0	(695)	1,600
2032	4.89%	859	6,982	448	3,136	448	3,136	(807)	1,209	0	0	0	(807)	2,407
2033	4.52%	795	7,777	448	3,584	448	3,584	(903)	1,209	0	0	0	(903)	3,310
2034	4.46%	785	8,562	448	4,032	448	4,032	(996)	1,209	0	0	0	(996)	4,306
2035	4.46%	784	9,346	448	4,480	448	4,480	(1,089)	1,209	0	0	0	(1,089)	5,395
2036	4.46%	784	10,131	448	4,928	448	4,928	(1,182)	1,209	0	0	0	(1,182)	6,577
2037	4.46%	784	10,916	448	5,376	448	5,376	(1,275)	1,209	0	0	0	(1,275)	7,851
2038	4.46%	785	11,700	448	5,824	448	5,824	(1,368)	1,209	0	0	0	(1,368)	9,219
2039	4.46%	784	12,485	448	6,272	448	6,272	(1,461)	1,209	0	0	0	(1,461)	10,680
2040	4.46%	785	13,269	448	6,720	448	6,720	(1,554)	1,209	0	0	0	(1,554)	12,233
2041	4.46%	784	14,054	448	7,168	448	7,168	(1,646)	1,209	0	0	0	(1,646)	13,880
2042	4.46%	785	14,838	448	7,616	448	7,616	(1,739)	1,209	0	0	0	(1,739)	15,619
2043	4.46%	784	15,623	448	8,064	448	8,064	(1,832)	1,209	0	0	0	(1,832)	17,451
2044	4.46%	785	16,407	448	8,512	448	8,512	(1,925)	1,209	0	0	0	(1,925)	19,377
2045	4.46%	784	17,192	448	8,960	448	8,960	(2,018)	1,209	0	0	0	(2,018)	21,395
2046	2.23%	392	17,584	448	9,408	448	9,408	(2,012)	1,209	0	0	0	(2,012)	23,407
2047	0.00%	0	17,584	448	9,856	448	9,856	(1,906)	1,209	0	0	0	(1,906)	25,313
2048	0.00%	0	17,584	448	10,304	448	10,304	(1,800)	1,209	0	0	0	(1,800)	27,113
2049	0.00%	0	17,584	448	10,752	448	10,752	(1,694)	1,209	0	0	0	(1,694)	28,807
2050	0.00%	0	17,584	448	11,200	448	11,200	(1,588)	1,209	0	0	0	(1,588)	30,395
2051	0.00%	0	17,584	448	11,648	448	11,648	(1,482)	1,209	0	0	0	(1,482)	31,878
2052	0.00%	0	17,584	448	12,096	448	12,096	(1,377)	1,209	0	0	0	(1,377)	33,254
2053	0.00%	0	17,584	448	12,544	448	12,544	(1,271)	1,209	0	0	0	(1,271)	34,525
2054	0.00%	0	17,584	448	12,992	448	12,992	(1,165)	1,209	0	0	0	(1,165)	35,689
2055	0.00%	0	17,584	448	13,440	448	13,440	(1,059)	1,209	0	0	0	(1,059)	36,748
2056	0.00%	0	17,584	448	13,888	448	13,888	(953)	1,209	0	0	0	(953)	37,701
2057	0.00%	0	17,584	448	14,336	448	14,336	(847)	1,209	0	0	0	(847)	38,548
2058	0.00%	0	17,584	448	14,784	448	14,784	(741)	1,209	0	0	0	(741)	39,290
2059	0.00%	0	17,584	448	15,232	448	15,232	(635)	1,209	0	0	0	(635)	39,925
2060	0.00%	0	17,584	448	15,680	448	15,680	(529)	1,209	0	0	0	(529)	40,454
2061	0.00%	0	17,584	448	16,128	448	16,128	(424)	1,209	0	0	0	(424)	40,878
2062	0.00%	0	17,584	448	16,576	448	16,576	(318)	1,209	0	0	0	(318)	41,195
2063	0.00%	0	17,584	448	17,024	448	17,024	(212)	1,209	0	0	0	(212)	41,407
2064	0.00%	0	17,584	448	17,472	448	17,472	(106)	1,209	0	0	0	(106)	41,513
2065	0.00%	0	17,584	448	17,920	448	17,920	0	1,209	0	0	0	0	41,513

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2065
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	221
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,209
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business Lighting

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$(000)	(4) DEFERRED TAX \$(000)	(5) END OF YEAR NET PLANT IN SERVICE \$(000)	(5a)* ACCUMULATED DEPRECIATION \$(000)	(5b)* ACCUMULATED DEF TAXES \$(000)	(6) BEGINNING YEAR RATE BASE \$(000)	(7) ENDING OF YEAR RATE BASE \$(000)	(8) MID-YEAR RATE BASE \$(000)
2026	3.75%	659	160	17,472	448	381	18,141	17,632	17,886
2027	7.22%	1,269	(56)	17,024	896	325	17,632	16,968	17,300
2028	6.68%	1,174	(248)	16,576	1,344	78	16,968	16,328	16,648
2029	6.18%	1,086	(417)	16,128	1,792	(339)	16,328	15,711	16,019
2030	5.71%	1,005	(566)	15,680	2,240	(905)	15,711	15,114	15,412
2031	5.29%	929	(695)	15,232	2,688	(1,600)	15,114	14,536	14,825
2032	4.89%	859	(807)	14,784	3,136	(2,407)	14,536	13,976	14,256
2033	4.52%	795	(903)	14,336	3,584	(3,310)	13,976	13,433	13,705
2034	4.46%	785	(996)	13,888	4,032	(4,306)	13,433	12,892	13,162
2035	4.46%	784	(1,089)	13,440	4,480	(5,395)	12,892	12,351	12,621
2036	4.46%	784	(1,182)	12,992	4,928	(6,577)	12,351	11,810	12,080
2037	4.46%	784	(1,275)	12,544	5,376	(7,851)	11,810	11,269	11,540
2038	4.46%	785	(1,368)	12,096	5,824	(9,219)	11,269	10,728	10,999
2039	4.46%	784	(1,461)	11,648	6,272	(10,680)	10,728	10,187	10,458
2040	4.46%	785	(1,554)	11,200	6,720	(12,233)	10,187	9,646	9,917
2041	4.46%	784	(1,646)	10,752	7,168	(13,880)	9,646	9,105	9,376
2042	4.46%	785	(1,739)	10,304	7,616	(15,619)	9,105	8,564	8,835
2043	4.46%	784	(1,832)	9,856	8,064	(17,451)	8,564	8,023	8,294
2044	4.46%	785	(1,925)	9,408	8,512	(19,377)	8,023	7,482	7,753
2045	4.46%	784	(2,018)	8,960	8,960	(21,395)	7,482	6,942	7,212
2046	2.23%	392	(2,012)	8,512	9,408	(23,407)	6,942	6,500	6,721
2047	0.00%	0	(1,906)	8,064	9,856	(25,313)	6,500	6,158	6,329
2048	0.00%	0	(1,800)	7,616	10,304	(27,113)	6,158	5,816	5,987
2049	0.00%	0	(1,694)	7,168	10,752	(28,807)	5,816	5,474	5,645
2050	0.00%	0	(1,588)	6,720	11,200	(30,395)	5,474	5,132	5,303
2051	0.00%	0	(1,482)	6,272	11,648	(31,878)	5,132	4,789	4,961
2052	0.00%	0	(1,377)	5,824	12,096	(33,254)	4,789	4,447	4,618
2053	0.00%	0	(1,271)	5,376	12,544	(34,525)	4,447	4,105	4,276
2054	0.00%	0	(1,165)	4,928	12,992	(35,689)	4,105	3,763	3,934
2055	0.00%	0	(1,059)	4,480	13,440	(36,748)	3,763	3,421	3,592
2056	0.00%	0	(953)	4,032	13,888	(37,701)	3,421	3,079	3,250
2057	0.00%	0	(847)	3,584	14,336	(38,548)	3,079	2,737	2,908
2058	0.00%	0	(741)	3,136	14,784	(39,290)	2,737	2,395	2,566
2059	0.00%	0	(635)	2,688	15,232	(39,925)	2,395	2,053	2,224
2060	0.00%	0	(529)	2,240	15,680	(40,454)	2,053	1,711	1,882
2061	0.00%	0	(424)	1,792	16,128	(40,878)	1,711	1,368	1,539
2062	0.00%	0	(318)	1,344	16,576	(41,195)	1,368	1,026	1,197
2063	0.00%	0	(212)	896	17,024	(41,407)	1,026	684	855
2064	0.00%	0	(106)	448	17,472	(41,513)	684	342	513
2065	0.00%	0	0	(0)	17,920	(41,513)	342	(0)	171

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)	
2019	-7	0.0%	1.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2020	-6	2.5%	1.025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2021	-5	2.5%	1.051	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2022	-4	2.5%	1.077	5.19	31.14	15.57	1.45	0.19	0.93	6.15	7.08	0.75	0.14	0.14	0.14	32.07	32.07	
2023	-3	2.5%	1.104	23.10	142.17	102.22	3.76	5.21	18.38	18.38	25.46	14.46	2.71	3.78	3.78	148.32	180.39	
2024	-2	2.5%	1.131	40.77	257.23	301.92	6.75	11.96	32.97	32.97	58.43	25.41	4.73	8.51	8.51	275.61	456.00	
2025	-1	2.5%	1.160	30.94	200.08	530.58										233.05	689.05	
							100.00		630.61									
								11.96		58.43		45.52		8.51			689.05	

IN-SERVICE YEAR	2026
PLANT COSTS	558
AFUDC RATE	5.97%

	BOOK BASIS FOR DEF. TAX	TAX BASIS
CONSTRUCTION CASH	16,400	16,400
EQUITY AFUDC	1,209	
DEBT AFUDC	311	
CPI	311	1,184
ITC Basis Reduction (Solar)		
TOTAL	17,920	17,584

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2019	0	0	2.44	11.36	2.44	0.00	1.00	1.00
2020	3,750	3,750	1.80	1.87	1.90	0.00	1.00	1.00
2021	7,750	7,750	1.83	1.95	2.02	0.00	1.00	1.00
2022	12,000	12,000	1.80	1.88	1.92	0.00	1.00	1.00
2023	16,450	16,450	1.95	2.04	2.09	0.00	1.00	1.00
2024	21,150	21,150	2.14	2.23	2.27	0.00	1.00	1.00
2025	21,150	21,150	2.32	2.41	2.46	0.00	1.00	1.00
2026	21,150	21,150	2.54	2.63	2.70	2.63	1.00	1.00
2027	21,150	21,150	2.67	2.78	2.85	2.76	1.00	1.00
2028	21,150	21,150	2.75	2.85	2.91	2.85	1.00	1.00
2029	21,150	21,150	3.00	3.10	3.17	3.09	1.00	1.00
2030	21,150	21,150	3.10	3.18	3.25	3.09	1.00	1.00
2031	21,150	21,150	3.04	3.11	3.21	2.97	1.00	1.00
2032	21,150	21,150	3.26	3.37	3.48	3.07	1.00	1.00
2033	21,150	21,150	3.14	3.22	3.29	3.34	1.00	1.00
2034	21,150	21,150	3.19	3.28	3.34	3.46	1.00	1.00
2035	21,150	21,150	3.22	3.30	3.37	3.47	1.00	1.00
2036	21,150	21,150	3.27	3.37	3.45	3.52	1.00	1.00
2037	21,150	21,150	3.33	3.43	3.50	3.62	1.00	1.00
2038	21,150	21,150	3.40	3.58	3.58	3.66	1.00	1.00
2039	21,150	21,150	3.47	3.57	3.63	3.75	1.00	1.00
2040	21,150	21,150	3.54	3.64	3.72	3.85	1.00	1.00
2041	21,150	21,150	3.61	3.72	3.80	3.88	1.00	1.00
2042	21,150	21,150	3.66	3.78	3.87	3.93	1.00	1.00
2043	21,150	21,150	3.71	3.83	3.91	3.99	1.00	1.00
2044	21,150	21,150	3.76	3.90	3.99	4.04	1.00	1.00
2045	21,150	21,150	3.80	3.92	4.00	4.08	1.00	1.00
2046	21,150	21,150	3.84	3.96	4.04	4.14	1.00	1.00
2047	21,150	21,150	3.89	4.01	4.09	4.20	1.00	1.00
2048	21,150	21,150	3.94	4.08	4.16	4.22	1.00	1.00
2049	21,150	21,150	3.98	4.12	4.19	4.28	1.00	1.00
2050	21,150	21,150	5.03	5.21	5.28	4.41	1.00	1.00
2051	21,150	21,150	5.13	5.31	5.39	4.55	1.00	1.00
2052	21,150	21,150	5.23	5.42	5.49	4.68	1.00	1.00
2053	21,150	21,150	5.34	5.52	5.60	4.83	1.00	1.00
2054	21,150	21,150	5.44	5.63	5.71	4.97	1.00	1.00
2055	21,150	21,150	5.55	5.75	5.83	5.12	1.00	1.00
2056	21,150	21,150	5.66	5.86	5.95	5.28	1.00	1.00
2057	21,150	21,150	5.78	5.98	6.06	5.44	1.00	1.00
2058	21,150	21,150	5.89	6.10	6.19	5.61	1.00	1.00
2059	21,150	21,150	6.01	6.22	6.31	5.78	1.00	1.00
2060	21,150	21,150	6.13	6.35	6.44	5.95	1.00	1.00
2061	21,150	21,150	6.25	6.47	6.56	6.13	1.00	1.00
2062	21,150	21,150	6.38	6.60	6.70	6.32	1.00	1.00
2063	21,150	21,150	6.50	6.73	6.83	6.51	1.00	1.00
2064	21,150	21,150	6.63	6.87	6.97	6.71	1.00	1.00
2065	21,150	21,150	6.77	7.01	7.11	6.91	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	2,629	732	17	2,784	2,956	3,706
2027	2,560	750	29	4,870	5,129	3,080
2028	2,484	769	28	4,874	5,069	3,087
2029	2,411	788	28	4,814	5,230	2,811
2030	2,341	808	23	4,135	4,246	3,061
2031	2,272	828	22	3,972	3,796	3,299
2032	2,205	849	22	4,051	3,906	3,221
2033	2,140	870	32	5,478	5,836	2,684
2034	2,076	892	33	5,637	6,105	2,533
2035	2,012	914	34	5,751	6,112	2,599
2036	1,948	937	36	6,083	6,454	2,550
2037	1,884	961	38	6,330	6,804	2,408
2038	1,820	985	38	6,438	6,866	2,415
2039	1,756	1,009	40	6,602	7,090	2,317
2040	1,692	1,035	41	6,765	7,310	2,223
2041	1,628	1,060	43	6,987	7,534	2,185
2042	1,564	1,087	44	7,058	7,621	2,132
2043	1,500	1,114	46	7,284	7,924	2,020
2044	1,436	1,142	47	7,407	8,073	1,959
2045	1,372	1,171	49	7,516	8,181	1,926
2046	1,313	1,200	50	7,576	8,273	1,866
2047	1,265	1,230	52	7,724	8,476	1,794
2048	1,221	1,261	53	7,774	8,466	1,843
2049	1,178	1,292	56	8,150	8,908	1,769
2050	1,135	1,324	57	8,395	9,178	1,733
2051	1,091	1,357	59	8,647	9,457	1,697
2052	1,048	1,391	60	8,906	9,745	1,661
2053	1,004	1,426	62	9,173	10,041	1,624
2054	961	1,462	63	9,449	10,347	1,588
2055	918	1,498	65	9,732	10,661	1,552
2056	874	1,536	67	10,024	10,985	1,515
2057	831	1,574	68	10,325	11,319	1,479
2058	788	1,614	70	10,634	11,664	1,442
2059	752	1,654	72	10,954	12,018	1,413
2060	717	1,695	73	11,282	12,384	1,383
2061	681	1,738	75	11,621	12,761	1,354
2062	646	1,781	77	11,969	13,149	1,324
2063	610	1,826	79	12,328	13,549	1,294
2064	575	1,871	81	12,698	13,961	1,264
2065	540	1,918	83	13,079	14,386	1,234

NOM	57,875	49,351	2,011	315,280	341,973	82,545
NPV	15,187.28	7,728.66	288	47,026	50,233	19,997

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	186	0
2021	221	32	253	41	17	59	597	0
2022	458	56	515	85	31	116	984	0
2023	711	83	794	133	45	178	1,539	0
2024	976	113	1,088	183	61	244	2,221	0
2025	1,258	130	1,388	236	71	306	2,699	0
2026	1,219	133	1,352	230	72	302	2,956	0
2027	1,180	136	1,317	224	74	298	3,118	0
2028	1,143	140	1,283	218	76	294	3,193	0
2029	1,107	143	1,251	212	78	290	3,476	0
2030	1,072	147	1,219	206	80	286	3,560	0
2031	1,037	150	1,188	201	82	283	3,483	0
2032	1,003	154	1,157	196	84	280	3,780	0
2033	968	158	1,126	190	86	276	3,604	0
2034	934	162	1,096	185	88	273	3,667	0
2035	899	166	1,065	179	90	270	3,687	0
2036	865	170	1,035	174	93	267	3,777	0
2037	833	175	1,007	169	95	264	3,839	0
2038	803	179	982	163	97	261	3,925	0
2039	776	183	960	158	100	258	4,001	0
2040	753	188	941	153	102	255	4,082	0
2041	732	193	925	147	105	252	4,167	0
2042	712	197	909	142	108	250	4,244	0
2043	692	202	894	138	110	248	4,290	0
2044	671	207	879	133	113	246	4,372	0
2045	651	213	864	130	116	245	4,393	0
2046	631	218	849	126	119	245	4,439	0
2047	611	223	834	123	122	245	4,500	0
2048	591	229	820	120	125	244	4,569	0
2049	571	235	805	116	128	244	4,616	0
2050	550	241	791	113	131	244	4,616	0
2051	530	247	777	110	134	244	4,616	0
2052	510	253	763	106	138	244	4,616	0
2053	490	259	749	103	141	244	4,616	0
2054	470	266	735	100	145	244	4,616	0
2055	450	272	722	97	148	245	4,616	0
2056	429	279	708	93	152	245	4,616	0
2057	410	286	696	90	156	246	4,616	0
2058	391	293	684	87	160	246	4,616	0
2059	372	300	673	83	164	247	4,616	0
2060	355	308	663	80	168	248	4,616	0
2061	338	316	654	77	172	249	4,616	0
2062	322	324	646	73	176	250	4,616	0
2063	306	332	637	70	181	251	4,616	0
2064	289	340	629	67	185	252	4,616	0
2065	239	348	587	64	190	254	4,616	0

NOM	30,530	9,378.49	39,908	6,124	5,107	11,230	210,745	0
NPV	9,526	1,699	11,224	1,845	925	2,770	37,563	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2019	0	0	0	0	0
2020	0	0	0	0	0
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	1	1	0	0	0
2028	1	1	0	0	0
2029	1	1	0	0	0
2030	1	1	0	0	0
2031	0	1	0	0	0
2032	0	1	0	0	0
2033	1	1	0	0	0
2034	1	1	0	0	0
2035	1	1	0	0	0
2036	1	1	0	0	0
2037	1	1	0	0	0
2038	1	1	0	0	0
2039	1	1	0	0	0
2040	1	1	0	0	0
2041	1	1	0	0	0
2042	1	1	0	0	0
2043	1	1	0	0	0
2044	1	1	0	0	0
2045	1	1	0	0	0
2046	1	1	0	0	0
2047	1	1	0	0	0
2048	1	1	0	0	0
2049	1	1	0	0	0
2050	1	1	0	0	0
2051	1	1	0	0	0
2052	1	1	0	0	0
2053	1	1	0	0	0
2054	1	1	0	0	0
2055	1	1	0	0	0
2056	1	1	0	0	0
2057	1	1	0	0	0
2058	1	1	0	0	0
2059	1	1	0	0	0
2060	1	1	0	0	0
2061	1	1	0	0	0
2062	1	1	0	0	0
2063	1	1	0	0	0
2064	1	1	0	0	0
2065	1	1	0	0	0

NOM	29	33	21	0	17
NPV	5	6	5	0	4

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	120	3,968	0	4,087	0	0	186	0	186	(3,901)	(3,621)
2021	0	131	4,338	0	4,469	0	312	909	0	909	(3,560)	(6,688)
2022	0	142	4,724	0	4,867	0	631	984	0	984	(2,571)	(9,289)
2023	0	153	5,070	0	5,223	0	972	1,539	0	1,539	(1,042)	(11,302)
2024	0	165	5,489	0	5,654	0	1,332	2,221	0	2,221	(2,101)	(12,749)
2025	0	0	0	0	0	0	1,694	2,699	0	4,394	(9,939)	(9,939)
2026	0	0	0	0	0	3,206	1,654	2,956	0	7,816	(7,816)	(5,298)
2027	0	0	0	0	0	3,080	1,614	3,118	0	7,813	(7,813)	(993)
2028	0	0	0	0	0	3,087	1,577	3,193	0	7,857	(7,857)	3,026
2029	0	0	0	0	0	2,811	1,541	3,476	0	7,828	(7,828)	6,743
2030	0	0	0	0	0	3,061	1,505	3,560	0	8,127	(8,127)	10,326
2031	0	0	0	0	0	3,299	1,471	3,483	0	8,253	(8,253)	13,702
2032	0	0	0	0	0	3,221	1,437	3,780	0	8,438	(8,438)	16,906
2033	0	0	0	0	0	2,684	1,403	3,604	0	7,691	(7,691)	19,617
2034	0	0	0	0	0	2,533	1,369	3,667	0	7,569	(7,569)	22,094
2035	0	173	5,746	0	5,919	2,599	1,335	3,687	0	7,621	(7,621)	22,611
2036	0	189	6,282	0	6,472	2,550	1,302	3,777	0	7,629	(7,629)	22,937
2037	0	206	6,842	0	7,048	2,408	1,271	3,839	0	7,518	(7,518)	23,060
2038	0	221	7,343	0	7,564	2,415	1,243	3,925	0	7,583	(7,583)	23,065
2039	0	240	7,949	0	8,189	2,317	1,218	4,001	0	7,536	(6,533)	22,917
2040	0	0	0	0	0	2,223	1,196	4,082	0	7,501	(7,501)	24,487
2041	0	0	0	0	0	2,185	1,177	4,167	0	7,529	(7,529)	25,950
2042	0	0	0	0	0	2,132	1,159	4,244	0	7,535	(7,535)	27,308
2043	0	0	0	0	0	2,020	1,142	4,290	0	7,452	(7,452)	28,556
2044	0	0	0	0	0	1,959	1,125	4,372	0	7,457	(7,457)	29,714
2045	0	0	0	0	0	1,926	1,109	4,393	0	7,429	(7,429)	30,786
2046	0	0	0	0	0	1,866	1,094	4,439	0	7,400	(7,400)	31,176
2047	0	0	0	0	0	1,794	1,079	4,500	0	7,373	(7,373)	32,692
2048	0	0	0	0	0	1,843	1,064	4,569	0	7,476	(7,476)	33,554
2049	0	0	0	0	0	1,769	1,049	4,616	0	7,435	(7,435)	34,350
2050	0	251	8,322	0	8,573	1,733	1,035	5,836	0	8,604	(8,604)	34,353
2051	0	274	9,099	0	9,373	1,697	1,021	5,953	0	8,671	(7,021)	34,289
2052	0	299	9,909	0	10,208	1,661	1,007	6,072	0	8,740	(1,468)	34,163
2053	0	321	10,635	0	10,955	1,624	993	6,193	0	8,811	(2,145)	33,992
2054	0	347	11,513	0	11,860	1,588	980	6,317	0	8,886	(2,975)	33,773
2055	0	0	0	0	0	1,552	966	6,444	0	8,963	(8,963)	34,387
2056	0	0	0	0	0	1,515	954	6,572	0	9,041	(9,041)	34,961
2057	0	0	0	0	0	1,479	941	6,704	0	9,125	(9,125)	35,500
2058	0	0	0	0	0	1,442	930	6,837	0	9,210	(9,210)	36,004
2059	0	0	0	0	0	1,413	920	6,974	0	9,307	(9,307)	36,477
2060	0	0	0	0	0	1,383	911	7,115	0	9,409	(9,409)	36,921
2061	0	0	0	0	0	1,354	903	7,257	0	9,514	(9,514)	37,338
2062	0	0	0	0	0	1,324	895	7,402	0	9,621	(9,621)	37,729
2063	0	0	0	0	0	1,294	888	7,550	0	9,732	(9,732)	38,096
2064	0	0	0	0	0	1,264	881	7,701	0	9,847	(9,847)	38,441
2065	0	363	12,053	0	12,416	1,234	841	7,854	0	9,930	(2,486)	38,360

NOM	0	3,596	119,282	0	122,878	82,545,227	51,138	210,745	17	344,446	221,568	221,568
NPV	0	971	32,228	0	33,199	19,997	13,995	37,563	4	71,559,27	38,360	38,360

Discount Rate: 2.16 %

Benefit/Cost Ratio (Col(11) / Col(6)):

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0
2020	798	0	274	0	1,072	3,968	0	0	3,968	(2,895)	(2,688)
2021	2,460	0	293	0	2,753	4,338	0	0	4,338	(1,585)	(4,053)
2022	4,200	0	311	0	4,511	4,724	0	0	4,724	(213)	(4,223)
2023	6,596	0	326	0	6,921	5,070	0	0	5,070	1,851	(2,849)
2024	8,818	0	344	0	9,162	5,489	0	0	5,489	3,673	(318)
2025	10,063	0	0	0	10,063	0	0	0	0	10,063	6,119
2026	10,295	0	0	0	10,295	0	0	0	0	10,295	12,231
2027	10,492	0	0	0	10,492	0	0	0	0	10,492	18,013
2028	10,745	0	0	0	10,745	0	0	0	0	10,745	23,510
2029	10,980	0	0	0	10,980	0	0	0	0	10,980	28,723
2030	11,183	0	0	0	11,183	0	0	0	0	11,183	33,652
2031	11,406	0	0	0	11,406	0	0	0	0	11,406	38,319
2032	11,675	0	0	0	11,675	0	0	0	0	11,675	42,752
2033	11,933	0	0	0	11,933	0	0	0	0	11,933	46,959
2034	12,197	0	0	0	12,197	0	0	0	0	12,197	50,949
2035	12,487	0	274	0	12,761	5,746	0	0	5,746	7,015	53,080
2036	13,015	0	293	0	13,308	6,282	0	0	6,282	7,026	55,060
2037	13,321	0	311	0	13,633	6,842	0	0	6,842	6,791	56,837
2038	13,609	0	326	0	13,935	7,343	0	0	7,343	6,592	58,438
2039	13,891	0	344	0	14,235	7,949	0	0	7,949	6,286	59,856
2040	14,125	0	0	0	14,125	0	0	0	0	14,125	62,812
2041	14,407	0	0	0	14,407	0	0	0	0	14,407	65,610
2042	14,555	0	0	0	14,555	0	0	0	0	14,555	68,235
2043	15,105	0	0	0	15,105	0	0	0	0	15,105	70,763
2044	15,520	0	0	0	15,520	0	0	0	0	15,520	73,174
2045	15,821	0	0	0	15,821	0	0	0	0	15,821	75,455
2046	16,158	0	0	0	16,158	0	0	0	0	16,158	77,618
2047	16,500	0	0	0	16,500	0	0	0	0	16,500	79,668
2048	16,825	0	0	0	16,825	0	0	0	0	16,825	81,609
2049	17,156	0	0	0	17,156	0	0	0	0	17,156	83,445
2050	17,495	0	274	0	17,769	8,322	0	0	8,322	9,447	84,384
2051	17,843	0	293	0	18,136	9,099	0	0	9,099	9,037	85,218
2052	18,201	0	311	0	18,513	9,909	0	0	9,909	8,603	85,954
2053	18,569	0	326	0	18,895	10,635	0	0	10,635	8,260	86,611
2054	18,947	0	344	0	19,291	11,513	0	0	11,513	7,777	87,185
2055	19,334	0	0	0	19,334	0	0	0	0	19,334	88,508
2056	19,734	0	0	0	19,734	0	0	0	0	19,734	89,763
2057	20,155	0	0	0	20,155	0	0	0	0	20,155	90,952
2058	20,583	0	0	0	20,583	0	0	0	0	20,583	92,079
2059	21,020	0	0	0	21,020	0	0	0	0	21,020	93,147
2060	21,469	0	0	0	21,469	0	0	0	0	21,469	94,160
2061	21,931	0	0	0	21,931	0	0	0	0	21,931	95,121
2062	22,406	0	0	0	22,406	0	0	0	0	22,406	96,032
2063	22,907	0	0	0	22,907	0	0	0	0	22,907	96,896
2064	23,400	0	0	0	23,400	0	0	0	0	23,400	97,716
2065	23,897	0	274	0	24,171	12,053	0	0	12,053	12,118	98,110
NOM	684,229	0	4,919	0	689,148	119,282	0	0	119,282	569,865	
NPV	128,558	0	1,780	0	130,337	32,228	0	0	32,228	98,110	

In Service of Gen Unit:  
Discount Rate: 7.73 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 4.04

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2019	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	120	274	703	0	1,098	186	0	0	0	186	(912)	(846)
2021	0	293	274	2,168	0	2,592	597	312	0	0	909	(1,683)	(2,297)
2022	0	142	311	3,703	0	4,156	984	631	0	0	1,615	(2,541)	(4,329)
2023	0	153	326	5,825	0	6,304	1,539	972	0	0	2,511	(3,793)	(7,144)
2024	0	165	344	7,788	0	8,298	2,221	1,332	0	0	3,553	(4,744)	(10,413)
2025	0	0	0	8,878	0	8,878	2,699	1,694	0	0	4,394	(4,884)	(13,281)
2026	0	0	0	9,072	0	9,072	6,162	1,654	0	0	7,816	(1,255)	(14,026)
2027	0	0	0	9,242	0	9,242	6,198	1,614	0	0	7,813	(1,429)	(14,814)
2028	0	0	0	9,463	0	9,463	6,280	1,577	0	0	7,857	(1,607)	(15,636)
2029	0	0	0	9,666	0	9,666	6,287	1,541	0	0	7,828	(1,838)	(16,509)
2030	0	0	0	9,839	0	9,839	6,622	1,505	0	0	8,127	(1,711)	(17,263)
2031	0	0	0	10,032	0	10,032	6,782	1,471	0	0	8,253	(1,778)	(17,991)
2032	0	0	0	10,263	0	10,263	7,001	1,437	0	0	8,438	(1,824)	(18,683)
2033	0	0	0	10,486	0	10,486	6,288	1,403	0	0	7,691	(1,968)	(19,668)
2034	0	0	0	10,715	0	10,715	6,200	1,369	0	0	7,569	(2,145)	(20,698)
2035	0	173	274	10,962	0	11,410	6,286	1,335	0	0	7,621	(2,188)	(21,888)
2036	0	189	293	11,413	0	11,895	6,327	1,302	0	0	7,629	(2,466)	(23,051)
2037	0	206	311	11,675	0	12,193	6,247	1,271	0	0	7,518	(2,718)	(24,274)
2038	0	221	326	11,924	0	12,471	6,340	1,243	0	0	7,583	(2,961)	(25,461)
2039	0	240	344	12,170	0	12,754	6,318	1,218	0	0	7,536	(3,217)	(26,638)
2040	0	0	0	12,369	0	12,369	6,305	1,196	0	0	7,501	(3,487)	(27,656)
2041	0	0	0	12,611	0	12,611	6,352	1,177	0	0	7,529	(3,764)	(28,644)
2042	0	0	0	12,741	0	12,741	6,375	1,159	0	0	7,535	(4,053)	(29,582)
2043	0	0	0	13,210	0	13,210	6,310	1,142	0	0	7,452	(4,358)	(30,546)
2044	0	0	0	13,564	0	13,564	6,331	1,125	0	0	7,457	(4,677)	(31,495)
2045	0	0	0	13,822	0	13,822	6,319	1,109	0	0	7,429	(5,009)	(32,417)
2046	0	0	0	14,109	0	14,109	6,305	1,094	0	0	7,400	(5,353)	(33,315)
2047	0	0	0	14,396	0	14,396	6,293	1,079	0	0	7,373	(5,707)	(34,188)
2048	0	0	0	14,675	0	14,675	6,412	1,064	0	0	7,476	(6,072)	(35,018)
2049	0	0	0	14,959	0	14,959	6,385	1,049	0	0	7,435	(6,447)	(35,823)
2050	0	251	274	15,249	0	15,774	7,569	1,035	0	0	8,604	(6,822)	(36,536)
2051	0	274	293	15,547	0	16,114	7,650	1,021	0	0	8,671	(7,207)	(37,222)
2052	0	299	311	15,854	0	16,464	7,732	1,007	0	0	8,740	(7,592)	(37,884)
2053	0	321	326	16,169	0	16,815	7,817	993	0	0	8,811	(8,005)	(38,520)
2054	0	347	344	16,492	0	17,184	7,906	980	0	0	8,886	(8,298)	(39,132)
2055	0	0	0	16,824	0	16,824	7,996	966	0	0	8,963	(8,622)	(39,670)
2056	0	0	0	17,167	0	17,167	8,087	954	0	0	9,041	(8,957)	(40,187)
2057	0	0	0	17,526	0	17,526	8,183	941	0	0	9,125	(9,292)	(40,682)
2058	0	0	0	17,891	0	17,891	8,279	930	0	0	9,210	(9,627)	(41,158)
2059	0	0	0	18,264	0	18,264	8,387	920	0	0	9,307	(9,962)	(41,613)
2060	0	0	0	18,647	0	18,647	8,498	911	0	0	9,409	(10,297)	(42,049)
2061	0	0	0	19,041	0	19,041	8,611	903	0	0	9,514	(10,632)	(42,466)
2062	0	0	0	19,446	0	19,446	8,726	895	0	0	9,621	(10,967)	(42,866)
2063	0	0	0	19,872	0	19,872	8,844	888	0	0	9,732	(11,302)	(43,248)
2064	0	0	0	20,291	0	20,291	8,965	881	0	0	9,847	(11,637)	(43,614)
2065	0	363	274	20,715	0	21,352	9,088	841	0	0	9,930	(11,972)	(43,985)
NOM	0	3,596	4,919	597,439	0	605,954	293,290.14	51,138.45	0.00	16.99	344,446	(261,508)	
NPV	0	971	1,780	112,793	0	115,545	57,560	13,995	0	4	71,559	(43,985)	

7.73 %  
0.62

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)):



**ATTACHMENT B**

**Gulf Power Company  
Existing Demand-Side Management Plan 2020-2024**

**GULF POWER COMPANY**  
**2020-2024 DEMAND-SIDE MANAGEMENT PLAN**

**BEFORE THE FLORIDA PUBLIC SERVICE**  
**COMMISSION**

**FEBRUARY 24, 2020**

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>2</b>
<b>SECTION I – OVERVIEW .....</b>	<b>4</b>
<b>A. COMPOSITION OF GULF’S 2020 DSM PLAN .....</b>	<b>4</b>
<b>B. COST-EFFECTIVENESS SCREENING ANALYSIS .....</b>	<b>6</b>
<b>C. PROGRAM STANDARDS.....</b>	<b>7</b>
<b>SECTION II – DSM PROGRAM DESCRIPTIONS.....</b>	<b>8</b>
<b>RESIDENTIAL SECTOR PROGRAM PORTFOLIO .....</b>	<b>9</b>
<i>Residential Home Energy Survey .....</i>	<i>10</i>
<i>Residential Low Income (Community Energy Saver) .....</i>	<i>12</i>
<i>Residential Heating, Ventilating, and Air Conditioning (HVAC).....</i>	<i>14</i>
<i>Residential Ceiling Insulation .....</i>	<i>16</i>
<i>Residential High Efficiency Pool Pump.....</i>	<i>18</i>
<i>Energy Select.....</i>	<i>20</i>
<b>BUSINESS SECTOR PROGRAM PORTFOLIO .....</b>	<b>23</b>
<i>Business Energy Survey (BES) .....</i>	<i>24</i>
<i>Business Heating, Ventilating, and Air Conditioning (HVAC).....</i>	<i>26</i>
<i>Curtable Load Rider (CL).....</i>	<i>28</i>
<i>Business Custom Incentive (BCI) .....</i>	<i>29</i>
<b>OTHER PROGRAMS.....</b>	<b>31</b>
<i>Conservation Demonstration and Development (CDD).....</i>	<i>32</i>
<b>SECTION III – PROGRAM PROJECTIONS .....</b>	<b>34</b>
<b>APPENDIX A – COMPARISON OF 2020 DSM PLAN TO THE CURRENT DSM PLAN.....</b>	<b>39</b>
<b>APPENDIX B – PROGRAM-LEVEL COST-EFFECTIVENESS ANALYSIS .....</b>	<b>40</b>

## **INTRODUCTION**

Gulf Power Company (GULF) has been delivering cost-effective Demand-Side Management (DSM) programs for more than forty years. These programs have included customer education, load management and energy efficiency initiatives. GULF's DSM efforts through 2019 have resulted in a cumulative Summer peak reduction of more than 500 Megawatts (MW) at the generator and estimated cumulative energy savings of more than 1,079 Gigawatt Hours (GWh) at the generator.

Pursuant to Florida Administrative Code (F.A.C.) Rule 25-17.0021, GULF is submitting its 2020 DSM Plan designed to meet the annual Summer MW, Winter MW and GWh Goals for the Residential and Business sectors established by the Florida Public Service Commission (Commission) in Order No. PSC-2019-0509-FOF-EG. The Commission established GULF's 2020-2024 DSM Goals based on continuing those approved in the 2014 Goals proceeding (Order No. PSC-2014-0696-FOF-EU) for 2020-2024. The Goals set in the 2014 proceeding were based on GULF's Achievable Potential projection of measures that were cost-effective utilizing the Rate Impact Measure (RIM) and Participant cost-effectiveness screening tests during the 2014 goal-setting process. GULF's 2020 DSM Plan to meet these goals represents a diverse portfolio of ten DSM programs. It includes six Residential programs, four Business programs, and a Conservation Demonstration and Development (CDD) program for evaluating new technologies. The 2020 DSM Plan is comprehensive, offering a wide variety of programs for all of GULF's customers. While none of these programs, except the Business Curtailable Load Rider, pass the RIM cost-effectiveness test, these programs represent a mixture of customer offerings including programs that do not have any direct customer costs, programs that offer financial incentives for

the purchase of energy efficient products, and programs that provide ongoing incentives for available capacity. GULF believes the RIM test is an important criterion for utility-sponsored DSM programs since it protects against upward pressure on electric rates. Therefore, in offering these programs, GULF may choose to cap program participation each year for the Residential and Business sectors individually once their respective MW and GWh Goals have been achieved in order to mitigate the financial impact to the general body of customers.

The DSM Plan includes GULF's Residential Home Energy Survey and Business Energy Survey as foundational components of GULF's DSM portfolio. These programs facilitate awareness of other program opportunities and serve as a gateway to helping customers save money. These programs are offered through online, phone and in-person channels and provide education on actions customers can take to reduce their electric cost by participating in GULF's DSM programs and also by taking actions and implementing measures, many at low or no cost, which are not offered as part of GULF's DSM programs.

The 2020 DSM Plan contains three Sections and two Appendices.

- **Section I** – Overview of GULF's 2020 DSM Plan summarizing: how the Plan will achieve GULF's Goals; the programs and measures; and program cost-effectiveness.
- **Section II** – Detailed description of the DSM Programs.
- **Section III** – Projections for the five-year Goals period of customers, participation, penetration, and kW and kWh savings at the meter and the generator.
- **Appendix A** – Comparison of 2015 DSM Plan to Current Plan.
- **Appendix B** – Program-Level Cost-effectiveness evaluations.

## SECTION I – OVERVIEW

### A. Composition of GULF’s 2020 DSM Plan

Table 1 shows the annual Residential and Business Goals for Summer MW, Winter MW and GWh established by Order No. PSC-2019-0509-FOF-EG.

**Table 1 – Annual Residential and Business Goals (at the Generator)**

Year	Summer MW			Winter MW			GWh		
	Residential	Business	Total	Residential	Business	Total	Residential	Business	Total
2020	6.7	0.8	7.5	3.8	0.2	4.0	6.8	2.5	9.3
2021	7.5	0.9	8.4	4.3	0.2	4.5	7.6	2.7	10.3
2022	8.1	0.9	9.0	4.6	0.3	4.9	8.3	3.0	11.3
2023	8.8	1.0	9.8	5.0	0.3	5.3	8.9	3.2	12.1
2024	9.3	1.1	10.4	5.3	0.3	5.6	9.5	3.4	12.9
Total	40.4	4.7	45.1	23.0	1.3	24.3	41.1	14.8	55.9

GULF has developed a portfolio of DSM programs to achieve the annual Residential and Business DSM Goals. The 2020 DSM Plan’s programs and associated measures are shown in Table 2 with detailed descriptions of each provided in Section II. As with prior Plans, GULF anticipates that the Plan could change over time due to: changes in market conditions or system needs; program experience; measurement and evaluation; customer research; or new technology options which may become available. Section III demonstrates how the 2020 DSM Plan meets the DSM Goals in Table 1 above. GULF does not count kW or kWh savings for the educational programs (*i.e.*, Residential Home Energy Survey and Business Energy Survey) or the CDD program.

**Table 2 – Residential and Business Programs & Measures<sup>1</sup>**

<b>Programs</b>	<b>Measures (if multiple per Program)</b>
Residential Home Energy Survey (HES)	Home Energy Survey (HES)
	Online Home Energy Survey
	Phone Energy Survey
Residential Low Income	Various company-installed EE measures
Residential HVAC	
Residential Ceiling Insulation	
Residential High Efficiency Pool Pump	
Energy Select	
<b>Business Programs</b>	
Business Energy Survey (BES)	Business Energy Survey (BES)
	Online Business Energy Survey
Business HVAC	Chillers
	Split/Packaged Direct Expansion (DX)
	Demand Control Ventilation (DCV)
	Energy Recovery Ventilation (ERV)
Curtable Load	
Business Custom Incentive	
<b>Conservation Demonstration and Development (CDD)</b>	
Conservation Demonstration and Development (CDD)	

<sup>1</sup> Measures listed only when there are multiple measures associated with a program.

## **B. Cost-Effectiveness Screening Analysis**

The Commission-established cost-effectiveness methodology required by Rule 25-17.008, F.A.C., to determine the cost-effectiveness of DSM programs includes the following three screening tests: (a) the RIM test; (b) the Total Resource Cost (TRC) test; and (c) the Participant test. The results for each program under the three preliminary screening tests are summarized in Table 3. The individual program cost-effectiveness screening analyses can be found in Appendix B. GULF used the same assumptions in these cost-effectiveness screening tests as were used for the analyses in the DSM Goals proceeding (Docket No. 20190016-EG). Consistent with past proceedings, cost-effectiveness screenings were not performed for the Residential and Business Energy Survey programs or the Business Custom Incentive program.

**Table 3 – Cost-Effectiveness Screening Test Results<sup>2</sup>**

<b>Program</b>	<b>RIM</b>	<b>TRC</b>	<b>Participant</b>
<b>Residential Sector Programs</b>			
Energy Select	0.92	2.03	Infinite
Residential Heat Pump	0.57	0.74	1.34
Residential Ceiling Insulation	0.73	2.75	5.00
Residential Pool Pump	0.53	2.07	4.35
Residential Low Income	0.37	2.05	Infinite
<b>Business Sector Programs</b>			
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.83	0.94	1.15
Curtable Load	1.00	34.01	Infinite

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<sup>2</sup> Infinite means that the customer has no out of pocket expense.



### **C. Program Standards**

GULF will file for Commission Staff approval Program Standards for all programs within the timeframe specified by the Commission in the Final Order approving GULF's 2020 DSM Plan. The Program Standards will contain the specifics regarding each program's operations. These will be subject to periodic review and may change over time based on factors such as, but not limited to: changes in Codes & Standards; technological advances; operational needs; program results; and technology application assumptions. All program participants and contractors must comply with the requirements specified in the Program Standards.

## **SECTION II – DSM PROGRAM DESCRIPTIONS**

GULF's 2020 DSM Plan incorporates a wide array of programs. It is comprised of ten DSM programs; six Residential programs, four Business programs, and a Conservation and Demonstration and Development (CDD) program for evaluating new technologies. GULF's comprehensive DSM portfolio includes several new programs as compared to GULF's 2015 DSM Plan. These proposed changes are intended to increase participation in DSM programs to achieve the goals established by the Commission. Program changes between the 2020 DSM Plan as compared to GULF's 2015 DSM Plan are provided in Appendix A.

This section includes summaries for each of the programs and provides a general description of the programs' objectives, features and administration. Additional specifics on each program and its operations will be provided in GULF's Program Standards to be filed after the 2020 DSM Plan is approved. All of the programs included in GULF's portfolio have as a primary objective to reduce growth of coincident peak demand and energy consumption. The portfolio addresses the major drivers of a customer's energy consumption and its program mix is designed to address the diversity of GULF's customer types and their needs through providing financial incentives and investing in customer awareness through education.

**Post-Installation Verification** – Verification will be conducted for all programs where GULF provides a financial incentive. In order to ensure compliance with Program Standards, GULF will, at a minimum, perform verifications of the installations as required by Rule 25-17.003(10), F.A.C.

**RESIDENTIAL SECTOR PROGRAM PORTFOLIO**

## **Residential Home Energy Survey**

**Start Date** –1981

The Residential Home Energy Survey is the primary educational program to help customers improve the energy efficiency of their home through energy conservation advice and information that encourages the implementation of efficiency measures and behaviors resulting in energy and utility bill savings. This program also increases the awareness of energy savings opportunities among Gulf's customers.

As part of Gulf Power's overall DSM Plan, many of the recommendations associated with this program are complemented with incentive-based programs to increase the likelihood of customer adoption. In addition to encouraging the installation of energy efficient HVAC equipment and appliances, Gulf Power views this program as a vehicle to promote energy efficient new home construction techniques and thermal envelope upgrades to existing homes.

The Energy Survey program provides customers an assessment of their home energy usage and energy savings opportunities. Customers may choose to have a Gulf Power representative conduct an on-site audit of their home, they may opt to participate in an on-line interactive version of the survey, or they may call in to be assisted with the on-line, interactive version of the survey.

**Eligibility** – GULF residential customers.

**Participant Financial Incentive** – Free to the participant. Residential Home Energy Surveys can identify opportunities for customers to receive incentives through other GULF Residential programs.

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; television, radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Residential Low Income (Community Energy Saver)**

**Start Date** – March, 2010

The Community Energy Saver Program will assist low-income families in addressing energy costs through increased awareness and installation of efficiency measures.

The Community Energy Saver Program will implement a comprehensive package of short payback electric conservation measures at no cost to the customer. In addition to direct installation of the conservation measures, the program will feature a Home Energy Survey that will help educate families on energy efficiency techniques and behavioral changes to help these customers control their energy use and reduce their monthly energy bill.

Program goals include:

- Increasing customer awareness of the amount of energy consumed and energy efficiency opportunities;
- Reducing energy use and costs on monthly utility bills;
- Installing energy efficiency items to improve comfort and reduce energy use; and
- Identifying customer needs that might be met by other programs and leveraging opportunities with other providers such as the Low Income Home Energy Assistance Program (LIHEAP) and Weatherization Assistance Program (WAP).

**Eligibility** – Existing GULF residential customers who meet certain low income criteria. Eligible customers must reside in defined geographical areas that have at least 50 percent of households with incomes less than 200 percent of the poverty level set by the U.S. Department of Energy for low-income programs; however, all customers in these areas may participate.

**Participant Financial Incentives** –Participating customers will be provided with energy saving measures at no cost. The value of measures for each household is expected to average \$55.00.

**Marketing Channels** – GULF personnel, WAP agencies, community-based organizations, faith-based organizations, online, and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with statistical billing analysis.

## **Residential Heating, Ventilating, and Air Conditioning (HVAC)**

**Start Date** – 2020

The Heating, Ventilation and Air Conditioning (HVAC) Efficiency Improvement program is designed to increase energy efficiency and improve HVAC cooling and heating system performance for both new and existing single-family homes. Since as much as half of the energy used in a home goes to cooling and heating, customers can save energy and money by installing an efficient system. This program encourages customers to install high-efficiency central heat pumps.

Gulf Power will utilize Participating Independent Contractors (PIC) to assist with field delivery of the HVAC Efficiency Improvement Program. Customers will realize the financial incentives associated with each qualifying measure through reduced pricing by the PICs.

**Eligibility** – New and existing GULF residential customers occupying single-family homes who install a central heat pump with a SEER rating of 16 or greater.

**Participant Financial Incentive** – Provided as a credit towards the installation cost on a customer's invoice from a Participating Independent Contractor (PIC). The incentive value is up to a maximum of \$300 per participant.

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; Residential Home Energy Survey, Participating Independent Contractors (PICs), television, radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.



**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses, end-use metering data and statistical billing analysis as applicable.

## **Residential Ceiling Insulation**

**Start Date** – 2020

This Residential Ceiling Insulation program encourages customers to improve the building envelope's thermal efficiency. This program will provide residential customers with incentives to upgrade ceiling insulation levels in existing homes. The objective of this program is to reduce heat gain and heat loss which in turn leads to reduced HVAC loads and operating costs.

Reduced HVAC loads may also result in the installation of lower capacity HVAC equipment with the resulting potential for additional energy, demand and cost benefits.

Gulf Power will utilize Participating Independent Contractors (PIC) to assist with field delivery of the Ceiling Insulation program. Customers will realize the financial incentives associated with each qualifying measure through reduced pricing by the PICs.

**Eligibility** – Existing GULF residential customers whose homes lack sufficient ceiling insulation. Minimum of R-19 insulation installed to qualify for incentive payment.

**Participant Financial Incentives** – Provided as a credit towards the installation cost on a customer's invoice from a PIC. The incentive value is up to a maximum of \$300 per participant.

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; Residential Home Energy Survey, PICs, television, radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses, end-use metering data and statistical billing analysis as applicable.

## **Residential High Efficiency Pool Pump**

**Start Date:** 2020

The High Efficiency Pool Pump Program will provide an incentive to encourage the installation of high-efficiency variable speed or variable flow pool pumping and control equipment in both new and existing residential applications. Because the energy required to power standard pool pumping equipment can represent a significant portion of the total energy consumed in residences with pools, the objective of the program is to reduce the energy, demand, and cost associated with swimming pool operation.

Gulf Power will utilize Participating Independent Contractors (PIC) to assist with field delivery of the High Efficiency Pool Pump Program. Customers will realize the financial incentives associated with each qualifying measure through reduced pricing by the PICs.

**Eligibility** – New and existing GULF residential customers occupying single-family detached homes who install a high-efficiency speed pool pump.

**Participant Financial Incentives** – Provided as a credit towards the installation cost on a customer's invoice from a PIC. The incentive value is up to a maximum of \$250 per participant.

**Marketing Channels** - Program promotion will be achieved through an appropriate mix of promotion methods which may include; Residential Home Energy Survey, PICs, television, radio, online, and print media.. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses, end-use metering data and statistical billing analysis as applicable.

## **Energy Select**

**Start Date:** 1995

The Energy Select Program is designed to increase the efficiency of energy consumption on Gulf Power's system. The program is an interactive energy management system that allows residential customers to program their central heating and cooling system, electric water heater and pool pump, if applicable, to automatically respond to varying prices of electricity depending upon the time of day, day of week and season. These prices are in relation to the Company's cost of producing or purchasing energy. Energy Select consists of three elements -- a price-responsive programmable thermostat and timers for a water heater and pool pump, a rate featuring four prices for electricity, and an online programming portal. These elements work together to enable customers to choose their own level of comfort and savings.

With this program, customers can save money by programming the largest portion of their energy purchases to occur in the lower price periods, while providing peak demand reduction benefits during the high and critical peak price periods.

### **Individual Program Measures:**

The primary features of this program offering are the following:

#### **Equipment**

- Programmable Communicating Thermostat (PCT)
- Load Control Relays (Water Heater, Pool Pump)

These premise-mounted devices allow the customer to program and control the temperature set points and equipment run times for the major energy using appliances in

their home. This automated technology provides automatic response to pricing signals depending on the customer's unique energy purchasing desires. These systems offer conservation of energy, as well as the ability to take advantage of lower cost periods when demand for electricity is not high.

### **Rate**

- Residential Service Variable Price (RSVP). This rate is a Critical Peak Pricing (CPP) mechanism that encourages reduced usage during Gulf Power's peak demand period by participating customers. The rate along with the equipment mentioned above, allows participants to program the majority of their energy purchases to avoid high demand/high price periods and to take advantage of off peak/lower priced electricity. The rate has four price tiers: the low and medium tiers offer cost savings over the standard RS rate and are in effect for 87% of the hours of the year, the high tier is in effect for 12% of the hours and the critical tier is capped at 1% of annual hours.

### **Communication**

- Wide area network communication is facilitated via the customer's broad band internet connection.

**Eligibility** - GULF residential customers.

**Participant Financial Incentive** – None

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; Residential Home Energy Survey, PICs, television,

radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses, end-use metering data and statistical billing analysis as applicable



**BUSINESS SECTOR PROGRAM PORTFOLIO**

## **Business Energy Survey (BES)**

**Start Date** – 1981

This program educates customers on energy efficiency and encourages them to participate in applicable DSM programs and/or implement other recommended actions not included as part of GULF's Business programs.

This program is a prime tool for GULF's Business Customer Advisors to introduce customers personally to conservation measures including low or no-cost improvements or new electro-technologies to replace old or inefficient equipment. As part of GULF's overall DSM Plan, many of the recommendations associated with this program are complemented with incentive-based programs to increase the likelihood of customer adoption.

There are two delivery channels for the BES: (1) Field BES, which is performed by a GULF representative at the customer's facility; and (2) Online BES, which is performed by the customer using GULF's online application.

**Eligibility** – GULF business customers.

**Participant Financial Incentives** – Free to the participant. The BES helps to determine which practices are most appropriate for a particular facility and how to qualify for incentives through other GULF Business programs.

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; television, radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Business Heating, Ventilating & Air Conditioning (HVAC)**

**Start Date** – 2020

This program encourages business customers to install high-efficiency HVAC systems. The goal of the program is to increase awareness and customer demand for high-efficiency, energy-saving equipment; increase availability and market penetration of energy efficient equipment; and contribute toward long-term energy savings and peak demand reductions. The primary types of eligible HVAC systems include: chillers; split/package direct expansion (DX); demand control ventilation (DCV); and energy recovery ventilation (ERV).

**Eligibility** – GULF business customers.

**Participant Financial Incentive** – Paid to customers, their designees or designers. The maximum per customer (*i.e.*, per Summer kW reduced) is:

- Chillers – \$210 per Summer kW reduction
- DX – \$180 per Summer kW reduction
- DCV – \$2,010 per Summer kW reduction
- ERV – \$1,270 per Summer kW reduction

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; BES, Gulf personnel, television, radio, online, and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses, end-use metering data and statistical billing analysis as applicable.

## **Curtable Load Rider (CL)**

**Start Date** – 2018

The Curtable Load (CL) program provides qualifying customers capacity payments for electric load which can be curtailed during certain conditions as described in Rate Rider CL.

The CL rider is available to customers taking service under rate schedules LP, LPT, PX, or PXT and who also execute a Curtable Load Service agreement (CL Service Agreement).

Qualifying customers must commit a minimum of 4,000 KW of non-firm load.

**Eligibility** – GULF business customers who meet the requirements of the CL Rider (Tariff Sheet Nos. 6.105 – 6.109).

**Participant Financial Incentives** – Monthly credit on the electric bill calculated as specified in the CL Rider.

**Marketing Channels** – Program promotion will be achieved through Gulf customer advisors who can assist potential customers with evaluation and benefits of this program.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

## **Business Custom Incentive (BCI)**

**Start Date** – 2000

The Business Custom Incentive (BCI) program is designed to establish the capability and process to offer advanced energy services and energy efficient end-use equipment to Business customers. Specifically, the types of projects covered under this program would be demand reduction or efficiency improvement retrofits that are beyond the scope of other programs included in this Plan.

A BCI project may be developed as a result of a Business Energy Survey or a customer-generated project proposal. The project must provide quantifiable demand and energy savings to be considered for a custom incentive. Each project will be evaluated for cost-effectiveness in accordance with Commission-approved tests before an incentive is established. Any incentive associated with this program will be provided upon successful installation and verification of the energy saving measures associated with the project.

**Eligibility** – GULF Business customers.

**Participant Financial Incentive** – The level of incentives contemplated under this program will be determined based on the cost-effectiveness of the project and not exceed an amount that brings the project to a two-year payback.

**Marketing Channels** – Program promotion will be achieved through an appropriate mix of promotion methods which may include; Business Energy Survey and Gulf personnel. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Gulf Power will monitor and evaluate program performance and progress toward goal achievement on a continual basis. Monitoring and evaluation will be administered on a case by case basis. Energy efficiency levels resulting in lower operating costs, improved customer perception, and kW and kWh reductions will be monitored in determining the effectiveness of this program.



## **OTHER PROGRAMS**

## **Conservation Demonstration and Development (CDD)**

**Start Date** –1990

The primary purpose of this program is to allow GULF to “pursue research, development and demonstration projects designed to promote energy efficiency and conservation” as stated in Order No. 22176 issued November 14, 1989, Docket No. 890737-PU, and is consistent with meeting the goals in Rule 25-17.001, Florida Administrative Code. This program enhances and complements the residential and business conservation programs currently implemented at GULF by evaluating new and existing technologies and program designs that may be incorporated in future program offerings. Areas of research may include energy and demand savings, technology maturity and customer acceptance.

GULF limits expenditures to an annual maximum of \$250,000 for all projects. Additionally, GULF will submit a report to the FPSC for any project that exceeds \$25,000.

**Demand/Energy Savings Measurement & Evaluation** – GULF will utilize a variety of approaches to measure the energy and demand savings associated with the CDD projects including engineering modeling analyses, end-use metering data and statistical billing analysis as applicable.

**Residential Service Time of Use (RSTOU) Rate Pilot** – The RSTOU rate pilot is one of several CDD programs implemented pursuant to the 2015 DSM Plan. The purpose of this pilot was to evaluate the use of customer-owned equipment to automatically respond and take advantage of a variable pricing structure with a critical peak component. In 2017, the Commission approved extension of the RSTOU pilot (and its associated Rate Schedule RSTOU)

until December 31, 2020, to allow interested customers to remain on the rate until the company filed a new DSM Plan. See, Order No. PSC-2017-0434-FOF-EG, issued on November 14, 2017. The pilot has largely been completed and GULF will not be requesting continuation of the program and accompanying rate schedule beyond December 31, 2020.

## SECTION III – PROGRAM PROJECTIONS<sup>3</sup>

<b>Table 4 - Total Customers</b>					
	2020	2021	2022	2023	2024
<b>Residential (Premises)</b>	415,321	419,169	422,477	425,601	428,685
<b>Business (Summer kW)</b>	725,802	730,375	734,392	738,137	741,828
<b>Table 5 - Eligible Customers</b>					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Energy Select	379,234	382,039	383,988	385,511	386,747
Residential Heat Pump	413,524	416,172	418,130	419,754	421,188
Residential Ceiling Insulation	413,524	416,572	418,980	421,104	423,013
Residential Pool Pump	78,570	78,151	77,454	76,598	75,584
Residential Low Income	144,733	142,330	139,738	137,081	134,411
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	725,802	729,975	733,552	736,812	739,973
Curtable Load	715,902	719,611	722,679	725,370	727,893
Business Custom Incentive	725,802	730,375	734,392	738,137	741,828
<b>Table 6 - Annual Participants</b>					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Energy Select	2,033	2,258	2,418	2,588	2,667
Residential Heat Pump	1,200	1,350	1,500	1,650	1,800
Residential Ceiling Insulation	800	900	1,000	1,175	1,300
Residential Pool Pump	1,150	1,325	1,450	1,600	1,750
Residential Low Income	3,750	3,750	3,750	3,750	3,750
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	400	440	485	530	570
Curtable Load	864	949	1,054	1,168	1,291
Business Custom Incentive	-	-	-	-	-
<b>Table 7 - Cumulative Penetration Levels</b>					
Programs	2020	2021	2022	2023	2024
<b>Residential Portfolio</b>					
Energy Select	0.5%	1.1%	1.7%	2.4%	3.1%
Residential Heat Pump	0.3%	0.6%	1.0%	1.4%	1.8%
Residential Ceiling Insulation	0.2%	0.4%	0.6%	0.9%	1.2%
Residential Pool Pump	1.5%	3.2%	5.1%	7.2%	9.6%
Residential Low Income	2.6%	5.3%	8.1%	10.9%	13.9%
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.1%	0.1%	0.2%	0.3%	0.3%
Curtable Load	0.1%	0.3%	0.4%	0.6%	0.7%
Business Custom Incentive	0.0%	0.0%	0.0%	0.0%	0.0%

<sup>3</sup> The specific number of participants in Table 6 for the Business Custom Incentive program is not projected due to the unique nature of projects under this program

<b>Table 8 - Total Summer kW Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	3,855	4,282	4,585	4,908	5,057
Residential Heat Pump	405	455	506	556	607
Residential Ceiling Insulation	465	523	582	683	756
Residential Pool Pump	1,735	1,999	2,187	2,414	2,640
Residential Low Income	240	240	240	240	240
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	421	464	511	558	600
Curtable Load	910	1,000	1,110	1,230	1,360
Business Custom Incentive	-	-	-	-	-
<b>Residential Subtotal</b>	<b>6,700</b>	<b>7,500</b>	<b>8,100</b>	<b>8,801</b>	<b>9,301</b>
<b>Business Subtotal</b>	<b>1,332</b>	<b>1,463</b>	<b>1,621</b>	<b>1,789</b>	<b>1,961</b>
<b>Grand Total</b>	<b>8,032</b>	<b>8,963</b>	<b>9,722</b>	<b>10,590</b>	<b>11,261</b>

<b>Table 9 - Total Winter kW Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	2,292	2,545	2,726	2,917	3,006
Residential Heat Pump	430	484	537	591	645
Residential Ceiling Insulation	813	915	1,017	1,195	1,322
Residential Pool Pump	-	-	-	-	-
Residential Low Income	499	499	499	499	499
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	659	725	799	873	939
Curtable Load	693	761	845	937	1,035
Business Custom Incentive	-	-	-	-	-
<b>Residential Subtotal</b>	<b>4,034</b>	<b>4,443</b>	<b>4,779</b>	<b>5,202</b>	<b>5,472</b>
<b>Business Subtotal</b>	<b>1,352</b>	<b>1,486</b>	<b>1,644</b>	<b>1,810</b>	<b>1,974</b>
<b>Grand Total</b>	<b>5,386</b>	<b>5,929</b>	<b>6,423</b>	<b>7,012</b>	<b>7,446</b>

<b>Table 10 - Total Annual kWh Savings (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1,574,646	1,748,918	1,872,845	2,004,517	2,065,706
Residential Heat Pump	1,531,382	1,722,805	1,914,228	2,105,650	2,297,073
Residential Ceiling Insulation	1,758,371	1,978,167	2,197,963	2,582,607	2,857,352
Residential Pool Pump	3,193,120	3,679,029	4,026,108	4,442,602	4,859,096
Residential Low Income	2,672,252	2,672,252	2,672,252	2,672,252	2,672,252
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1,666,005	1,832,605	2,020,031	2,207,456	2,374,057
Curtable Load	910	1,000	1,111	1,231	1,360
Business Custom Incentive	834,000	867,000	980,000	993,000	1,026,000
<b>Residential Subtotal</b>	<b>10,729,771</b>	<b>11,801,172</b>	<b>12,683,396</b>	<b>13,807,629</b>	<b>14,751,480</b>
<b>Business Subtotal</b>	<b>2,500,915</b>	<b>2,700,605</b>	<b>3,001,142</b>	<b>3,201,687</b>	<b>3,401,417</b>
<b>Grand Total</b>	<b>13,230,686</b>	<b>14,501,777</b>	<b>15,684,538</b>	<b>17,009,316</b>	<b>18,152,897</b>

<b>Table 11 - Total Summer kW Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	3,659	4,064	4,352	4,658	4,801
Residential Heat Pump	384	432	480	528	576
Residential Ceiling Insulation	442	497	552	649	718
Residential Pool Pump	1,647	1,897	2,076	2,291	2,506
Residential Low Income	228	228	228	228	228
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	400	440	485	530	570
Curtable Load	864	949	1,054	1,168	1,291
Business Custom Incentive	-	-	-	-	-
<b>Residential Subtotal</b>	<b>6,360</b>	<b>7,119</b>	<b>7,689</b>	<b>8,354</b>	<b>8,828</b>
<b>Business Subtotal</b>	<b>1,264</b>	<b>1,389</b>	<b>1,539</b>	<b>1,698</b>	<b>1,861</b>
<b>Grand Total</b>	<b>7,624</b>	<b>8,508</b>	<b>9,228</b>	<b>10,052</b>	<b>10,689</b>

<b>Table 12 - Total Winter kW Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	2,175	2,416	2,587	2,769	2,854
Residential Heat Pump	408	459	510	561	612
Residential Ceiling Insulation	772	869	965	1,134	1,255
Residential Pool Pump	-	-	-	-	-
Residential Low Income	474	474	474	474	474
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	625	688	758	829	891
Curtable Load	658	722	802	889	983
Business Custom Incentive	-	-	-	-	-
<b>Residential Subtotal</b>	<b>3,829</b>	<b>4,217</b>	<b>4,536</b>	<b>4,938</b>	<b>5,194</b>
<b>Business Subtotal</b>	<b>1,283</b>	<b>1,410</b>	<b>1,561</b>	<b>1,718</b>	<b>1,874</b>
<b>Grand Total</b>	<b>5,112</b>	<b>5,628</b>	<b>6,097</b>	<b>6,655</b>	<b>7,068</b>

<b>Table 13 - Total Annual kWh Savings (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1,494,255	1,659,630	1,777,230	1,902,180	1,960,245
Residential Heat Pump	1,453,200	1,634,850	1,816,500	1,998,150	2,179,800
Residential Ceiling Insulation	1,668,600	1,877,175	2,085,750	2,450,756	2,711,475
Residential Pool Pump	3,030,101	3,491,203	3,820,562	4,215,792	4,611,023
Residential Low Income	2,535,825	2,535,825	2,535,825	2,535,825	2,535,825
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1,580,950	1,739,045	1,916,902	2,094,758	2,252,853
Curtable Load	864	949	1,054	1,168	1,291
Business Custom Incentive	816,094	850,256	959,385	974,568	1,008,730
<b>Residential Subtotal</b>	<b>10,181,981</b>	<b>11,198,683</b>	<b>12,035,867</b>	<b>13,102,703</b>	<b>13,998,368</b>
<b>Business Subtotal</b>	<b>2,397,908</b>	<b>2,590,250</b>	<b>2,877,341</b>	<b>3,070,494</b>	<b>3,262,874</b>
<b>Grand Total</b>	<b>12,579,888</b>	<b>13,788,933</b>	<b>14,913,207</b>	<b>16,173,198</b>	<b>17,261,242</b>

<b>Table 14 - Summer kW Savings - per Customer (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1.90	1.90	1.90	1.90	1.90
Residential Heat Pump	0.34	0.34	0.34	0.34	0.34
Residential Ceiling Insulation	0.58	0.58	0.58	0.58	0.58
Residential Pool Pump	1.51	1.51	1.51	1.51	1.51
Residential Low Income	0.06	0.06	0.06	0.06	0.06
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.05	1.05	1.05	1.05	1.05
Curtable Load	1.05	1.05	1.05	1.05	1.05
Business Custom Incentive	-	-	-	-	-

<b>Table 15 - Winter kW Savings - per Customer (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1.13	1.13	1.13	1.13	1.13
Residential Heat Pump	0.36	0.36	0.36	0.36	0.36
Residential Ceiling Insulation	1.02	1.02	1.02	1.02	1.02
Residential Pool Pump	-	-	-	-	-
Residential Low Income	0.13	0.13	0.13	0.13	0.13
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.65	1.65	1.65	1.65	1.65
Curtable Load	0.80	0.80	0.80	0.80	0.80
Business Custom Incentive	-	-	-	-	-

<b>Table 16 - Annual kWh Savings - per Customer (at the Generator)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	775	775	775	775	775
Residential Heat Pump	1,276	1,276	1,276	1,276	1,276
Residential Ceiling Insulation	2,198	2,198	2,198	2,198	2,198
Residential Pool Pump	2,777	2,777	2,777	2,777	2,777
Residential Low Income	713	713	713	713	713
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	4,165	4,165	4,165	4,165	4,165
Curtable Load	1.05	1.05	1.05	1.05	1.05
Business Custom Incentive	-	-	-	-	-

<b>Table 17 - Summer kW Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1.80	1.80	1.80	1.80	1.80
Residential Heat Pump	0.32	0.32	0.32	0.32	0.32
Residential Ceiling Insulation	0.55	0.55	0.55	0.55	0.55
Residential Pool Pump	1.43	1.43	1.43	1.43	1.43
Residential Low Income	0.06	0.06	0.06	0.06	0.06
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.00	1.00	1.00	1.00	1.00
Curtable Load	1.00	1.00	1.00	1.00	1.00
Business Custom Incentive	-	-	-	-	-
<b>Table 18 - Winter kW Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	1.07	1.07	1.07	1.07	1.07
Residential Heat Pump	0.34	0.34	0.34	0.34	0.34
Residential Ceiling Insulation	0.97	0.97	0.97	0.97	0.97
Residential Pool Pump	-	-	-	-	-
Residential Low Income	0.13	0.13	0.13	0.13	0.13
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.56	1.56	1.56	1.56	1.56
Curtable Load	0.76	0.76	0.76	0.76	0.76
Business Custom Incentive	-	-	-	-	-
<b>Table 19 - Annual kWh Savings - per Customer (at the Meter)</b>					
<b>Programs</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>					
Energy Select	735	735	735	735	735
Residential Heat Pump	1,211	1,211	1,211	1,211	1,211
Residential Ceiling Insulation	2,086	2,086	2,086	2,086	2,086
Residential Pool Pump	2,635	2,635	2,635	2,635	2,635
Residential Low Income	676	676	676	676	676
<b>Business Portfolio</b>					
Business Heating, Ventilating, & Air Conditioning (HVAC)	3,952	3,952	3,952	3,952	3,952
Curtable Load	1.00	1.00	1.00	1.00	1.00
Business Custom Incentive	-	-	-	-	-



## APPENDIX A – Comparison of 2020 DSM Plan to the Current DSM Plan

### Residential Programs

2015	2020
Residential Energy Audit and Education	Residential Home Energy Survey (HES) (Renamed)
Community Energy Saver	Residential Low Income - Community Energy Saver
HVAC Efficiency	Residential HVAC (New)
HVAC Maintenance	<i>Discontinued</i>
HVAC Quality Installation	<i>Discontinued</i>
Duct Repair	<i>Discontinued</i>
Residential Building Efficiency	<i>Discontinued</i>
High Performance Windows	<i>Discontinued</i>
Reflective Roof	<i>Discontinued</i>
Energy Star Window A/C	<i>Discontinued</i>
	Residential Ceiling Insulation (New)
	Residential High Efficiency Pool Pump (New)
Energy Select	Energy Select
Residential Custom Incentive	<i>Discontinued</i>

### Business Programs

2015	2020
Commercial/Industrial Audit Program	Business Energy Survey (BES) (Renamed)
Commercial HVAC Efficiency Improvement	Business HVAC (New)
HVAC Retrocommissioning	<i>Discontinued</i>
Commercial Building Efficiency	<i>Discontinued</i>
Geothermal Heat Pump	<i>Discontinued</i>
Ceiling/Roof Insulation	<i>Discontinued</i>
Reflective Roofing	<i>Discontinued</i>
Critical Peak Option for Rate LPT <sup>4</sup>	<i>Discontinued</i>
Curtable Load <sup>5</sup>	Curtable Load
Business Custom Incentive	Business Custom Incentive
Conservation Demonstration and Development (CDD)	Conservation Demonstration and Development (CDD)

<sup>4</sup> Approved as part of the 2015 DSM Program in Order No. PSC-2017-0434-FOF-EG, issued November 14, 2017.

<sup>5</sup> Approved in Order No. PSC-2018-0159-PAA-EI, issued March 21, 2018.

## **APPENDIX B – Program-Level Cost-Effectiveness Analysis**

Run Date:  
Filename: Energy Select

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-1.36	kW/Cus
(2) Change in Peak kW per Customer at generator	-1.68	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	(775)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	(735)	kWh/Cus/Yr

II. Economic Life and K-Factors

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$0.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$0.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	2.10%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	2.10%	
* (12) Utility Discount Rate	7.25%	
* (13) Utility AFUDC Rate	5.73%	
* (14) Utility Nonrecurring Rebate/Incentive	\$0.00	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2019	
(2) In-Service Year For Incremental Generation	2024 **	
(3) In-Service Year For Incremental T & D	2020	
(4) Base Year Incremental Generation Cost	\$806.95	\$/kW
(5) Base Year Incremental Transmission Cost	\$205.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$173.77	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%	
(8) Generator Fixed O & M Cost	\$59.33	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.24%	
(10) Transmission Fixed O & M Cost	\$3.87	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	81.49%	
(16) Incremental Generating Unit Fuel Cost	\$0.0314	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.42%	
(18) Incremental Purchased Capacity Cost	\$12.54	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	7.57%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0767	\$/kWh
(2) Non-Fuel Escalation Rate		Per Table
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate		Per Table
* (5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants	RIM
NPV Benefits(\$000s)	\$25,883	\$15,489	\$25,883
NPV Costs (\$000s)	\$12,743	\$0	\$28,232
NPV Net Benefits (\$000s)	\$13,140	\$15,489	(\$2,349)
Benefit:Cost Ratio	2.031	#DIV/0!	0.917

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13	
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Cap Costs (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$1,039	\$0	\$0	\$0	\$0	(\$137)	(\$137)	(\$48)	\$1,039	\$186	(\$853)	(\$796)
2021	\$0	\$1,181	\$0	\$0	\$0	\$0	(\$295)	(\$295)	(\$115)	\$1,181	\$410	(\$771)	(\$1,466)
2022	\$0	\$1,325	\$0	\$0	\$0	\$0	(\$472)	(\$472)	(\$189)	\$1,325	\$660	(\$664)	(\$2,005)
2023	\$0	\$1,469	\$0	\$0	\$0	\$0	(\$667)	(\$667)	(\$283)	\$1,469	\$951	(\$519)	(\$2,396)
2024	\$0	\$1,610	\$0	\$0	\$0	(\$2,568)	(\$877)	(\$877)	(\$152)	\$1,610	\$3,626	\$2,016	(\$976)
2025	\$0	\$1,574	\$0	\$0	\$0	(\$2,502)	(\$850)	(\$850)	(\$137)	\$1,574	\$3,490	\$1,915	\$282
2026	\$0	\$1,539	\$0	\$0	\$0	(\$2,410)	(\$825)	(\$825)	(\$143)	\$1,539	\$3,378	\$1,839	\$1,408
2027	\$0	\$1,504	\$0	\$0	\$0	(\$2,322)	(\$800)	(\$800)	(\$147)	\$1,504	\$3,269	\$1,765	\$2,416
2028	\$0	\$1,260	\$0	\$0	\$0	(\$2,237)	(\$776)	(\$776)	(\$149)	\$1,260	\$3,162	\$1,902	\$3,429
2029	\$0	\$1,226	\$0	\$0	\$0	(\$2,155)	(\$753)	(\$753)	(\$153)	\$1,226	\$3,061	\$1,835	\$4,340
2030	\$0	\$826	\$0	\$0	\$0	(\$2,077)	(\$730)	(\$730)	(\$157)	\$826	\$2,964	\$1,738	\$5,329
2031	\$0	\$785	\$0	\$0	\$0	(\$2,002)	(\$708)	(\$708)	(\$158)	\$785	\$2,868	\$2,083	\$6,228
2032	\$0	\$745	\$0	\$0	\$0	(\$1,929)	(\$687)	(\$687)	(\$165)	\$745	\$2,781	\$1,988	\$7,047
2033	\$0	\$705	\$0	\$0	\$0	(\$1,860)	(\$666)	(\$666)	(\$167)	\$705	\$2,693	\$1,988	\$7,793
2034	\$0	\$665	\$0	\$0	\$0	(\$1,793)	(\$646)	(\$646)	(\$168)	\$665	\$2,607	\$1,942	\$8,472
2035	\$0	\$625	\$0	\$0	\$0	(\$1,728)	(\$627)	(\$627)	(\$172)	\$625	\$2,527	\$1,901	\$9,093
2036	\$0	\$586	\$0	\$0	\$0	(\$1,666)	(\$608)	(\$608)	(\$173)	\$586	\$2,447	\$1,861	\$9,658
2037	\$0	\$557	\$0	\$0	\$0	(\$1,607)	(\$590)	(\$590)	(\$171)	\$557	\$2,368	\$1,811	\$10,172
2038	\$0	\$564	\$0	\$0	\$0	(\$1,549)	(\$572)	(\$572)	(\$173)	\$564	\$2,295	\$1,731	\$10,629
2039	\$0	\$571	\$0	\$0	\$0	(\$1,494)	(\$555)	(\$555)	(\$173)	\$571	\$2,222	\$1,651	\$11,036
2040	\$0	\$579	\$0	\$0	\$0	(\$1,441)	(\$538)	(\$538)	(\$174)	\$579	\$2,154	\$1,575	\$11,398
2041	\$0	\$586	\$0	\$0	\$0	(\$1,390)	(\$522)	(\$522)	(\$175)	\$586	\$2,087	\$1,500	\$11,720
2042	\$0	\$595	\$0	\$0	\$0	(\$1,341)	(\$506)	(\$506)	(\$175)	\$595	\$2,021	\$1,426	\$12,004
2043	\$0	\$603	\$0	\$0	\$0	(\$1,294)	(\$491)	(\$491)	(\$174)	\$603	\$1,959	\$1,356	\$12,257
2044	\$0	\$611	\$0	\$0	\$0	(\$1,248)	(\$476)	(\$476)	(\$175)	\$611	\$1,899	\$1,288	\$12,481
2045	\$0	\$620	\$0	\$0	\$0	(\$1,204)	(\$462)	(\$462)	(\$172)	\$620	\$1,839	\$1,219	\$12,678
2046	\$0	\$629	\$0	\$0	\$0	(\$1,162)	(\$448)	(\$448)	(\$173)	\$629	\$1,783	\$1,154	\$12,852
2047	\$0	\$638	\$0	\$0	\$0	(\$1,121)	(\$435)	(\$435)	(\$173)	\$638	\$1,729	\$1,090	\$13,005
2048	\$0	\$648	\$0	\$0	\$0	(\$1,082)	(\$422)	(\$422)	(\$170)	\$648	\$1,673	\$1,025	\$13,140
Nominal NPV		\$25,867	\$0.000	\$0.000	\$0.000	(\$43,212)	(\$17,142)	(\$17,142)	(\$4,752)	\$25,867	\$65,106	\$39,239	
Discount Rate =		\$12,743.300				(\$16,791.075)	(\$7,207.008)	(\$7,207.008)	(\$1,885.154)	\$12,743.300	\$25,883.238	\$13,139.938	
Benefit/Cost Ratio =		7.25%				2.03							

Participants' Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$0	\$0	\$0	(\$323)	\$0	\$0	\$0	\$323	\$323	\$301
2021	\$0	\$0	\$0	\$0	(\$698)	\$0	\$0	\$0	\$698	\$698	\$908
2022	\$0	\$0	\$0	\$0	(\$1,112)	\$0	\$0	\$0	\$1,112	\$1,112	\$1,809
2023	\$0	\$0	\$0	\$0	(\$1,564)	\$0	\$0	\$0	\$1,564	\$1,564	\$2,991
2024	\$0	\$0	\$0	\$0	(\$2,027)	\$0	\$0	\$0	\$2,027	\$2,027	\$4,419
2025	\$0	\$0	\$0	\$0	(\$1,921)	\$0	\$0	\$0	\$1,921	\$1,921	\$5,681
2026	\$0	\$0	\$0	\$0	(\$1,839)	\$0	\$0	\$0	\$1,839	\$1,839	\$6,807
2027	\$0	\$0	\$0	\$0	(\$1,759)	\$0	\$0	\$0	\$1,759	\$1,759	\$7,812
2028	\$0	\$0	\$0	\$0	(\$1,682)	\$0	\$0	\$0	\$1,682	\$1,682	\$8,707
2029	\$0	\$0	\$0	\$0	(\$1,614)	\$0	\$0	\$0	\$1,614	\$1,614	\$9,509
2030	\$0	\$0	\$0	\$0	(\$1,550)	\$0	\$0	\$0	\$1,550	\$1,550	\$10,226
2031	\$0	\$0	\$0	\$0	(\$1,484)	\$0	\$0	\$0	\$1,484	\$1,484	\$10,867
2032	\$0	\$0	\$0	\$0	(\$1,424)	\$0	\$0	\$0	\$1,424	\$1,424	\$11,440
2033	\$0	\$0	\$0	\$0	(\$1,363)	\$0	\$0	\$0	\$1,363	\$1,363	\$11,951
2034	\$0	\$0	\$0	\$0	(\$1,305)	\$0	\$0	\$0	\$1,305	\$1,305	\$12,407
2035	\$0	\$0	\$0	\$0	(\$1,251)	\$0	\$0	\$0	\$1,251	\$1,251	\$12,815
2036	\$0	\$0	\$0	\$0	(\$1,192)	\$0	\$0	\$0	\$1,192	\$1,192	\$13,177
2037	\$0	\$0	\$0	\$0	(\$1,145)	\$0	\$0	\$0	\$1,145	\$1,145	\$13,502
2038	\$0	\$0	\$0	\$0	(\$1,099)	\$0	\$0	\$0	\$1,099	\$1,099	\$13,793
2039	\$0	\$0	\$0	\$0	(\$1,077)	\$0	\$0	\$0	\$1,077	\$1,077	\$14,058
2040	\$0	\$0	\$0	\$0	(\$1,036)	\$0	\$0	\$0	\$1,036	\$1,036	\$14,296
2041	\$0	\$0	\$0	\$0	(\$996)	\$0	\$0	\$0	\$996	\$996	\$14,509
2042	\$0	\$0	\$0	\$0	(\$947)	\$0	\$0	\$0	\$947	\$947	\$14,699
2043	\$0	\$0	\$0	\$0	(\$913)	\$0	\$0	\$0	\$913	\$913	\$14,869
2044	\$0	\$0	\$0	\$0	(\$879)	\$0	\$0	\$0	\$879	\$879	\$15,022
2045	\$0	\$0	\$0	\$0	(\$846)	\$0	\$0	\$0	\$846	\$846	\$15,158
2046	\$0	\$0	\$0	\$0	(\$812)	\$0	\$0	\$0	\$812	\$812	\$15,281
2047	\$0	\$0	\$0	\$0	(\$780)	\$0	\$0	\$0	\$780	\$780	\$15,391
2048	\$0	\$0	\$0	\$0	(\$749)	\$0	\$0	\$0	\$749	\$749	\$15,489
<b>Nominal NPV</b>	\$0	\$0	\$0	\$0	(\$35,388)	\$0	\$0	\$0,000	\$35,388	\$35,388	\$35,388
<b>Discount Rate = 7.25%</b>					(\$15,489)				\$15,489.137	\$15,489	\$15,489
<b>Benefit/Cost Ratio = #DIV/0!</b>											

Ratepayers' Impact Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

Year	2	3	4	5	6	7	8	9	10	11	12	13	14
	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2020	\$0.000	\$1,038,902	\$0.000	(\$322,952)	\$0.000	(\$137,112)	(\$48,413)	\$0.000	\$0.000	\$1,361,853	\$185,524	(\$1,176,329)	(\$1,096,767)
2021	\$0.000	\$1,181,287	\$0.000	(\$697,741)	\$0.000	(\$295,476)	(\$114,684)	\$0.000	\$0.000	\$1,879,029	\$410,160	(\$1,468,869)	(\$2,373,660)
2022	\$0.000	\$1,324,668	\$0.000	(\$1,111,897)	\$0.000	(\$471,680)	(\$188,562)	\$0.000	\$0.000	\$2,436,565	\$660,242	(\$1,776,324)	(\$3,813,384)
2023	\$0.000	\$1,469,154	\$0.000	(\$1,563,877)	\$0.000	(\$667,356)	(\$283,247)	\$0.000	\$0.000	\$3,033,030	\$950,604	(\$2,082,427)	(\$5,387,050)
2024	\$0.000	\$1,610,272	\$0.000	(\$2,027,432)	(\$2,597,570)	(\$876,833)	(\$151,522)	\$0.000	\$0.000	\$3,637,705	\$3,625,926	(\$11,779)	(\$5,395,349)
2025	\$0.000	\$1,574,446	\$0.000	(\$1,921,441)	(\$2,501,958)	(\$850,485)	(\$137,437)	\$0.000	\$0.000	\$3,495,887	\$3,489,880	(\$6,007)	(\$5,399,295)
2026	\$0.000	\$1,539,032	\$0.000	(\$1,838,517)	(\$2,410,092)	(\$824,928)	(\$142,867)	\$0.000	\$0.000	\$3,377,549	\$3,377,887	\$0.338	(\$5,399,086)
2027	\$0.000	\$1,504,028	\$0.000	(\$1,758,603)	(\$2,321,815)	(\$800,138)	(\$147,018)	\$0.000	\$0.000	\$3,262,631	\$3,268,972	\$6,341	(\$5,395,467)
2028	\$0.000	\$1,260,248	\$0.000	(\$1,662,054)	(\$2,236,980)	(\$776,094)	(\$149,089)	\$0.000	\$0.000	\$2,942,302	\$3,162,162	\$219,860	(\$5,278,405)
2029	\$0.000	\$1,226,059	\$0.000	(\$1,613,902)	(\$2,155,442)	(\$752,773)	(\$152,735)	\$0.000	\$0.000	\$2,839,961	\$3,060,950	\$220,988	(\$5,168,699)
2030	\$0.000	\$826,189	\$0.000	(\$1,550,321)	(\$2,077,065)	(\$730,152)	(\$156,630)	\$0.000	\$0.000	\$2,376,509	\$2,963,847	\$587,338	(\$4,896,848)
2031	\$0.000	\$785,491	\$0.000	(\$1,484,383)	(\$2,001,720)	(\$708,211)	(\$158,477)	\$0.000	\$0.000	\$2,289,874	\$2,868,408	\$598,534	(\$4,638,553)
2032	\$0.000	\$745,052	\$0.000	(\$1,423,768)	(\$1,929,282)	(\$686,929)	(\$164,982)	\$0.000	\$0.000	\$2,168,821	\$2,781,193	\$612,372	(\$4,392,159)
2033	\$0.000	\$704,871	\$0.000	(\$1,362,628)	(\$1,859,630)	(\$666,287)	(\$167,047)	\$0.000	\$0.000	\$2,067,499	\$2,692,964	\$625,466	(\$4,157,518)
2034	\$0.000	\$664,944	\$0.000	(\$1,305,081)	(\$1,792,651)	(\$646,265)	(\$167,989)	\$0.000	\$0.000	\$1,970,025	\$2,606,906	\$636,880	(\$3,934,755)
2035	\$0.000	\$625,270	\$0.000	(\$1,250,629)	(\$1,728,236)	(\$626,845)	(\$171,652)	\$0.000	\$0.000	\$1,875,899	\$2,526,733	\$650,834	(\$3,722,508)
2036	\$0.000	\$585,869	\$0.000	(\$1,192,014)	(\$1,666,281)	(\$608,008)	(\$172,856)	\$0.000	\$0.000	\$1,777,882	\$2,447,145	\$669,262	(\$3,519,013)
2037	\$0.000	\$556,750	\$0.000	(\$1,145,466)	(\$1,606,684)	(\$589,737)	(\$171,197)	\$0.000	\$0.000	\$1,702,216	\$2,367,619	\$665,403	(\$3,330,375)
2038	\$0.000	\$563,804	\$0.000	(\$1,098,760)	(\$1,549,352)	(\$572,016)	(\$173,298)	\$0.000	\$0.000	\$1,662,565	\$2,294,665	\$632,101	(\$3,163,299)
2039	\$0.000	\$571,108	\$0.000	(\$1,077,126)	(\$1,494,191)	(\$564,827)	(\$173,280)	\$0.000	\$0.000	\$1,648,234	\$2,222,298	\$574,064	(\$3,021,826)
2040	\$0.000	\$578,659	\$0.000	(\$1,036,022)	(\$1,441,115)	(\$538,154)	(\$174,479)	\$0.000	\$0.000	\$1,614,681	\$2,153,748	\$539,067	(\$2,897,962)
2041	\$0.000	\$586,458	\$0.000	(\$995,637)	(\$1,390,040)	(\$521,983)	(\$174,899)	\$0.000	\$0.000	\$1,582,095	\$2,086,921	\$504,826	(\$2,789,812)
2042	\$0.000	\$594,505	\$0.000	(\$947,408)	(\$1,340,885)	(\$506,297)	(\$173,445)	\$0.000	\$0.000	\$1,541,913	\$2,020,627	\$478,714	(\$2,694,192)
2043	\$0.000	\$602,801	\$0.000	(\$913,417)	(\$1,293,573)	(\$491,083)	(\$173,855)	\$0.000	\$0.000	\$1,516,218	\$1,958,511	\$442,293	(\$2,611,823)
2044	\$0.000	\$611,346	\$0.000	(\$879,467)	(\$1,248,031)	(\$476,326)	(\$174,721)	\$0.000	\$0.000	\$1,490,813	\$1,899,077	\$408,264	(\$2,540,933)
2045	\$0.000	\$620,141	\$0.000	(\$846,177)	(\$1,204,188)	(\$462,012)	(\$172,486)	\$0.000	\$0.000	\$1,466,318	\$1,838,686	\$372,369	(\$2,480,649)
2046	\$0.000	\$629,187	\$0.000	(\$812,428)	(\$1,161,977)	(\$448,129)	(\$172,793)	\$0.000	\$0.000	\$1,441,615	\$1,782,900	\$341,284	(\$2,429,134)
2047	\$0.000	\$638,485	\$0.000	(\$779,937)	(\$1,121,334)	(\$434,662)	(\$172,568)	\$0.000	\$0.000	\$1,418,422	\$1,728,554	\$310,132	(\$2,385,488)
2048	\$0.000	\$648,037	\$0.000	(\$748,762)	(\$1,082,195)	(\$421,601)	(\$169,564)	\$0.000	\$0.000	\$1,396,799	\$1,673,360	\$276,561	(\$2,349,199)
Nominal NPV		\$25,867,063	\$0.000	(\$35,387,846)	(\$43,212,288)	(\$17,142,397)	(\$4,751,762)	\$0.000	\$0.000	\$61,254,908	\$65,106,467	\$3,851,559	
Discount Rate =		\$12,743,300		(\$15,489,137)	(\$16,791,075)	(\$7,207,008)	(\$1,885,154)			\$28,232,437	\$25,863,238	(\$2,349,199)	
Benefit/Cost Ratio =		7.25%		0.92									

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-0.33	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.41	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	(1.276)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	(1,211)	kWh/Cus/Yr

II. Economic Life and K-Factors

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$165.21	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$1,709.17	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	2.10%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	2.10%	
* (12) Utility Discount Rate	7.25%	
* (13) Utility AFUDC Rate	5.73%	
* (14) Utility Nonrecurring Rebate/Incentive	\$250.00	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2019	
(2) In-Service Year For Incremental Generation	2024 **	
(3) In-Service Year For Incremental T & D	2020	
(4) Base Year Incremental Generation Cost	\$806.95	\$/kW
(5) Base Year Incremental Transmission Cost	\$205.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$173.77	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%	
(8) Generator Fixed O & M Cost	\$59.33	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.24%	
(10) Transmission Fixed O & M Cost	\$3.87	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	81.49%	
(16) Incremental Generating Unit Fuel Cost	\$0.0314	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.42%	
(18) Incremental Purchased Capacity Cost	\$12.54	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	7.57%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0767	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table	
* (5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants	RIM
NPV Benefits(\$000s)	\$8,374	\$13,751	\$8,374
NPV Costs (\$000s)	\$11,290	\$10,295	\$14,746
NPV Net Benefits (\$000s)	(\$2,916)	\$3,456	(\$6,372)
Benefit:Cost Ratio	0.742	1.336	0.568

\* Supplemental information.  
 \*\* The relevant avoidable generation unit is a combined cycle unit.

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$198	\$2,051	\$0	\$0	\$0	(\$20)	(\$47)	\$2,249	\$67	(\$2,182)	(\$2,035)
2021	\$0	\$223	\$2,307	\$0	\$0	\$0	(\$43)	(\$112)	\$2,530	\$155	(\$2,375)	(\$4,100)
2022	\$0	\$248	\$2,564	\$0	\$0	\$0	(\$70)	(\$188)	\$2,812	\$257	(\$2,554)	(\$6,170)
2023	\$0	\$273	\$2,820	\$0	\$0	\$0	(\$100)	(\$286)	\$3,093	\$386	(\$2,707)	(\$8,215)
2024	\$0	\$297	\$3,077	\$0	\$0	(\$368)	(\$134)	(\$157)	\$3,374	\$688	(\$2,686)	(\$10,108)
2025	\$0	\$0	\$0	\$0	\$0	(\$403)	(\$137)	(\$149)	\$0	\$690	\$690	(\$9,655)
2026	\$0	\$0	\$0	\$0	\$0	(\$409)	(\$140)	(\$164)	\$0	\$712	\$712	(\$9,218)
2027	\$0	\$0	\$0	\$0	\$0	(\$415)	(\$143)	(\$177)	\$0	\$735	\$735	(\$8,799)
2028	\$0	\$0	\$0	\$0	\$0	(\$420)	(\$146)	(\$189)	\$0	\$755	\$755	(\$8,397)
2029	\$0	\$0	\$0	\$0	\$0	(\$426)	(\$149)	(\$204)	\$0	\$779	\$779	(\$8,010)
2030	\$0	\$0	\$0	\$0	\$0	(\$433)	(\$152)	(\$220)	\$0	\$805	\$805	(\$7,637)
2031	\$0	\$0	\$0	\$0	\$0	(\$439)	(\$155)	(\$234)	\$0	\$828	\$828	(\$7,280)
2032	\$0	\$0	\$0	\$0	\$0	(\$445)	(\$159)	(\$257)	\$0	\$861	\$861	(\$6,934)
2033	\$0	\$0	\$0	\$0	\$0	(\$452)	(\$162)	(\$274)	\$0	\$887	\$887	(\$6,601)
2034	\$0	\$0	\$0	\$0	\$0	(\$458)	(\$165)	(\$290)	\$0	\$913	\$913	(\$6,281)
2035	\$0	\$0	\$0	\$0	\$0	(\$465)	(\$169)	(\$312)	\$0	\$946	\$946	(\$5,973)
2036	\$0	\$0	\$0	\$0	\$0	(\$472)	(\$172)	(\$330)	\$0	\$975	\$975	(\$5,677)
2037	\$0	\$0	\$0	\$0	\$0	(\$479)	(\$176)	(\$344)	\$0	\$999	\$999	(\$5,393)
2038	\$0	\$0	\$0	\$0	\$0	(\$486)	(\$180)	(\$367)	\$0	\$1,033	\$1,033	(\$5,120)
2039	\$0	\$0	\$0	\$0	\$0	(\$494)	(\$183)	(\$386)	\$0	\$1,063	\$1,063	(\$4,858)
2040	\$0	\$0	\$0	\$0	\$0	(\$501)	(\$187)	(\$409)	\$0	\$1,098	\$1,098	(\$4,606)
2041	\$0	\$0	\$0	\$0	\$0	(\$509)	(\$191)	(\$432)	\$0	\$1,132	\$1,132	(\$4,364)
2042	\$0	\$0	\$0	\$0	\$0	(\$517)	(\$195)	(\$451)	\$0	\$1,163	\$1,163	(\$4,131)
2043	\$0	\$0	\$0	\$0	\$0	(\$525)	(\$199)	(\$476)	\$0	\$1,200	\$1,200	(\$3,908)
2044	\$0	\$0	\$0	\$0	\$0	(\$533)	(\$203)	(\$503)	\$0	\$1,240	\$1,240	(\$3,693)
2045	\$0	\$0	\$0	\$0	\$0	(\$541)	(\$208)	(\$523)	\$0	\$1,272	\$1,272	(\$3,487)
2046	\$0	\$0	\$0	\$0	\$0	(\$550)	(\$212)	(\$552)	\$0	\$1,313	\$1,313	(\$3,288)
2047	\$0	\$0	\$0	\$0	\$0	(\$558)	(\$216)	(\$580)	\$0	\$1,355	\$1,355	(\$3,098)
2048	\$0	\$0	\$0	\$0	\$0	(\$567)	(\$221)	(\$600)	\$0	\$1,388	\$1,388	(\$2,916)
Nominal NPV	\$1,239	\$995,097	\$12,819	\$0,000	\$0,000	(\$11,895)	(\$4,587)	(\$9,213)	\$14,058	\$25,695	\$11,637	\$11,637
Discount Rate =			\$10,294.816			(\$3,888.615)	(\$1,580.974)	(\$2,904.747)	\$11,289.913	\$8,374.336	(\$2,915.577)	(\$2,915.577)
Benefit/Cost Ratio =		7.25%										
		0.74										



Participants' Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$2,051	\$0	\$0	\$0	(\$154)	\$0	\$300	\$2,051	\$454	(\$1,597)	(\$1,489)
2021	\$2,307	\$0	\$0	\$0	(\$343)	\$0	\$338	\$2,307	\$681	(\$1,626)	(\$2,903)
2022	\$2,564	\$0	\$0	\$0	(\$566)	\$0	\$375	\$2,564	\$941	(\$1,622)	(\$4,218)
2023	\$2,820	\$0	\$0	\$0	(\$820)	\$0	\$413	\$2,820	\$1,233	(\$1,587)	(\$5,417)
2024	\$3,077	\$0	\$0	\$0	(\$1,095)	\$0	\$450	\$3,077	\$1,545	(\$1,532)	(\$6,496)
2025	\$0	\$0	\$0	\$0	(\$1,090)	\$0	\$0	\$0	\$1,090	\$1,090	(\$5,780)
2026	\$0	\$0	\$0	\$0	(\$1,105)	\$0	\$0	\$0	\$1,105	\$1,105	(\$5,103)
2027	\$0	\$0	\$0	\$0	(\$1,119)	\$0	\$0	\$0	\$1,119	\$1,119	(\$4,464)
2028	\$0	\$0	\$0	\$0	(\$1,134)	\$0	\$0	\$0	\$1,134	\$1,134	(\$3,860)
2029	\$0	\$0	\$0	\$0	(\$1,155)	\$0	\$0	\$0	\$1,155	\$1,155	(\$3,287)
2030	\$0	\$0	\$0	\$0	(\$1,179)	\$0	\$0	\$0	\$1,179	\$1,179	(\$2,741)
2031	\$0	\$0	\$0	\$0	(\$1,196)	\$0	\$0	\$0	\$1,196	\$1,196	(\$2,225)
2032	\$0	\$0	\$0	\$0	(\$1,218)	\$0	\$0	\$0	\$1,218	\$1,218	(\$1,735)
2033	\$0	\$0	\$0	\$0	(\$1,234)	\$0	\$0	\$0	\$1,234	\$1,234	(\$1,272)
2034	\$0	\$0	\$0	\$0	(\$1,252)	\$0	\$0	\$0	\$1,252	\$1,252	(\$834)
2035	\$0	\$0	\$0	\$0	(\$1,272)	\$0	\$0	\$0	\$1,272	\$1,272	(\$419)
2036	\$0	\$0	\$0	\$0	(\$1,279)	\$0	\$0	\$0	\$1,279	\$1,279	(\$30)
2037	\$0	\$0	\$0	\$0	(\$1,306)	\$0	\$0	\$0	\$1,306	\$1,306	\$340
2038	\$0	\$0	\$0	\$0	(\$1,328)	\$0	\$0	\$0	\$1,328	\$1,328	\$691
2039	\$0	\$0	\$0	\$0	(\$1,402)	\$0	\$0	\$0	\$1,402	\$1,402	\$1,037
2040	\$0	\$0	\$0	\$0	(\$1,432)	\$0	\$0	\$0	\$1,432	\$1,432	\$1,366
2041	\$0	\$0	\$0	\$0	(\$1,460)	\$0	\$0	\$0	\$1,460	\$1,460	\$1,679
2042	\$0	\$0	\$0	\$0	(\$1,464)	\$0	\$0	\$0	\$1,464	\$1,464	\$1,971
2043	\$0	\$0	\$0	\$0	(\$1,501)	\$0	\$0	\$0	\$1,501	\$1,501	\$2,251
2044	\$0	\$0	\$0	\$0	(\$1,535)	\$0	\$0	\$0	\$1,535	\$1,535	\$2,517
2045	\$0	\$0	\$0	\$0	(\$1,567)	\$0	\$0	\$0	\$1,567	\$1,567	\$2,771
2046	\$0	\$0	\$0	\$0	(\$1,595)	\$0	\$0	\$0	\$1,595	\$1,595	\$3,012
2047	\$0	\$0	\$0	\$0	(\$1,622)	\$0	\$0	\$0	\$1,622	\$1,622	\$3,240
2048	\$0	\$0	\$0	\$0	(\$1,650)	\$0	\$0	\$0	\$1,650	\$1,650	\$3,456
<b>Nominal NPV</b>	\$12,819	\$0	\$0	\$0	(\$35,076)	\$0	\$1,875	\$12,819	\$36,951	\$24,132	\$24,132
<b>Discount Rate =</b>	\$10,295				(\$12,245)		\$1,506	\$10,294.816	\$13,751.218	\$3,456	\$3,456
<b>Benefit/Cost Ratio =</b>											7.25%
											1.34

Ratepayers' Impact Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2020	\$0.00	\$198,250	\$300,000	(\$154,227)	\$0.00	(\$19,763)	(\$47,082)	\$0.00	\$0.00	\$652,477	\$66,845	(\$585,631)	(\$546,022)
2021	\$0.00	\$223,031	\$337,500	(\$343,491)	\$0.00	(\$42,877)	(\$112,290)	\$0.00	\$0.00	\$904,022	\$155,167	(\$748,855)	(\$1,197,004)
2022	\$0.00	\$247,813	\$375,000	(\$566,406)	\$0.00	(\$69,529)	(\$187,546)	\$0.00	\$0.00	\$1,189,219	\$257,076	(\$932,143)	(\$1,952,513)
2023	\$0.00	\$272,594	\$412,500	(\$820,464)	\$0.00	(\$99,911)	(\$286,124)	\$0.00	\$0.00	\$1,505,588	\$386,035	(\$1,119,522)	(\$2,798,524)
2024	\$0.00	\$297,375	\$450,000	(\$1,094,979)	(\$397,628)	(\$134,223)	(\$156,501)	\$0.00	\$0.00	\$1,842,354	\$688,352	(\$1,154,002)	(\$3,611,607)
2025	\$0.00	\$0.00	\$0.00	(\$1,089,857)	(\$403,149)	(\$137,042)	(\$149,424)	\$0.00	\$0.00	\$1,089,957	\$689,615	(\$400,342)	(\$3,874,601)
2026	\$0.00	\$0.00	\$0.00	(\$1,105,005)	(\$408,786)	(\$139,919)	(\$163,504)	\$0.00	\$0.00	\$1,105,005	\$712,209	(\$392,796)	(\$4,115,186)
2027	\$0.00	\$0.00	\$0.00	(\$1,119,475)	(\$414,540)	(\$142,858)	(\$177,109)	\$0.00	\$0.00	\$1,119,475	\$734,507	(\$384,968)	(\$4,335,027)
2028	\$0.00	\$0.00	\$0.00	(\$1,133,907)	(\$420,414)	(\$145,858)	(\$189,056)	\$0.00	\$0.00	\$1,133,907	\$755,328	(\$378,579)	(\$4,536,598)
2029	\$0.00	\$0.00	\$0.00	(\$1,155,198)	(\$426,410)	(\$148,921)	(\$203,874)	\$0.00	\$0.00	\$1,155,198	\$779,206	(\$375,982)	(\$4,723,251)
2030	\$0.00	\$0.00	\$0.00	(\$1,179,244)	(\$432,532)	(\$152,048)	(\$220,077)	\$0.00	\$0.00	\$1,179,244	\$804,657	(\$374,587)	(\$4,896,630)
2031	\$0.00	\$0.00	\$0.00	(\$1,196,369)	(\$438,781)	(\$155,241)	(\$234,391)	\$0.00	\$0.00	\$1,196,369	\$828,413	(\$367,955)	(\$5,055,420)
2032	\$0.00	\$0.00	\$0.00	(\$1,217,550)	(\$445,160)	(\$158,501)	(\$256,856)	\$0.00	\$0.00	\$1,217,550	\$860,517	(\$357,032)	(\$5,199,076)
2033	\$0.00	\$0.00	\$0.00	(\$1,234,016)	(\$451,672)	(\$161,830)	(\$273,759)	\$0.00	\$0.00	\$1,234,016	\$887,261	(\$346,755)	(\$5,329,160)
2034	\$0.00	\$0.00	\$0.00	(\$1,252,276)	(\$458,320)	(\$165,228)	(\$289,793)	\$0.00	\$0.00	\$1,252,276	\$913,341	(\$338,935)	(\$5,447,710)
2035	\$0.00	\$0.00	\$0.00	(\$1,271,890)	(\$465,107)	(\$168,698)	(\$311,695)	\$0.00	\$0.00	\$1,271,890	\$945,500	(\$326,390)	(\$5,554,151)
2036	\$0.00	\$0.00	\$0.00	(\$1,279,376)	(\$472,035)	(\$172,241)	(\$330,402)	\$0.00	\$0.00	\$1,279,376	\$974,678	(\$304,698)	(\$5,646,797)
2037	\$0.00	\$0.00	\$0.00	(\$1,305,638)	(\$479,108)	(\$175,858)	(\$344,454)	\$0.00	\$0.00	\$1,305,638	\$999,419	(\$295,109)	(\$5,733,608)
2038	\$0.00	\$0.00	\$0.00	(\$1,328,020)	(\$486,328)	(\$179,551)	(\$367,032)	\$0.00	\$0.00	\$1,328,020	\$1,032,910	(\$295,109)	(\$5,811,611)
2039	\$0.00	\$0.00	\$0.00	(\$1,402,268)	(\$493,698)	(\$183,321)	(\$386,310)	\$0.00	\$0.00	\$1,402,268	\$1,063,330	(\$338,938)	(\$5,895,139)
2040	\$0.00	\$0.00	\$0.00	(\$1,432,194)	(\$501,222)	(\$187,171)	(\$409,455)	\$0.00	\$0.00	\$1,432,194	\$1,097,848	(\$334,346)	(\$5,971,963)
2041	\$0.00	\$0.00	\$0.00	(\$1,460,393)	(\$508,903)	(\$191,102)	(\$432,043)	\$0.00	\$0.00	\$1,460,393	\$1,132,048	(\$328,345)	(\$6,042,306)
2042	\$0.00	\$0.00	\$0.00	(\$1,464,431)	(\$516,745)	(\$195,115)	(\$451,002)	\$0.00	\$0.00	\$1,464,431	\$1,162,861	(\$301,570)	(\$6,102,542)
2043	\$0.00	\$0.00	\$0.00	(\$1,501,052)	(\$524,749)	(\$199,212)	(\$475,862)	\$0.00	\$0.00	\$1,501,052	\$1,199,824	(\$291,228)	(\$6,158,641)
2044	\$0.00	\$0.00	\$0.00	(\$1,534,822)	(\$532,921)	(\$203,396)	(\$503,400)	\$0.00	\$0.00	\$1,534,822	\$1,239,717	(\$295,105)	(\$6,209,882)
2045	\$0.00	\$0.00	\$0.00	(\$1,567,222)	(\$541,263)	(\$207,667)	(\$523,118)	\$0.00	\$0.00	\$1,567,222	\$1,272,047	(\$295,175)	(\$6,257,669)
2046	\$0.00	\$0.00	\$0.00	(\$1,594,551)	(\$549,779)	(\$212,028)	(\$551,632)	\$0.00	\$0.00	\$1,594,551	\$1,313,439	(\$281,112)	(\$6,300,101)
2047	\$0.00	\$0.00	\$0.00	(\$1,621,872)	(\$558,472)	(\$216,480)	(\$579,874)	\$0.00	\$0.00	\$1,621,872	\$1,354,827	(\$267,045)	(\$6,337,683)
2048	\$0.00	\$0.00	\$0.00	(\$1,649,542)	(\$567,347)	(\$221,026)	(\$599,805)	\$0.00	\$0.00	\$1,649,542	\$1,388,178	(\$261,364)	(\$6,371,978)
Nominal NPV	\$1,239,063	\$1,875,000	\$1,875,000	(\$35,075,835)	(\$11,895,068)	(\$4,565,613)	(\$9,213,475)	\$0.00	\$0.00	\$38,189,898	\$25,695,156	(\$12,494,742)	
Discount Rate =	7.25%	\$995,097	\$1,505,821	(\$12,245,397)	(\$3,888,615)	(\$1,580,974)	(\$2,904,747)	\$0.00	\$0.00	\$14,746,314	\$8,374,336	(\$6,371,978)	
Benefit/Cost Ratio =	0.57												

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses		2019	2024 **
(1) Change in Peak kW Customer at meter	-0.80 kW/Cus		
(2) Change in Peak kW per Customer at generator	-0.99 kW Gen/Cus		
(3) kW Line Loss Percentage	5.35%		
(4) Change in kWh per Customer at generator	(2.198) kWh/Cus/Yr		
(5) kWh Line Loss Percentage	5.38%		
(6) Group Line Loss Multiplier	1.0012		
(7) Annual Change in Customer kWh at Meter	(2.086) kWh/Cus/Yr		
<b>II. Economic Life and K-Factors</b>			
(1) DSM Program Study Period	30 Years		
(2) Economic Life of Incremental Generation	40 Years		
(3) Economic Life of Incremental T&D	42 Years		
(4) K-Factor for Generation	1.3072		
(5) K-Factor for T&D	1.3060		
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1		
<b>III. Utility &amp; Customer Costs</b>			
(1) Utility Nonrecurring Cost Per Customer	\$339.06 \$/Cus		
(2) Utility Recurring Cost Per Customer	\$0.00 \$/Cus/Year		
(3) Utility Cost Escalation Rate	0.00%		
(4) Customer Equipment Cost	\$759.74 \$/Cus		
(5) Customer Equipment Cost Escalation Rate	0.00%		
(6) Customer O&M Cost	\$0.00 \$/Cus/Year		
(7) Customer O&M Cost Escalation Rate	2.10%		
* (8) Customer Tax Credit Per Installation	\$0.00 \$/Cus		
* (9) Customer Tax Credit Escalation Rate	2.10%		
* (10) Change in Supply Costs	\$0.00 \$/Cus/Year		
* (11) Supply Costs Escalation Rate	2.10%		
* (12) Utility Discount Rate	7.25%		
* (13) Utility AFUDC Rate	5.73%		
* (14) Utility Nonrecurring Rebate/Incentive	\$300.00 \$/Cus		
* (15) Utility Recurring Rebate/Incentive	\$0.00 \$/Cus/Year		
* (16) Utility Rebate/Incentive Escalation Rate	0.00%		
<b>IV. Incremental Generation, Transmission, &amp; Distribution Costs</b>			
(1) Base Year	2019		
(2) In-Service Year For Incremental Generation	2024 **		
(3) In-Service Year For Incremental T & D	2020		
(4) Base Year Incremental Generation Cost	\$806.95 \$/kW		
(5) Base Year Incremental Transmission Cost	\$205.00 \$/kW		
(6) Base Year Incremental Distribution Cost	\$173.77 \$/kW		
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%		
(8) Generator Fixed O & M Cost	\$59.33 \$/kW/Yr		
(9) Generator Fixed O&M Escalation Rate	0.24%		
(10) Transmission Fixed O & M Cost	\$3.87 \$/kW/Yr		
(11) Distribution Fixed O & M Cost	\$6.68 \$/kW/Yr		
(12) T&D Fixed O&M Escalation Rate	2.10%		
(13) Incremental Gen Variable O & M Costs	\$0.000 \$/kW/Yr		
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%		
(15) Incremental Gen Capacity Factor	81.49%		
(16) Incremental Generating Unit Fuel Cost	\$0.0314 \$/kWh		
(17) Incremental Gen Unit Fuel Esc Rate	2.42%		
(18) Incremental Purchased Capacity Cost	\$12.54 \$/KW/YR		
(19) Incremental Capacity Cost Esc Rate	7.57%		
Stop Revenue Loss at In-Service Year? (Y=1, N=0)	0		
<b>V. (1) Non-Fuel Cost In Customer Bill (Base Year)</b>			
(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0767 \$/kWh		
(2) Non-Fuel Escalation Rate	Per Table		
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000 \$/KW/Mo		
(4) Demand Charge Escalation Rate	Per Table		
* (5) Average Annual Change in Monthly Billing kW	0 kW/Mo.		
<b>Summary Results for This Analysis</b>			
	TRC	Participants'	RIM
NPV Benefits(\$000s)	\$12,533	\$15,748	\$12,533
NPV Costs (\$000s)	\$4,552	\$3,147	\$17,153
NPV Net Benefits (\$000s)	\$7,981	\$12,601	(\$4,620)
Benefit:Cost Ratio	2.753	5.004	0.731

\* Supplemental information.  
 \*\* The relevant avoidable generation unit is a combined cycle unit.

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$271	\$608	\$0	\$0	\$0	(\$32)	(\$54)	\$879	\$86	\$0	(\$740)
2021	\$0	\$305	\$684	\$0	\$0	\$0	(\$69)	(\$129)	\$989	\$198	(\$793)	(\$1,427)
2022	\$0	\$339	\$760	\$0	\$0	\$0	(\$112)	(\$215)	\$1,099	\$327	(\$772)	(\$2,053)
2023	\$0	\$398	\$893	\$0	\$0	\$0	(\$164)	(\$335)	\$1,291	\$499	(\$792)	(\$2,651)
2024	\$0	\$441	\$988	\$0	\$0	(\$662)	(\$223)	(\$186)	\$1,428	\$1,071	(\$357)	(\$2,903)
2025	\$0	\$0	\$0	\$0	\$0	(\$671)	(\$228)	(\$178)	\$0	\$1,077	\$1,077	(\$2,196)
2026	\$0	\$0	\$0	\$0	\$0	(\$680)	(\$233)	(\$194)	\$0	\$1,108	\$1,108	(\$1,517)
2027	\$0	\$0	\$0	\$0	\$0	(\$690)	(\$238)	(\$210)	\$0	\$1,138	\$1,138	(\$867)
2028	\$0	\$0	\$0	\$0	\$0	(\$700)	(\$243)	(\$225)	\$0	\$1,167	\$1,167	(\$245)
2029	\$0	\$0	\$0	\$0	\$0	(\$710)	(\$248)	(\$242)	\$0	\$1,200	\$1,200	\$350
2030	\$0	\$0	\$0	\$0	\$0	(\$720)	(\$253)	(\$262)	\$0	\$1,235	\$1,235	\$922
2031	\$0	\$0	\$0	\$0	\$0	(\$730)	(\$258)	(\$279)	\$0	\$1,267	\$1,267	\$1,469
2032	\$0	\$0	\$0	\$0	\$0	(\$741)	(\$264)	(\$305)	\$0	\$1,310	\$1,310	\$1,996
2033	\$0	\$0	\$0	\$0	\$0	(\$752)	(\$269)	(\$325)	\$0	\$1,347	\$1,347	\$2,501
2034	\$0	\$0	\$0	\$0	\$0	(\$763)	(\$275)	(\$344)	\$0	\$1,382	\$1,382	\$2,984
2035	\$0	\$0	\$0	\$0	\$0	(\$774)	(\$281)	(\$370)	\$0	\$1,425	\$1,425	\$3,449
2036	\$0	\$0	\$0	\$0	\$0	(\$786)	(\$287)	(\$393)	\$0	\$1,465	\$1,465	\$3,895
2037	\$0	\$0	\$0	\$0	\$0	(\$798)	(\$293)	(\$409)	\$0	\$1,500	\$1,500	\$4,320
2038	\$0	\$0	\$0	\$0	\$0	(\$810)	(\$299)	(\$436)	\$0	\$1,545	\$1,545	\$4,728
2039	\$0	\$0	\$0	\$0	\$0	(\$822)	(\$305)	(\$459)	\$0	\$1,586	\$1,586	\$5,119
2040	\$0	\$0	\$0	\$0	\$0	(\$834)	(\$312)	(\$487)	\$0	\$1,633	\$1,633	\$5,494
2041	\$0	\$0	\$0	\$0	\$0	(\$847)	(\$318)	(\$513)	\$0	\$1,679	\$1,679	\$5,854
2042	\$0	\$0	\$0	\$0	\$0	(\$860)	(\$325)	(\$536)	\$0	\$1,721	\$1,721	\$6,198
2043	\$0	\$0	\$0	\$0	\$0	(\$874)	(\$332)	(\$566)	\$0	\$1,771	\$1,771	\$6,527
2044	\$0	\$0	\$0	\$0	\$0	(\$887)	(\$339)	(\$598)	\$0	\$1,824	\$1,824	\$6,844
2045	\$0	\$0	\$0	\$0	\$0	(\$901)	(\$346)	(\$622)	\$0	\$1,868	\$1,868	\$7,147
2046	\$0	\$0	\$0	\$0	\$0	(\$915)	(\$353)	(\$656)	\$0	\$1,924	\$1,924	\$7,437
2047	\$0	\$0	\$0	\$0	\$0	(\$930)	(\$360)	(\$689)	\$0	\$1,979	\$1,979	\$7,715
2048	\$0	\$0	\$0	\$0	\$0	(\$944)	(\$368)	(\$713)	\$0	\$2,025	\$2,025	\$7,981
Nominal NPV	\$1,755	\$3,932	\$3,932	\$0.000	\$0.000	(\$19,801)	(\$7,625)	(\$10,930)	\$5,686	\$38,356	\$32,670	
Discount Rate =	\$1,404,620	\$3,147,342	\$3,147,342	\$0.000	\$0.000	(\$6,473,092)	(\$2,623,570)	(\$3,436,452)	\$4,551,962	\$12,533,114	\$7,981,153	
Benefit/Cost Ratio =	7.25%											2.75

Participants' Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$608	\$0	\$0	\$0	(\$177)	\$0	\$240	\$608	\$417	(\$191)	(\$178)
2021	\$684	\$0	\$0	\$0	(\$394)	\$0	\$270	\$684	\$664	(\$19)	(\$195)
2022	\$760	\$0	\$0	\$0	(\$650)	\$0	\$300	\$760	\$950	\$191	(\$40)
2023	\$893	\$0	\$0	\$0	(\$961)	\$0	\$353	\$893	\$1,313	\$420	\$278
2024	\$988	\$0	\$0	\$0	(\$1,301)	\$0	\$390	\$988	\$1,691	\$704	\$773
2025	\$0	\$0	\$0	\$0	(\$1,295)	\$0	\$0	\$0	\$1,295	\$1,295	\$1,624
2026	\$0	\$0	\$0	\$0	(\$1,313)	\$0	\$0	\$0	\$1,313	\$1,313	\$2,429
2027	\$0	\$0	\$0	\$0	(\$1,330)	\$0	\$0	\$0	\$1,330	\$1,330	\$3,188
2028	\$0	\$0	\$0	\$0	(\$1,348)	\$0	\$0	\$0	\$1,348	\$1,348	\$3,906
2029	\$0	\$0	\$0	\$0	(\$1,373)	\$0	\$0	\$0	\$1,373	\$1,373	\$4,587
2030	\$0	\$0	\$0	\$0	(\$1,401)	\$0	\$0	\$0	\$1,401	\$1,401	\$5,236
2031	\$0	\$0	\$0	\$0	(\$1,422)	\$0	\$0	\$0	\$1,422	\$1,422	\$5,850
2032	\$0	\$0	\$0	\$0	(\$1,447)	\$0	\$0	\$0	\$1,447	\$1,447	\$6,432
2033	\$0	\$0	\$0	\$0	(\$1,467)	\$0	\$0	\$0	\$1,467	\$1,467	\$6,982
2034	\$0	\$0	\$0	\$0	(\$1,488)	\$0	\$0	\$0	\$1,488	\$1,488	\$7,502
2035	\$0	\$0	\$0	\$0	(\$1,512)	\$0	\$0	\$0	\$1,512	\$1,512	\$7,995
2036	\$0	\$0	\$0	\$0	(\$1,520)	\$0	\$0	\$0	\$1,520	\$1,520	\$8,458
2037	\$0	\$0	\$0	\$0	(\$1,552)	\$0	\$0	\$0	\$1,552	\$1,552	\$8,898
2038	\$0	\$0	\$0	\$0	(\$1,578)	\$0	\$0	\$0	\$1,578	\$1,578	\$9,315
2039	\$0	\$0	\$0	\$0	(\$1,666)	\$0	\$0	\$0	\$1,666	\$1,666	\$9,725
2040	\$0	\$0	\$0	\$0	(\$1,702)	\$0	\$0	\$0	\$1,702	\$1,702	\$10,117
2041	\$0	\$0	\$0	\$0	(\$1,736)	\$0	\$0	\$0	\$1,736	\$1,736	\$10,488
2042	\$0	\$0	\$0	\$0	(\$1,740)	\$0	\$0	\$0	\$1,740	\$1,740	\$10,836
2043	\$0	\$0	\$0	\$0	(\$1,784)	\$0	\$0	\$0	\$1,784	\$1,784	\$11,168
2044	\$0	\$0	\$0	\$0	(\$1,824)	\$0	\$0	\$0	\$1,824	\$1,824	\$11,485
2045	\$0	\$0	\$0	\$0	(\$1,863)	\$0	\$0	\$0	\$1,863	\$1,863	\$11,786
2046	\$0	\$0	\$0	\$0	(\$1,895)	\$0	\$0	\$0	\$1,895	\$1,895	\$12,072
2047	\$0	\$0	\$0	\$0	(\$1,927)	\$0	\$0	\$0	\$1,927	\$1,927	\$12,344
2048	\$0	\$0	\$0	\$0	(\$1,960)	\$0	\$0	\$0	\$1,960	\$1,960	\$12,601
<b>Nominal NPV</b>	\$3,932	\$3,147	\$0	\$0	(\$41,627)	\$0	\$1,553	\$3,932	\$43,180	\$39,248	
<b>Discount Rate =</b>					7.25%		\$1,243	\$3,147,342	\$15,748,285	\$12,601	
<b>Benefit/Cost Ratio =</b>											5.00

Ratepayers' Impact Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Change in Electric Revenues (\$000)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2020	\$0.000	\$0.000	\$271,250	\$240,000	(\$177,087)	\$0.000	(\$31,785)	(\$54,061)	\$0.000	\$0.000	\$688,337	\$85,846	(\$602,491)	(\$561,741)
2021	\$0.000	\$0.000	\$305,156	\$270,000	(\$394,405)	\$0.000	(\$68,961)	(\$128,934)	\$0.000	\$0.000	\$969,561	\$197,895	(\$771,666)	(\$1,232,553)
2022	\$0.000	\$0.000	\$339,063	\$300,000	(\$650,362)	\$0.000	(\$111,827)	(\$315,345)	\$0.000	\$0.000	\$1,289,424	\$327,172	(\$962,252)	(\$2,012,465)
2023	\$0.000	\$0.000	\$398,398	\$352,500	(\$960,670)	\$0.000	(\$163,862)	(\$335,019)	\$0.000	\$0.000	\$1,711,569	\$498,881	(\$1,212,688)	(\$2,928,880)
2024	\$0.000	\$0.000	\$440,781	\$390,000	(\$1,301,287)	(\$661,902)	(\$223,431)	(\$185,988)	\$0.000	\$0.000	\$2,132,068	\$1,071,321	(\$1,060,748)	(\$3,676,258)
2025	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,295,318)	(\$671,093)	(\$228,123)	(\$177,578)	\$0.000	\$0.000	\$1,295,318	\$1,076,794	(\$218,525)	(\$3,819,812)
2026	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,313,201)	(\$680,476)	(\$232,914)	(\$194,310)	\$0.000	\$0.000	\$1,313,201	\$1,107,699	(\$205,502)	(\$3,945,680)
2027	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,330,398)	(\$690,054)	(\$237,805)	(\$210,479)	\$0.000	\$0.000	\$1,330,398	\$1,138,338	(\$192,060)	(\$4,055,359)
2028	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,347,549)	(\$699,832)	(\$242,799)	(\$224,677)	\$0.000	\$0.000	\$1,347,549	\$1,167,308	(\$180,242)	(\$4,151,327)
2029	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,372,851)	(\$709,814)	(\$247,897)	(\$242,287)	\$0.000	\$0.000	\$1,372,851	\$1,199,998	(\$172,853)	(\$4,237,137)
2030	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,401,429)	(\$720,004)	(\$253,103)	(\$261,542)	\$0.000	\$0.000	\$1,401,429	\$1,234,650	(\$166,779)	(\$4,314,331)
2031	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,421,780)	(\$730,406)	(\$258,418)	(\$278,554)	\$0.000	\$0.000	\$1,421,780	\$1,267,378	(\$154,401)	(\$4,380,962)
2032	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,446,951)	(\$741,025)	(\$263,845)	(\$305,251)	\$0.000	\$0.000	\$1,446,951	\$1,310,122	(\$136,830)	(\$4,436,017)
2033	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,466,521)	(\$751,866)	(\$269,386)	(\$325,339)	\$0.000	\$0.000	\$1,466,521	\$1,346,591	(\$119,930)	(\$4,481,008)
2034	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,488,221)	(\$762,932)	(\$275,043)	(\$344,393)	\$0.000	\$0.000	\$1,488,221	\$1,382,369	(\$105,852)	(\$4,518,032)
2035	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,511,530)	(\$774,230)	(\$280,819)	(\$370,422)	\$0.000	\$0.000	\$1,511,530	\$1,425,471	(\$86,059)	(\$4,546,097)
2036	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,520,426)	(\$785,762)	(\$286,716)	(\$392,654)	\$0.000	\$0.000	\$1,520,426	\$1,465,133	(\$55,294)	(\$4,562,910)
2037	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,551,637)	(\$797,535)	(\$292,737)	(\$409,353)	\$0.000	\$0.000	\$1,551,637	\$1,499,626	(\$52,011)	(\$4,577,655)
2038	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,578,235)	(\$809,554)	(\$298,885)	(\$436,185)	\$0.000	\$0.000	\$1,578,235	\$1,544,624	(\$33,611)	(\$4,586,539)
2039	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,666,473)	(\$821,823)	(\$305,161)	(\$459,096)	\$0.000	\$0.000	\$1,666,473	\$1,586,080	(\$80,392)	(\$4,606,351)
2040	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,702,038)	(\$834,348)	(\$311,570)	(\$486,601)	\$0.000	\$0.000	\$1,702,038	\$1,632,519	(\$69,519)	(\$4,622,324)
2041	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,735,550)	(\$847,134)	(\$318,113)	(\$513,445)	\$0.000	\$0.000	\$1,735,550	\$1,678,692	(\$56,857)	(\$4,634,505)
2042	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,740,348)	(\$860,187)	(\$324,793)	(\$535,976)	\$0.000	\$0.000	\$1,740,348	\$1,720,956	(\$19,392)	(\$4,638,378)
2043	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,783,869)	(\$873,512)	(\$331,614)	(\$565,521)	\$0.000	\$0.000	\$1,783,869	\$1,770,646	(\$13,223)	(\$4,640,841)
2044	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,824,002)	(\$887,114)	(\$338,578)	(\$598,247)	\$0.000	\$0.000	\$1,824,002	\$1,823,939	(\$0,063)	(\$4,642,324)
2045	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,862,506)	(\$901,000)	(\$345,688)	(\$621,690)	\$0.000	\$0.000	\$1,862,506	\$1,868,368	\$5,861	(\$4,639,903)
2046	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,894,984)	(\$915,176)	(\$352,947)	(\$655,567)	\$0.000	\$0.000	\$1,894,984	\$1,923,690	\$28,706	(\$4,635,570)
2047	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,927,452)	(\$929,647)	(\$360,359)	(\$689,130)	\$0.000	\$0.000	\$1,927,452	\$1,979,136	\$51,684	(\$4,628,296)
2048	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,960,337)	(\$944,420)	(\$367,927)	(\$712,815)	\$0.000	\$0.000	\$1,960,337	\$2,025,162	\$64,826	(\$4,619,790)

Nominal NPV	\$1,754,648	\$1,552,500	(\$41,627,416)	(\$19,800,846)	(\$7,625,105)	(\$10,930,452)	\$38,356,403	(\$6,578,161)
Discount Rate =	\$1,404,620	\$1,242,797	(\$14,505,488)	(\$6,473,092)	(\$2,623,570)	(\$3,436,452)	\$12,533,114	(\$4,619,790)
Benefit/Cost Ratio =	7.25%	0.73						

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-0.57	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.70	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	(2.777)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	(2.635)	kWh/Cus/Yr

II. Economic Life and K-Factors

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$172.39	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$1,085.01	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	2.10%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	2.10%	
* (12) Utility Discount Rate	7.25%	
* (13) Utility AFUDC Rate	5.73%	
* (14) Utility Nonrecurring Rebate/Incentive	\$300.00	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2019	
(2) In-Service Year For Incremental Generation	2024 **	
(3) In-Service Year For Incremental T & D	2020	
(4) Base Year Incremental Generation Cost	\$806.95	\$/kW
(5) Base Year Incremental Transmission Cost	\$205.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$173.77	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%	
(8) Generator Fixed O & M Cost	\$59.33	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.24%	
(10) Transmission Fixed O & M Cost	\$3.87	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	81.49%	
(16) Incremental Generating Unit Fuel Cost	\$0.0314	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.42%	
(18) Incremental Purchased Capacity Cost	\$12.54	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	7.57%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0767	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table	
* (5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants'	RIM
NPV Benefits(\$000s)	\$15,213	\$27,591	\$15,213
NPV Costs (\$000s)	\$7,345	\$6,338	\$28,598
NPV Net Benefits (\$000s)	\$7,868	\$21,253	(\$13,385)
Benefit:Cost Ratio	2.071	4.353	0.532

\* Supplemental information.  
 \*\* The relevant avoidable generation unit is a combined cycle unit.

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$198	\$1,248	\$0	\$0	\$0	(\$32)	(\$98)	\$1,446	\$131	(\$1,315)	(\$1,226)
2021	\$0	\$228	\$1,438	\$0	\$0	\$0	(\$71)	(\$237)	\$1,666	\$308	(\$1,358)	(\$2,407)
2022	\$0	\$250	\$1,573	\$0	\$0	\$0	(\$115)	(\$395)	\$1,823	\$511	(\$1,312)	(\$3,470)
2023	\$0	\$276	\$1,736	\$0	\$0	\$0	(\$166)	(\$603)	\$2,012	\$769	(\$1,243)	(\$4,409)
2024	\$0	\$302	\$1,899	\$0	\$0	(\$660)	(\$223)	(\$330)	\$2,200	\$1,214	(\$987)	(\$5,105)
2025	\$0	\$0	\$0	\$0	\$0	(\$670)	(\$228)	(\$315)	\$0	\$1,213	\$1,213	(\$4,308)
2026	\$0	\$0	\$0	\$0	\$0	(\$679)	(\$232)	(\$345)	\$0	\$1,256	\$1,256	(\$3,539)
2027	\$0	\$0	\$0	\$0	\$0	(\$689)	(\$237)	(\$374)	\$0	\$1,300	\$1,300	(\$2,796)
2028	\$0	\$0	\$0	\$0	\$0	(\$698)	(\$242)	(\$399)	\$0	\$1,340	\$1,340	(\$2,083)
2029	\$0	\$0	\$0	\$0	\$0	(\$708)	(\$247)	(\$430)	\$0	\$1,386	\$1,386	(\$1,395)
2030	\$0	\$0	\$0	\$0	\$0	(\$718)	(\$253)	(\$464)	\$0	\$1,435	\$1,435	(\$731)
2031	\$0	\$0	\$0	\$0	\$0	(\$729)	(\$258)	(\$495)	\$0	\$1,481	\$1,481	(\$92)
2032	\$0	\$0	\$0	\$0	\$0	(\$739)	(\$263)	(\$542)	\$0	\$1,545	\$1,545	\$530
2033	\$0	\$0	\$0	\$0	\$0	(\$750)	(\$269)	(\$578)	\$0	\$1,597	\$1,597	\$1,129
2034	\$0	\$0	\$0	\$0	\$0	(\$761)	(\$274)	(\$612)	\$0	\$1,647	\$1,647	\$1,705
2035	\$0	\$0	\$0	\$0	\$0	(\$773)	(\$280)	(\$658)	\$0	\$1,711	\$1,711	\$2,263
2036	\$0	\$0	\$0	\$0	\$0	(\$784)	(\$286)	(\$697)	\$0	\$1,767	\$1,767	\$2,800
2037	\$0	\$0	\$0	\$0	\$0	(\$796)	(\$292)	(\$727)	\$0	\$1,815	\$1,815	\$3,315
2038	\$0	\$0	\$0	\$0	\$0	(\$808)	(\$298)	(\$775)	\$0	\$1,881	\$1,881	\$3,812
2039	\$0	\$0	\$0	\$0	\$0	(\$820)	(\$304)	(\$815)	\$0	\$1,940	\$1,940	\$4,290
2040	\$0	\$0	\$0	\$0	\$0	(\$832)	(\$311)	(\$864)	\$0	\$2,008	\$2,008	\$4,751
2041	\$0	\$0	\$0	\$0	\$0	(\$845)	(\$317)	(\$912)	\$0	\$2,074	\$2,074	\$5,196
2042	\$0	\$0	\$0	\$0	\$0	(\$858)	(\$324)	(\$952)	\$0	\$2,134	\$2,134	\$5,622
2043	\$0	\$0	\$0	\$0	\$0	(\$872)	(\$331)	(\$1,004)	\$0	\$2,207	\$2,207	\$6,033
2044	\$0	\$0	\$0	\$0	\$0	(\$885)	(\$338)	(\$1,062)	\$0	\$2,285	\$2,285	\$6,430
2045	\$0	\$0	\$0	\$0	\$0	(\$899)	(\$345)	(\$1,104)	\$0	\$2,348	\$2,348	\$6,810
2046	\$0	\$0	\$0	\$0	\$0	(\$913)	(\$352)	(\$1,164)	\$0	\$2,430	\$2,430	\$7,177
2047	\$0	\$0	\$0	\$0	\$0	(\$928)	(\$360)	(\$1,224)	\$0	\$2,511	\$2,511	\$7,530
2048	\$0	\$0	\$0	\$0	\$0	(\$942)	(\$367)	(\$1,266)	\$0	\$2,575	\$2,575	\$7,868
Nominal NPV	\$1,254	\$1,007,006	\$7,893	\$0,000	\$0,000	(\$19,757)	(\$7,617)	(\$19,443)	\$9,148	\$46,817	\$37,670	\$7,868
Discount Rate =						(\$6,458,671)	(\$2,625,364)	(\$6,128,883)	\$7,344,977	\$15,212,917	\$7,867,940	
Benefit/Cost Ratio =		7.25%										2.07



Participants' Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$1,248	\$0	\$0	\$0	(\$322)	\$0	\$345	\$1,248	\$667	(\$581)	(\$542)
2021	\$1,438	\$0	\$0	\$0	(\$725)	\$0	\$398	\$1,438	\$1,123	(\$315)	(\$815)
2022	\$1,573	\$0	\$0	\$0	(\$1,194)	\$0	\$435	\$1,573	\$1,629	\$56	(\$770)
2023	\$1,736	\$0	\$0	\$0	(\$1,730)	\$0	\$480	\$1,736	\$2,210	\$474	(\$412)
2024	\$1,899	\$0	\$0	\$0	(\$2,311)	\$0	\$525	\$1,899	\$2,836	\$937	\$249
2025	\$0	\$0	\$0	\$0	(\$2,300)	\$0	\$0	\$0	\$2,300	\$2,300	\$1,760
2026	\$0	\$0	\$0	\$0	(\$2,332)	\$0	\$0	\$0	\$2,332	\$2,332	\$3,188
2027	\$0	\$0	\$0	\$0	(\$2,363)	\$0	\$0	\$0	\$2,363	\$2,363	\$4,538
2028	\$0	\$0	\$0	\$0	(\$2,393)	\$0	\$0	\$0	\$2,393	\$2,393	\$5,812
2029	\$0	\$0	\$0	\$0	(\$2,438)	\$0	\$0	\$0	\$2,438	\$2,438	\$7,022
2030	\$0	\$0	\$0	\$0	(\$2,489)	\$0	\$0	\$0	\$2,489	\$2,489	\$8,174
2031	\$0	\$0	\$0	\$0	(\$2,525)	\$0	\$0	\$0	\$2,525	\$2,525	\$9,264
2032	\$0	\$0	\$0	\$0	(\$2,570)	\$0	\$0	\$0	\$2,570	\$2,570	\$10,298
2033	\$0	\$0	\$0	\$0	(\$2,604)	\$0	\$0	\$0	\$2,604	\$2,604	\$11,275
2034	\$0	\$0	\$0	\$0	(\$2,643)	\$0	\$0	\$0	\$2,643	\$2,643	\$12,199
2035	\$0	\$0	\$0	\$0	(\$2,684)	\$0	\$0	\$0	\$2,684	\$2,684	\$13,074
2036	\$0	\$0	\$0	\$0	(\$2,700)	\$0	\$0	\$0	\$2,700	\$2,700	\$13,895
2037	\$0	\$0	\$0	\$0	(\$2,756)	\$0	\$0	\$0	\$2,756	\$2,756	\$14,677
2038	\$0	\$0	\$0	\$0	(\$2,803)	\$0	\$0	\$0	\$2,803	\$2,803	\$15,417
2039	\$0	\$0	\$0	\$0	(\$2,959)	\$0	\$0	\$0	\$2,959	\$2,959	\$16,147
2040	\$0	\$0	\$0	\$0	(\$3,023)	\$0	\$0	\$0	\$3,023	\$3,023	\$16,841
2041	\$0	\$0	\$0	\$0	(\$3,082)	\$0	\$0	\$0	\$3,082	\$3,082	\$17,502
2042	\$0	\$0	\$0	\$0	(\$3,091)	\$0	\$0	\$0	\$3,091	\$3,091	\$18,119
2043	\$0	\$0	\$0	\$0	(\$3,168)	\$0	\$0	\$0	\$3,168	\$3,168	\$18,709
2044	\$0	\$0	\$0	\$0	(\$3,239)	\$0	\$0	\$0	\$3,239	\$3,239	\$19,271
2045	\$0	\$0	\$0	\$0	(\$3,308)	\$0	\$0	\$0	\$3,308	\$3,308	\$19,807
2046	\$0	\$0	\$0	\$0	(\$3,365)	\$0	\$0	\$0	\$3,365	\$3,365	\$20,315
2047	\$0	\$0	\$0	\$0	(\$3,423)	\$0	\$0	\$0	\$3,423	\$3,423	\$20,797
2048	\$0	\$0	\$0	\$0	(\$3,481)	\$0	\$0	\$0	\$3,481	\$3,481	\$21,253
<b>Nominal NPV</b>	\$7,893	\$6,338	\$0	\$0	(\$74,022)	\$0	\$2,183	\$7,893	\$76,205	\$68,311	
<b>Discount Rate =</b>					7.25%		\$1,752	\$6,337,971	\$27,591,335	\$21,253	
<b>Benefit/Cost Ratio =</b>					4.35						

Ratepayers' Impact Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2020	\$0.000	\$198,250	\$345,000	(\$321,581)	\$0.000	(\$32,429)	(\$98,173)	\$0.000	\$0.000	\$864,831	\$130,602	(\$734,229)	(\$684,569)
2021	\$0.000	\$228,418	\$397,500	(\$725,380)	\$0.000	(\$71,259)	(\$237,132)	\$0.000	\$0.000	\$1,351,298	\$308,391	(\$1,042,907)	(\$1,591,172)
2022	\$0.000	\$249,967	\$435,000	(\$1,194,340)	\$0.000	(\$115,380)	(\$395,465)	\$0.000	\$0.000	\$1,879,307	\$510,845	(\$1,368,462)	(\$2,700,321)
2023	\$0.000	\$275,826	\$480,000	(\$1,730,342)	\$0.000	(\$165,824)	(\$603,430)	\$0.000	\$0.000	\$2,486,168	\$769,254	(\$1,716,913)	(\$3,997,773)
2024	\$0.000	\$301,685	\$525,000	(\$2,310,962)	(\$660,427)	(\$222,933)	(\$330,297)	\$0.000	\$0.000	\$3,137,646	\$1,213,657	(\$1,923,989)	(\$5,353,372)
2025	\$0.000	\$0.000	\$0.000	(\$2,300,362)	(\$669,598)	(\$227,615)	(\$315,361)	\$0.000	\$0.000	\$2,300,362	\$1,212,574	(\$1,087,788)	(\$6,067,964)
2026	\$0.000	\$0.000	\$0.000	(\$2,332,120)	(\$678,960)	(\$232,395)	(\$345,076)	\$0.000	\$0.000	\$2,332,120	\$1,256,430	(\$1,075,690)	(\$6,726,816)
2027	\$0.000	\$0.000	\$0.000	(\$2,362,660)	(\$688,517)	(\$237,275)	(\$373,790)	\$0.000	\$0.000	\$2,362,660	\$1,299,582	(\$1,063,078)	(\$7,333,902)
2028	\$0.000	\$0.000	\$0.000	(\$2,393,119)	(\$698,273)	(\$242,258)	(\$399,005)	\$0.000	\$0.000	\$2,393,119	\$1,339,536	(\$1,053,583)	(\$7,894,873)
2029	\$0.000	\$0.000	\$0.000	(\$2,438,053)	(\$708,232)	(\$247,345)	(\$430,279)	\$0.000	\$0.000	\$2,438,053	\$1,365,856	(\$1,052,197)	(\$8,417,214)
2030	\$0.000	\$0.000	\$0.000	(\$2,488,803)	(\$718,400)	(\$252,539)	(\$464,474)	\$0.000	\$0.000	\$2,488,803	\$1,435,413	(\$1,053,390)	(\$8,904,778)
2031	\$0.000	\$0.000	\$0.000	(\$2,524,945)	(\$728,779)	(\$257,843)	(\$494,685)	\$0.000	\$0.000	\$2,524,945	\$1,481,306	(\$1,043,638)	(\$9,355,158)
2032	\$0.000	\$0.000	\$0.000	(\$2,569,647)	(\$739,374)	(\$263,257)	(\$542,097)	\$0.000	\$0.000	\$2,569,647	\$1,544,729	(\$1,024,919)	(\$9,767,543)
2033	\$0.000	\$0.000	\$0.000	(\$2,604,400)	(\$750,191)	(\$268,786)	(\$577,771)	\$0.000	\$0.000	\$2,604,400	\$1,596,748	(\$1,007,653)	(\$10,145,560)
2034	\$0.000	\$0.000	\$0.000	(\$2,642,937)	(\$761,233)	(\$274,430)	(\$611,609)	\$0.000	\$0.000	\$2,642,937	\$1,647,272	(\$995,665)	(\$10,493,816)
2035	\$0.000	\$0.000	\$0.000	(\$2,684,333)	(\$772,505)	(\$280,193)	(\$657,835)	\$0.000	\$0.000	\$2,684,333	\$1,710,533	(\$973,800)	(\$10,811,386)
2036	\$0.000	\$0.000	\$0.000	(\$2,700,132)	(\$784,012)	(\$286,077)	(\$697,316)	\$0.000	\$0.000	\$2,700,132	\$1,767,405	(\$932,727)	(\$11,094,991)
2037	\$0.000	\$0.000	\$0.000	(\$2,755,558)	(\$795,759)	(\$292,085)	(\$726,972)	\$0.000	\$0.000	\$2,755,558	\$1,814,816	(\$940,742)	(\$11,361,686)
2038	\$0.000	\$0.000	\$0.000	(\$2,802,795)	(\$807,750)	(\$298,219)	(\$774,623)	\$0.000	\$0.000	\$2,802,795	\$1,880,593	(\$922,202)	(\$11,605,441)
2039	\$0.000	\$0.000	\$0.000	(\$2,959,496)	(\$819,992)	(\$304,481)	(\$815,310)	\$0.000	\$0.000	\$2,959,496	\$1,939,784	(\$1,019,712)	(\$11,856,741)
2040	\$0.000	\$0.000	\$0.000	(\$3,022,656)	(\$832,489)	(\$310,876)	(\$864,157)	\$0.000	\$0.000	\$3,022,656	\$2,007,522	(\$1,015,135)	(\$12,089,992)
2041	\$0.000	\$0.000	\$0.000	(\$3,082,170)	(\$845,247)	(\$317,404)	(\$911,830)	\$0.000	\$0.000	\$3,082,170	\$2,074,481	(\$1,007,689)	(\$12,305,872)
2042	\$0.000	\$0.000	\$0.000	(\$3,090,692)	(\$858,270)	(\$324,069)	(\$951,843)	\$0.000	\$0.000	\$3,090,692	\$2,134,183	(\$956,509)	(\$12,496,928)
2043	\$0.000	\$0.000	\$0.000	(\$3,167,980)	(\$871,565)	(\$330,875)	(\$1,004,311)	\$0.000	\$0.000	\$3,167,980	\$2,206,751	(\$961,229)	(\$12,675,941)
2044	\$0.000	\$0.000	\$0.000	(\$3,239,253)	(\$885,138)	(\$337,823)	(\$1,062,430)	\$0.000	\$0.000	\$3,239,253	\$2,285,391	(\$953,862)	(\$12,841,567)
2045	\$0.000	\$0.000	\$0.000	(\$3,307,633)	(\$898,993)	(\$344,918)	(\$1,104,044)	\$0.000	\$0.000	\$3,307,633	\$2,347,954	(\$959,679)	(\$12,996,932)
2046	\$0.000	\$0.000	\$0.000	(\$3,365,310)	(\$913,137)	(\$352,161)	(\$1,164,223)	\$0.000	\$0.000	\$3,365,310	\$2,429,521	(\$935,789)	(\$13,138,184)
2047	\$0.000	\$0.000	\$0.000	(\$3,422,971)	(\$927,576)	(\$359,556)	(\$1,223,829)	\$0.000	\$0.000	\$3,422,971	\$2,510,961	(\$912,010)	(\$13,266,535)
2048	\$0.000	\$0.000	\$0.000	(\$3,461,370)	(\$942,316)	(\$367,107)	(\$1,265,892)	\$0.000	\$0.000	\$3,461,370	\$2,575,315	(\$906,055)	(\$13,385,423)

Nominal NPV	\$1,254,147	\$2,162,500	(\$74,022,000)	(\$19,756,732)	(\$7,617,413)	(\$19,443,261)	\$0.000	\$0.000	\$0.000	\$77,458,647	\$46,817,407	(\$30,641,240)	(\$13,385,423)
Discount Rate =	\$1,007,006	\$1,752,418	(\$25,838,917)	(\$6,458,671)	(\$2,625,364)	(\$6,128,863)	\$0.000	\$0.000	\$0.000	\$28,598,341	\$15,212,917	(\$13,385,423)	
Benefit/Cost Ratio =	7.25%	0.53											

Run Date:

Filename: **Low Income**

**INPUT DATA -- PART 1**

**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

**I. Program Demand Impacts and Line Losses**

(1) Change in Peak kW Customer at meter	-0.10	kW/Cus
(2) Change in Peak kW per Customer at generator	-0.12	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	(713)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	(676)	kWh/Cus/Yr

**II. Economic Life and K-Factors**

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
(6) Switch: Rev Req (0) or Val-of-Def (1)	1	

**III. Utility & Customer Costs**

(1) Utility Nonrecurring Cost Per Customer	\$265.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$0.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
(8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
(9) Customer Tax Credit Escalation Rate	2.10%	
(10) Change in Supply Costs	\$0.00	\$/Cus/Year
(11) Supply Costs Escalation Rate	2.10%	
(12) Utility Discount Rate	7.25%	
(13) Utility AFUDC Rate	5.73%	
(14) Utility Nonrecurring Rebate/Incentive	\$55.00	\$/Cus
(15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
(16) Utility Rebate/Incentive Escalation Rate	0.00%	

\* Supplemental information.  
\*\* The relevant avoidable generation unit is a combined cycle unit.

**IV. Incremental Generation, Transmission, & Distribution Costs**

(1) Base Year	2019
(2) In-Service Year For Incremental Generation	2024 **
(3) In-Service Year For Incremental T & D	2020
(4) Base Year Incremental Generation Cost	\$806.95 \$/kW
(5) Base Year Incremental Transmission Cost	\$205.00 \$/kW
(6) Base Year Incremental Distribution Cost	\$173.77 \$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%
(8) Generator Fixed O & M Cost	\$59.33 \$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.24%
(10) Transmission Fixed O & M Cost	\$3.87 \$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68 \$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%
(13) Incremental Gen Variable O & M Costs	\$0.000 \$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%
(15) Incremental Gen Capacity Factor	81.49%
(16) Incremental Generating Unit Fuel Cost	\$0.0314 \$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.42%
(18) Incremental Purchased Capacity Cost	\$12.54 \$/KW/YR
(19) Incremental Capacity Cost Esc Rate	7.57%

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

**V. (1) Non-Fuel Cost In Customer Bill (Base Year)**

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0767 \$/kWh
(2) Non-Fuel Escalation Rate	Per Table
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000 \$/KW/Mo
(4) Demand Charge Escalation Rate	Per Table
(5) Average Annual Change in Monthly Billing kW	0 kW/Mo.

**Summary Results for This Analysis**

	<b>TRC</b>	<b>Participants'</b>	<b>RIM</b>
NPV Benefits(\$000s)	\$8,280	\$18,175	\$8,280
NPV Costs (\$000s)	\$4,047	\$0	\$22,222
NPV Net Benefits (\$000s)	\$4,233	\$18,175	(\$13,942)
Benefit:Cost Ratio	2.046	#DIV/0!	0.373

**Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$994	\$0	\$0	\$0	\$0	(\$19)	(\$82)	\$994	\$101	(\$893)	(\$833)
2021	\$0	\$994	\$0	\$0	\$0	\$0	(\$38)	(\$184)	\$994	\$223	(\$771)	(\$1,503)
2022	\$0	\$994	\$0	\$0	\$0	\$0	(\$58)	(\$291)	\$994	\$349	(\$645)	(\$2,025)
2023	\$0	\$994	\$0	\$0	\$0	\$0	(\$79)	(\$420)	\$994	\$500	(\$494)	(\$2,399)
2024	\$0	\$994	\$0	\$0	\$0	(\$300)	(\$101)	(\$218)	\$994	\$620	(\$374)	(\$2,662)
2025	\$0	\$0	\$0	\$0	\$0	(\$304)	(\$103)	(\$209)	\$0	\$616	\$616	(\$2,257)
2026	\$0	\$0	\$0	\$0	\$0	(\$309)	(\$106)	(\$228)	\$0	\$643	\$643	(\$1,863)
2027	\$0	\$0	\$0	\$0	\$0	(\$313)	(\$108)	(\$247)	\$0	\$668	\$668	(\$1,482)
2028	\$0	\$0	\$0	\$0	\$0	(\$317)	(\$110)	(\$264)	\$0	\$692	\$692	(\$1,114)
2029	\$0	\$0	\$0	\$0	\$0	(\$322)	(\$112)	(\$285)	\$0	\$719	\$719	(\$757)
2030	\$0	\$0	\$0	\$0	\$0	(\$327)	(\$115)	(\$307)	\$0	\$749	\$749	(\$410)
2031	\$0	\$0	\$0	\$0	\$0	(\$331)	(\$117)	(\$327)	\$0	\$776	\$776	(\$75)
2032	\$0	\$0	\$0	\$0	\$0	(\$336)	(\$120)	(\$359)	\$0	\$814	\$814	\$252
2033	\$0	\$0	\$0	\$0	\$0	(\$341)	(\$122)	(\$382)	\$0	\$845	\$845	\$569
2034	\$0	\$0	\$0	\$0	\$0	(\$346)	(\$125)	(\$405)	\$0	\$875	\$875	\$876
2035	\$0	\$0	\$0	\$0	\$0	(\$351)	(\$127)	(\$435)	\$0	\$914	\$914	\$1,174
2036	\$0	\$0	\$0	\$0	\$0	(\$356)	(\$130)	(\$461)	\$0	\$948	\$948	\$1,462
2037	\$0	\$0	\$0	\$0	\$0	(\$362)	(\$133)	(\$481)	\$0	\$975	\$975	\$1,738
2038	\$0	\$0	\$0	\$0	\$0	(\$367)	(\$136)	(\$512)	\$0	\$1,015	\$1,015	\$2,007
2039	\$0	\$0	\$0	\$0	\$0	(\$373)	(\$138)	(\$539)	\$0	\$1,050	\$1,050	\$2,266
2040	\$0	\$0	\$0	\$0	\$0	(\$378)	(\$141)	(\$572)	\$0	\$1,091	\$1,091	\$2,516
2041	\$0	\$0	\$0	\$0	\$0	(\$384)	(\$144)	(\$603)	\$0	\$1,132	\$1,132	\$2,759
2042	\$0	\$0	\$0	\$0	\$0	(\$390)	(\$147)	(\$630)	\$0	\$1,167	\$1,167	\$2,992
2043	\$0	\$0	\$0	\$0	\$0	(\$396)	(\$150)	(\$664)	\$0	\$1,211	\$1,211	\$3,217
2044	\$0	\$0	\$0	\$0	\$0	(\$402)	(\$154)	(\$703)	\$0	\$1,259	\$1,259	\$3,436
2045	\$0	\$0	\$0	\$0	\$0	(\$409)	(\$157)	(\$730)	\$0	\$1,296	\$1,296	\$3,646
2046	\$0	\$0	\$0	\$0	\$0	(\$415)	(\$160)	(\$770)	\$0	\$1,345	\$1,345	\$3,849
2047	\$0	\$0	\$0	\$0	\$0	(\$422)	(\$163)	(\$810)	\$0	\$1,395	\$1,395	\$4,045
2048	\$0	\$0	\$0	\$0	\$0	(\$428)	(\$167)	(\$837)	\$0	\$1,433	\$1,433	\$4,233
<b>Nominal NPV</b>		\$4,969	\$0,000	\$0,000	\$0,000	(\$8,982)	(\$3,483)	(\$12,956)	\$4,969	\$25,420	\$20,452	
<b>Discount Rate =</b>		\$4,046,989				(\$2,936,233)	(\$1,209,943)	(\$4,133,845)	\$4,046,989	\$8,280,020	\$4,233,031	
<b>Benefit/Cost Ratio =</b>		7.25%				2.05						

Run Date:

Filename: **Low Income**

**Participants' Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$0	\$0	\$0	(\$269)	\$0	\$206	\$0	\$475	\$475	\$443
2021	\$0	\$0	\$0	\$0	(\$564)	\$0	\$206	\$0	\$770	\$770	\$1,113
2022	\$0	\$0	\$0	\$0	(\$879)	\$0	\$206	\$0	\$1,085	\$1,085	\$1,992
2023	\$0	\$0	\$0	\$0	(\$1,206)	\$0	\$206	\$0	\$1,412	\$1,412	\$3,059
2024	\$0	\$0	\$0	\$0	(\$1,529)	\$0	\$206	\$0	\$1,735	\$1,735	\$4,281
2025	\$0	\$0	\$0	\$0	(\$1,522)	\$0	\$0	\$0	\$1,522	\$1,522	\$5,281
2026	\$0	\$0	\$0	\$0	(\$1,543)	\$0	\$0	\$0	\$1,543	\$1,543	\$6,226
2027	\$0	\$0	\$0	\$0	(\$1,563)	\$0	\$0	\$0	\$1,563	\$1,563	\$7,118
2028	\$0	\$0	\$0	\$0	(\$1,583)	\$0	\$0	\$0	\$1,583	\$1,583	\$7,961
2029	\$0	\$0	\$0	\$0	(\$1,613)	\$0	\$0	\$0	\$1,613	\$1,613	\$8,762
2030	\$0	\$0	\$0	\$0	(\$1,646)	\$0	\$0	\$0	\$1,646	\$1,646	\$9,524
2031	\$0	\$0	\$0	\$0	(\$1,670)	\$0	\$0	\$0	\$1,670	\$1,670	\$10,244
2032	\$0	\$0	\$0	\$0	(\$1,700)	\$0	\$0	\$0	\$1,700	\$1,700	\$10,928
2033	\$0	\$0	\$0	\$0	(\$1,723)	\$0	\$0	\$0	\$1,723	\$1,723	\$11,574
2034	\$0	\$0	\$0	\$0	(\$1,748)	\$0	\$0	\$0	\$1,748	\$1,748	\$12,186
2035	\$0	\$0	\$0	\$0	(\$1,776)	\$0	\$0	\$0	\$1,776	\$1,776	\$12,765
2036	\$0	\$0	\$0	\$0	(\$1,786)	\$0	\$0	\$0	\$1,786	\$1,786	\$13,308
2037	\$0	\$0	\$0	\$0	(\$1,823)	\$0	\$0	\$0	\$1,823	\$1,823	\$13,825
2038	\$0	\$0	\$0	\$0	(\$1,854)	\$0	\$0	\$0	\$1,854	\$1,854	\$14,315
2039	\$0	\$0	\$0	\$0	(\$1,958)	\$0	\$0	\$0	\$1,958	\$1,958	\$14,797
2040	\$0	\$0	\$0	\$0	(\$1,999)	\$0	\$0	\$0	\$1,999	\$1,999	\$15,257
2041	\$0	\$0	\$0	\$0	(\$2,039)	\$0	\$0	\$0	\$2,039	\$2,039	\$15,693
2042	\$0	\$0	\$0	\$0	(\$2,044)	\$0	\$0	\$0	\$2,044	\$2,044	\$16,102
2043	\$0	\$0	\$0	\$0	(\$2,095)	\$0	\$0	\$0	\$2,095	\$2,095	\$16,492
2044	\$0	\$0	\$0	\$0	(\$2,143)	\$0	\$0	\$0	\$2,143	\$2,143	\$16,864
2045	\$0	\$0	\$0	\$0	(\$2,188)	\$0	\$0	\$0	\$2,188	\$2,188	\$17,218
2046	\$0	\$0	\$0	\$0	(\$2,226)	\$0	\$0	\$0	\$2,226	\$2,226	\$17,554
2047	\$0	\$0	\$0	\$0	(\$2,264)	\$0	\$0	\$0	\$2,264	\$2,264	\$17,873
2048	\$0	\$0	\$0	\$0	(\$2,303)	\$0	\$0	\$0	\$2,303	\$2,303	\$18,175
<b>Nominal NPV</b>	\$0	\$0	\$0	\$0	(\$49,252)	\$0	\$1,031	\$0,000	\$50,284	\$50,284	\$50,284
<b>Discount Rate =</b>					7.25%		\$840		\$18,174,961	\$18,175	\$18,175
<b>Benefit/Cost Ratio =</b>					#DIV/0!						

Run Date:

Filename: Low Income

**Ratepayers' Impact Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2020	\$0.000	\$993.750	\$206.250	(\$269.124)	\$0.000	(\$18.653)	(\$82.159)	\$0.000	\$0.000	\$1,469.124	\$100.812	(\$1,368.313)	\$1,275.766
2021	\$0.000	\$993.750	\$206.250	(\$564.131)	\$0.000	(\$38.089)	(\$184.419)	\$0.000	\$0.000	\$1,764.131	\$222.509	(\$1,541.623)	(\$2,615.904)
2022	\$0.000	\$993.750	\$206.250	(\$878.556)	\$0.000	(\$58.334)	(\$209.904)	\$0.000	\$0.000	\$2,078.556	\$349.238	(\$1,729.318)	(\$4,017.530)
2023	\$0.000	\$993.750	\$206.250	(\$1,205.846)	\$0.000	(\$79.412)	(\$420.450)	\$0.000	\$0.000	\$2,405.846	\$499.862	(\$1,905.983)	(\$5,457.709)
2024	\$0.000	\$993.750	\$206.250	(\$1,528.586)	(\$300.243)	(\$101.350)	(\$218.475)	\$0.000	\$0.000	\$2,728.586	\$620.067	(\$2,108.519)	(\$6,943.323)
2025	\$0.000	\$0.000	\$0.000	(\$1,521.574)	(\$304.412)	(\$103.478)	(\$208.596)	\$0.000	\$0.000	\$1,521.574	\$616.485	(\$905.089)	(\$7,537.896)
2026	\$0.000	\$0.000	\$0.000	(\$1,542.581)	(\$308.668)	(\$105.651)	(\$228.250)	\$0.000	\$0.000	\$1,542.581	\$642.569	(\$900.012)	(\$8,089.146)
2027	\$0.000	\$0.000	\$0.000	(\$1,562.782)	(\$313.013)	(\$107.870)	(\$247.244)	\$0.000	\$0.000	\$1,562.782	\$668.126	(\$894.656)	(\$8,600.053)
2028	\$0.000	\$0.000	\$0.000	(\$1,562.929)	(\$317.448)	(\$110.135)	(\$263.922)	\$0.000	\$0.000	\$1,562.929	\$691.505	(\$871.424)	(\$9,074.683)
2029	\$0.000	\$0.000	\$0.000	(\$1,612.650)	(\$321.976)	(\$112.448)	(\$284.608)	\$0.000	\$0.000	\$1,612.650	\$719.031	(\$893.619)	(\$9,518.302)
2030	\$0.000	\$0.000	\$0.000	(\$1,646.219)	(\$326.598)	(\$114.809)	(\$307.227)	\$0.000	\$0.000	\$1,646.219	\$748.634	(\$897.585)	(\$9,933.752)
2031	\$0.000	\$0.000	\$0.000	(\$1,670.125)	(\$331.317)	(\$117.220)	(\$327.209)	\$0.000	\$0.000	\$1,670.125	\$775.746	(\$894.379)	(\$10,319.719)
2032	\$0.000	\$0.000	\$0.000	(\$1,699.693)	(\$336.133)	(\$119.682)	(\$358.570)	\$0.000	\$0.000	\$1,699.693	\$814.385	(\$885.308)	(\$10,675.931)
2033	\$0.000	\$0.000	\$0.000	(\$1,722.681)	(\$341.051)	(\$122.195)	(\$382.167)	\$0.000	\$0.000	\$1,722.681	\$845.413	(\$877.268)	(\$11,005.034)
2034	\$0.000	\$0.000	\$0.000	(\$1,748.171)	(\$346.071)	(\$124.761)	(\$404.549)	\$0.000	\$0.000	\$1,748.171	\$875.381	(\$872.790)	(\$11,310.313)
2035	\$0.000	\$0.000	\$0.000	(\$1,775.552)	(\$351.195)	(\$127.381)	(\$435.125)	\$0.000	\$0.000	\$1,775.552	\$913.701	(\$861.851)	(\$11,591.376)
2036	\$0.000	\$0.000	\$0.000	(\$1,786.003)	(\$356.426)	(\$130.056)	(\$461.240)	\$0.000	\$0.000	\$1,786.003	\$947.723	(\$838.280)	(\$11,846.262)
2037	\$0.000	\$0.000	\$0.000	(\$1,822.664)	(\$361.767)	(\$132.787)	(\$480.856)	\$0.000	\$0.000	\$1,822.664	\$975.410	(\$847.254)	(\$12,086.453)
2038	\$0.000	\$0.000	\$0.000	(\$1,853.909)	(\$367.218)	(\$135.576)	(\$512.375)	\$0.000	\$0.000	\$1,853.909	\$1,015.169	(\$838.740)	(\$12,308.148)
2039	\$0.000	\$0.000	\$0.000	(\$1,957.559)	(\$372.784)	(\$138.423)	(\$539.287)	\$0.000	\$0.000	\$1,957.559	\$1,050.494	(\$907.065)	(\$12,531.687)
2040	\$0.000	\$0.000	\$0.000	(\$1,999.336)	(\$378.465)	(\$141.330)	(\$571.597)	\$0.000	\$0.000	\$1,999.336	\$1,091.392	(\$907.945)	(\$12,740.308)
2041	\$0.000	\$0.000	\$0.000	(\$2,038.702)	(\$384.265)	(\$144.298)	(\$603.130)	\$0.000	\$0.000	\$2,038.702	\$1,131.693	(\$907.009)	(\$12,934.619)
2042	\$0.000	\$0.000	\$0.000	(\$2,044.338)	(\$390.186)	(\$147.328)	(\$629.597)	\$0.000	\$0.000	\$2,044.338	\$1,167.111	(\$877.228)	(\$13,109.839)
2043	\$0.000	\$0.000	\$0.000	(\$2,095.461)	(\$396.230)	(\$150.422)	(\$664.302)	\$0.000	\$0.000	\$2,095.461	\$1,210.954	(\$884.507)	(\$13,274.564)
2044	\$0.000	\$0.000	\$0.000	(\$2,142.604)	(\$402.400)	(\$153.581)	(\$702.744)	\$0.000	\$0.000	\$2,142.604	\$1,258.725	(\$883.879)	(\$13,428.038)
2045	\$0.000	\$0.000	\$0.000	(\$2,187.834)	(\$408.699)	(\$156.806)	(\$730.270)	\$0.000	\$0.000	\$2,187.834	\$1,295.775	(\$892.059)	(\$13,572.457)
2046	\$0.000	\$0.000	\$0.000	(\$2,225.985)	(\$415.129)	(\$160.099)	(\$770.076)	\$0.000	\$0.000	\$2,225.985	\$1,345.304	(\$890.681)	(\$13,705.390)
2047	\$0.000	\$0.000	\$0.000	(\$2,264.125)	(\$421.694)	(\$163.461)	(\$809.502)	\$0.000	\$0.000	\$2,264.125	\$1,394.656	(\$869.469)	(\$13,827.754)
2048	\$0.000	\$0.000	\$0.000	(\$2,302.753)	(\$428.395)	(\$166.894)	(\$837.324)	\$0.000	\$0.000	\$2,302.753	\$1,432.613	(\$870.140)	(\$13,941.930)
<b>Nominal NPV</b>		\$4,968.750	\$1,031.250	(\$49,252.274)	(\$6,981.781)	(\$3,482.528)	(\$12,956.172)	\$0.000	\$0.000	\$55,252.274	\$25,420.482	(\$29,831.792)	
<b>Discount Rate =</b>		\$4,046.989	\$839.941	(\$17,335.020)	(\$2,936.233)	(\$1,209.943)	(\$4,133.845)	\$0.000	\$0.000	\$22,221.950	\$8,280.020	(\$13,941.930)	
<b>Benefit/Cost Ratio =</b>													0.37

Run Date:

Filename: Business HVAC

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-1.34	kW/Cus
(2) Change in Peak kW per Customer at generator	-1.65	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	(3.786)	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	(3.592)	kWh/Cus/Yr

II. Economic Life and K-Factors

(1) DSM Program Study Period	30	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
* (6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$529.75	\$/Cus
(2) Utility Recurring Cost Per Customer	\$0.00	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$5,166.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
* (8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
* (9) Customer Tax Credit Escalation Rate	2.10%	
* (10) Change in Supply Costs	\$0.00	\$/Cus/Year
* (11) Supply Costs Escalation Rate	2.10%	
* (12) Utility Discount Rate	7.25%	
* (13) Utility AFUDC Rate	5.73%	
* (14) Utility Nonrecurring Rebate/Incentive	\$529.75	\$/Cus
* (15) Utility Recurring Rebate/Incentive	\$0.00	\$/Cus/Year
* (16) Utility Rebate/Incentive Escalation Rate	0.00%	

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2019	
(2) In-Service Year For Incremental Generation	2024 **	
(3) In-Service Year For Incremental T & D	2020	
(4) Base Year Incremental Generation Cost	\$806.95	\$/kW
(5) Base Year Incremental Transmission Cost	\$205.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$173.77	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%	
(8) Generator Fixed O & M Cost	\$59.33	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	0.24%	
(10) Transmission Fixed O & M Cost	\$3.87	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	81.49%	
(16) Incremental Generating Unit Fuel Cost	\$0.0309	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	2.85%	
(18) Incremental Purchased Capacity Cost	\$12.54	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	7.57%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0650	\$/kWh
(2) Non-Fuel Escalation Rate		Per Table
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate		Per Table
* (5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants'	RIM
NPV Benefits(\$000s)	\$10,427	\$11,548	\$10,427
NPV Costs (\$000s)	\$11,110	\$10,077	\$12,581
NPV Net Benefits (\$000s)	(\$684)	\$1,471	(\$2,154)
Benefit:Cost Ratio	0.938	1.146	0.829

\* Supplemental information.

\*\* The relevant avoidable generation unit is a combined cycle unit.

Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$0	\$212	\$2,066	\$0	\$0	\$0	(\$27)	(\$46)	\$2,278	\$72	(\$2,206)	(\$2,057)
2021	\$0	\$233	\$2,273	\$0	\$0	\$0	(\$57)	(\$108)	\$2,506	\$165	(\$2,341)	(\$4,092)
2022	\$0	\$257	\$2,506	\$0	\$0	\$0	(\$92)	(\$179)	\$2,762	\$270	(\$2,492)	(\$6,112)
2023	\$0	\$281	\$2,738	\$0	\$0	\$0	(\$131)	(\$271)	\$3,019	\$402	(\$2,617)	(\$8,090)
2024	\$0	\$302	\$2,945	\$0	\$0	(\$519)	(\$175)	(\$204)	\$3,247	\$897	(\$2,349)	(\$9,745)
2025	\$0	\$0	\$0	\$0	\$0	(\$526)	(\$179)	(\$199)	\$0	\$904	(\$9,151)	(\$10,745)
2026	\$0	\$0	\$0	\$0	\$0	(\$533)	(\$183)	(\$213)	\$0	\$929	(\$8,582)	(\$11,827)
2027	\$0	\$0	\$0	\$0	\$0	(\$541)	(\$186)	(\$227)	\$0	\$954	(\$7,957)	(\$12,884)
2028	\$0	\$0	\$0	\$0	\$0	(\$549)	(\$190)	(\$238)	\$0	\$977	(\$7,517)	(\$13,841)
2029	\$0	\$0	\$0	\$0	\$0	(\$556)	(\$194)	(\$253)	\$0	\$1,004	(\$7,019)	(\$14,845)
2030	\$0	\$0	\$0	\$0	\$0	(\$564)	(\$198)	(\$269)	\$0	\$1,032	(\$6,541)	(\$15,886)
2031	\$0	\$0	\$0	\$0	\$0	(\$572)	(\$203)	(\$283)	\$0	\$1,058	(\$6,085)	(\$16,944)
2032	\$0	\$0	\$0	\$0	\$0	(\$581)	(\$207)	(\$305)	\$0	\$1,093	(\$5,645)	(\$18,027)
2033	\$0	\$0	\$0	\$0	\$0	(\$589)	(\$211)	(\$323)	\$0	\$1,123	(\$5,224)	(\$19,151)
2034	\$0	\$0	\$0	\$0	\$0	(\$598)	(\$216)	(\$338)	\$0	\$1,152	(\$4,821)	(\$20,303)
2035	\$0	\$0	\$0	\$0	\$0	(\$607)	(\$220)	(\$359)	\$0	\$1,186	(\$4,434)	(\$21,479)
2036	\$0	\$0	\$0	\$0	\$0	(\$616)	(\$225)	(\$377)	\$0	\$1,217	(\$4,064)	(\$22,696)
2037	\$0	\$0	\$0	\$0	\$0	(\$625)	(\$229)	(\$391)	\$0	\$1,246	(\$3,711)	(\$23,957)
2038	\$0	\$0	\$0	\$0	\$0	(\$634)	(\$234)	(\$413)	\$0	\$1,281	(\$3,372)	(\$25,269)
2039	\$0	\$0	\$0	\$0	\$0	(\$644)	(\$239)	(\$432)	\$0	\$1,315	(\$3,048)	(\$26,617)
2040	\$0	\$0	\$0	\$0	\$0	(\$654)	(\$244)	(\$454)	\$0	\$1,352	(\$2,737)	(\$28,014)
2041	\$0	\$0	\$0	\$0	\$0	(\$664)	(\$249)	(\$477)	\$0	\$1,390	(\$2,439)	(\$29,453)
2042	\$0	\$0	\$0	\$0	\$0	(\$674)	(\$255)	(\$494)	\$0	\$1,423	(\$2,155)	(\$30,928)
2043	\$0	\$0	\$0	\$0	\$0	(\$685)	(\$260)	(\$518)	\$0	\$1,463	(\$1,883)	(\$32,441)
2044	\$0	\$0	\$0	\$0	\$0	(\$695)	(\$265)	(\$545)	\$0	\$1,506	(\$1,621)	(\$34,002)
2045	\$0	\$0	\$0	\$0	\$0	(\$706)	(\$271)	(\$565)	\$0	\$1,542	(\$1,372)	(\$35,614)
2046	\$0	\$0	\$0	\$0	\$0	(\$717)	(\$277)	(\$592)	\$0	\$1,586	(\$1,132)	(\$37,286)
2047	\$0	\$0	\$0	\$0	\$0	(\$729)	(\$282)	(\$621)	\$0	\$1,632	(\$903)	(\$39,017)
2048	\$0	\$0	\$0	\$0	\$0	(\$740)	(\$288)	(\$640)	\$0	\$1,669	(\$684)	(\$40,801)
Nominal NPV		\$1,285	\$12,528	\$0.000	\$0.000	(\$15,519)	(\$5,988)	(\$10,333)	\$13,812	\$31,840	\$18,028	
Discount Rate =		\$1,033,362	\$10,077,107	\$0.000	\$0.000	(\$5,073,370)	(\$2,065,823)	(\$3,287,666)	\$11,110,469	\$10,426,859	\$683,610	
Benefit/Cost Ratio =		7.25%	0.94									



Participants' Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	\$2,066	\$0	\$0	\$0	(\$139)	\$0	\$212	\$2,066	\$351	(\$1,716)	(\$1,600)
2021	\$2,273	\$0	\$0	\$0	(\$289)	\$0	\$233	\$2,273	\$522	(\$1,751)	(\$3,122)
2022	\$2,506	\$0	\$0	\$0	(\$476)	\$0	\$257	\$2,506	\$733	(\$1,772)	(\$4,558)
2023	\$2,738	\$0	\$0	\$0	(\$694)	\$0	\$281	\$2,738	\$975	(\$1,763)	(\$5,891)
2024	\$2,945	\$0	\$0	\$0	(\$917)	\$0	\$302	\$2,945	\$1,219	(\$1,726)	(\$7,106)
2025	\$0	\$0	\$0	\$0	(\$936)	\$0	\$0	\$0	\$936	\$936	(\$6,492)
2026	\$0	\$0	\$0	\$0	(\$945)	\$0	\$0	\$0	\$945	\$945	(\$5,913)
2027	\$0	\$0	\$0	\$0	(\$957)	\$0	\$0	\$0	\$957	\$957	(\$5,366)
2028	\$0	\$0	\$0	\$0	(\$970)	\$0	\$0	\$0	\$970	\$970	(\$4,850)
2029	\$0	\$0	\$0	\$0	(\$990)	\$0	\$0	\$0	\$990	\$990	(\$4,359)
2030	\$0	\$0	\$0	\$0	(\$1,010)	\$0	\$0	\$0	\$1,010	\$1,010	(\$3,891)
2031	\$0	\$0	\$0	\$0	(\$1,032)	\$0	\$0	\$0	\$1,032	\$1,032	(\$3,446)
2032	\$0	\$0	\$0	\$0	(\$1,048)	\$0	\$0	\$0	\$1,048	\$1,048	(\$3,024)
2033	\$0	\$0	\$0	\$0	(\$1,067)	\$0	\$0	\$0	\$1,067	\$1,067	(\$2,624)
2034	\$0	\$0	\$0	\$0	(\$1,082)	\$0	\$0	\$0	\$1,082	\$1,082	(\$2,245)
2035	\$0	\$0	\$0	\$0	(\$1,099)	\$0	\$0	\$0	\$1,099	\$1,099	(\$1,887)
2036	\$0	\$0	\$0	\$0	(\$1,117)	\$0	\$0	\$0	\$1,117	\$1,117	(\$1,547)
2037	\$0	\$0	\$0	\$0	(\$1,124)	\$0	\$0	\$0	\$1,124	\$1,124	(\$1,228)
2038	\$0	\$0	\$0	\$0	(\$1,148)	\$0	\$0	\$0	\$1,148	\$1,148	(\$925)
2039	\$0	\$0	\$0	\$0	(\$1,169)	\$0	\$0	\$0	\$1,169	\$1,169	(\$637)
2040	\$0	\$0	\$0	\$0	(\$1,239)	\$0	\$0	\$0	\$1,239	\$1,239	(\$352)
2041	\$0	\$0	\$0	\$0	(\$1,267)	\$0	\$0	\$0	\$1,267	\$1,267	(\$80)
2042	\$0	\$0	\$0	\$0	(\$1,294)	\$0	\$0	\$0	\$1,294	\$1,294	\$178
2043	\$0	\$0	\$0	\$0	(\$1,297)	\$0	\$0	\$0	\$1,297	\$1,297	\$419
2044	\$0	\$0	\$0	\$0	(\$1,331)	\$0	\$0	\$0	\$1,331	\$1,331	\$651
2045	\$0	\$0	\$0	\$0	(\$1,363)	\$0	\$0	\$0	\$1,363	\$1,363	\$871
2046	\$0	\$0	\$0	\$0	(\$1,393)	\$0	\$0	\$0	\$1,393	\$1,393	\$1,081
2047	\$0	\$0	\$0	\$0	(\$1,418)	\$0	\$0	\$0	\$1,418	\$1,418	\$1,281
2048	\$0	\$0	\$0	\$0	(\$1,444)	\$0	\$0	\$0	\$1,444	\$1,444	\$1,471
<b>Nominal NPV</b>	\$12,528	\$10,077	\$0	\$0	(\$30,256)	\$0	\$1,285	\$12,528	\$31,541	\$19,013	
<b>Discount Rate =</b>					7.25%		\$1,033	\$10,077.107	\$11,547.647	\$1,471	
<b>Benefit/Cost Ratio =</b>					1.15						

Ratepayers' Impact Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Change in Electric Supply Costs (\$000s)	Change in Electric Revenues (\$000)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Program Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2019	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2020	\$0.000	\$0.000	\$211.900	\$211.900	(\$138.944)	\$0.000	(\$26.581)	(\$45.741)	\$0.000	\$0.000	\$562.744	\$72.322	(\$490.423)	(\$457.253)
2021	\$0.000	\$0.000	\$233.090	\$233.090	(\$288.749)	\$0.000	(\$56.993)	(\$107.680)	\$0.000	\$0.000	\$754.929	\$164.873	(\$590.256)	(\$970.364)
2022	\$0.000	\$0.000	\$256.929	\$256.929	(\$476.401)	\$0.000	(\$91.787)	(\$178.573)	\$0.000	\$0.000	\$990.259	\$270.360	(\$719.899)	(\$1,553.848)
2023	\$0.000	\$0.000	\$280.768	\$280.768	(\$694.035)	\$0.000	(\$131.200)	(\$270.629)	\$0.000	\$0.000	\$1,255.570	\$401.829	(\$853.740)	(\$2,199.010)
2024	\$0.000	\$0.000	\$301.958	\$301.958	(\$917.082)	(\$518.774)	(\$175.117)	(\$203.573)	\$0.000	\$0.000	\$1,520.997	\$697.464	(\$823.533)	(\$2,638.337)
2025	\$0.000	\$0.000	\$0.000	\$0.000	(\$935.933)	(\$525.978)	(\$178.794)	(\$199.307)	\$0.000	\$0.000	\$935.933	\$904.080	(\$31.853)	(\$2,659.262)
2026	\$0.000	\$0.000	\$0.000	\$0.000	(\$944.547)	(\$533.332)	(\$182.549)	(\$212.991)	\$0.000	\$0.000	\$944.547	\$928.872	(\$15.675)	(\$2,668.863)
2027	\$0.000	\$0.000	\$0.000	\$0.000	(\$957.185)	(\$540.839)	(\$186.383)	(\$226.565)	\$0.000	\$0.000	\$957.185	\$953.786	(\$3.399)	(\$2,670.803)
2028	\$0.000	\$0.000	\$0.000	\$0.000	(\$959.881)	(\$548.502)	(\$190.297)	(\$238.087)	\$0.000	\$0.000	\$969.881	\$976.886	\$7.006	(\$2,660.270)
2029	\$0.000	\$0.000	\$0.000	\$0.000	(\$990.044)	(\$556.326)	(\$194.293)	(\$253.129)	\$0.000	\$0.000	\$990.044	\$1,003.748	\$13.704	(\$2,650.058)
2030	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,009.761)	(\$564.312)	(\$198.373)	(\$269.139)	\$0.000	\$0.000	\$1,009.761	\$1,031.824	\$22.063	(\$2,638.868)
2031	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,032.117)	(\$572.465)	(\$202.539)	(\$283.044)	\$0.000	\$0.000	\$1,032.117	\$1,058.048	\$25.931	(\$2,620.812)
2032	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,047.828)	(\$580.788)	(\$206.792)	(\$305.122)	\$0.000	\$0.000	\$1,047.828	\$1,092.702	\$44.874	(\$2,599.950)
2033	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,067.424)	(\$589.285)	(\$211.135)	(\$322.616)	\$0.000	\$0.000	\$1,067.424	\$1,123.036	\$55.612	(\$2,575.769)
2034	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,082.494)	(\$597.958)	(\$215.569)	(\$338.099)	\$0.000	\$0.000	\$1,082.494	\$1,151.626	\$69.132	(\$2,547.372)
2035	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,099.279)	(\$606.812)	(\$220.096)	(\$359.448)	\$0.000	\$0.000	\$1,099.279	\$1,186.356	\$87.078	(\$2,516.951)
2036	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,117.356)	(\$615.851)	(\$224.718)	(\$376.897)	\$0.000	\$0.000	\$1,117.356	\$1,217.406	\$122.169	(\$2,482.317)
2037	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,123.797)	(\$625.079)	(\$229.437)	(\$391.451)	\$0.000	\$0.000	\$1,123.797	\$1,245.966	\$122.169	(\$2,447.107)
2038	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,148.241)	(\$634.498)	(\$234.255)	(\$412.695)	\$0.000	\$0.000	\$1,148.241	\$1,281.448	\$133.208	(\$2,411.159)
2039	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,168.957)	(\$644.115)	(\$238.174)	(\$431.538)	\$0.000	\$0.000	\$1,168.957	\$1,314.827	\$145.870	(\$2,385.321)
2040	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,239.417)	(\$653.931)	(\$244.197)	(\$453.737)	\$0.000	\$0.000	\$1,239.417	\$1,351.865	\$112.449	(\$2,358.996)
2041	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,267.359)	(\$663.952)	(\$249.325)	(\$476.962)	\$0.000	\$0.000	\$1,267.359	\$1,390.239	\$122.880	(\$2,333.168)
2042	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,293.639)	(\$674.183)	(\$254.561)	(\$494.204)	\$0.000	\$0.000	\$1,293.639	\$1,422.947	\$129.308	(\$2,302.230)
2043	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,296.739)	(\$684.626)	(\$259.907)	(\$518.329)	\$0.000	\$0.000	\$1,296.739	\$1,462.862	\$166.123	(\$2,271.891)
2044	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,331.086)	(\$695.287)	(\$265.365)	(\$545.161)	\$0.000	\$0.000	\$1,331.086	\$1,505.813	\$174.727	(\$2,242.844)
2045	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,362.893)	(\$706.171)	(\$270.937)	(\$565.003)	\$0.000	\$0.000	\$1,362.893	\$1,542.111	\$179.419	(\$2,213.704)
2046	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,392.980)	(\$717.281)	(\$276.627)	(\$592.124)	\$0.000	\$0.000	\$1,392.980	\$1,586.032	\$193.053	(\$2,183.665)
2047	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,418.397)	(\$728.623)	(\$282.436)	(\$620.786)	\$0.000	\$0.000	\$1,418.397	\$1,631.845	\$213.448	(\$2,154.149)
2048	\$0.000	\$0.000	\$0.000	\$0.000	(\$1,443.801)	(\$740.202)	(\$286.367)	(\$640.171)	\$0.000	\$0.000	\$1,443.801	\$1,668.740	\$224.939	
Nominal NPV	\$1,284.644	\$1,284.644	\$1,284.644	\$1,284.644	(\$30,256.163)	(\$15,519.171)	(\$5,987.800)	(\$10,332.743)	\$0.000	\$0.000	\$32,825.450	\$31,839.714	(\$985.736)	
Discount Rate =	\$1,033.362	\$1,033.362	\$1,033.362	\$1,033.362	(\$10,514.285)	(\$5,073.370)	(\$2,065.823)	(\$3,287.666)	\$0.000	\$0.000	\$12,581.009	\$10,426.859	(\$2,154.149)	
Benefit/Cost Ratio =														0.83

Run Date:

Filename: Curtailable

INPUT DATA -- PART 1

Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

I. Program Demand Impacts and Line Losses

(1) Change in Peak kW Customer at meter	-1.00	kW/Cus
(2) Change in Peak kW per Customer at generator	-1.01	kW Gen/Cus
(3) kW Line Loss Percentage	5.35%	
(4) Change in kWh per Customer at generator	0	kWh/Cus/Yr
(5) kWh Line Loss Percentage	5.38%	
(6) Group Line Loss Multiplier	1.0012	
(7) Annual Change in Customer kWh at Meter	0	kWh/Cus/Yr

II. Economic Life and K-Factors

(1) DSM Program Study Period	15	Years
(2) Economic Life of Incremental Generation	40	Years
(3) Economic Life of Incremental T&D	42	Years
(4) K-Factor for Generation	1.3072	
(5) K-Factor for T&D	1.3060	
(6) Switch: Rev Req (0) or Val-of-Def (1)	1	

III. Utility & Customer Costs

(1) Utility Nonrecurring Cost Per Customer	\$0.00	\$/Cus
(2) Utility Recurring Cost Per Customer	\$2.50	\$/Cus/Year
(3) Utility Cost Escalation Rate	0.00%	
(4) Customer Equipment Cost	\$0.00	\$/Cus
(5) Customer Equipment Cost Escalation Rate	0.00%	
(6) Customer O&M Cost	\$0.00	\$/Cus/Year
(7) Customer O&M Cost Escalation Rate	2.10%	
(8) Customer Tax Credit Per Installation	\$0.00	\$/Cus
(9) Customer Tax Credit Escalation Rate	2.10%	
(10) Change in Supply Costs	\$0.00	\$/Cus/Year
(11) Supply Costs Escalation Rate	2.10%	
(12) Utility Discount Rate	7.25%	
(13) Utility AFUDC Rate	5.73%	
(14) Utility Nonrecurring Rebate/Incentive	\$0.00	\$/Cus
(15) Utility Recurring Rebate/Incentive	\$82.50	\$/Cus/Year
(16) Utility Rebate/Incentive Escalation Rate	0.00%	

\* Supplemental information.  
\*\* The relevant avoidable generation unit is a combined cycle unit.

IV. Incremental Generation, Transmission, & Distribution Costs

(1) Base Year	2020	
(2) In-Service Year For Incremental Generation	2024 **	
(3) In-Service Year For Incremental T & D	2021	
(4) Base Year Incremental Generation Cost	\$806.95	\$/kW
(5) Base Year Incremental Transmission Cost	\$205.00	\$/kW
(6) Base Year Incremental Distribution Cost	\$173.77	\$/kW
(7) Gen, Tran, & Dist Cost Escalation Rate	2.10%	
(8) Generator Fixed O & M Cost	\$50.61	\$/kW/Yr
(9) Generator Fixed O&M Escalation Rate	1.70%	
(10) Transmission Fixed O & M Cost	\$3.87	\$/kW/Yr
(11) Distribution Fixed O & M Cost	\$6.68	\$/kW/Yr
(12) T&D Fixed O&M Escalation Rate	2.10%	
(13) Incremental Gen Variable O & M Costs	\$0.000	\$/kW/Yr
(14) Incre Gen Variable O&M Cost Esc Rate	0.00%	
(15) Incremental Gen Capacity Factor	81.49%	
(16) Incremental Generating Unit Fuel Cost	\$0.0309	\$/kWh
(17) Incremental Gen Unit Fuel Esc Rate	0.92%	
(18) Incremental Purchased Capacity Cost	\$12.54	\$/KW/YR
(19) Incremental Capacity Cost Esc Rate	12.91%	

Stop Revenue Loss at In-Service Year? (Y=1, N=0) 0

V. (1) Non-Fuel Cost In Customer Bill (Base Year)

(1) Non-Fuel Cost In Customer Bill (Base Year)	\$0.0234	\$/kWh
(2) Non-Fuel Escalation Rate	Per Table	
(3) Customer Demand Charge Per kW (Base Year)	\$0.0000	\$/kW/Mo
(4) Demand Charge Escalation Rate	Per Table	
(5) Average Annual Change in Monthly Billing kW	0	kW/Mo.

Summary Results for This Analysis

	TRC	Participants	RIM
NPV Benefits(\$000s)	\$818	\$793	\$818
NPV Costs (\$000s)	\$24	\$0	\$817
NPV Net Benefits (\$000s)	\$793	\$793	\$0
Benefit:Cost Ratio	34.014	#DIV/0!	1.000

**Total Resource Cost-Effectiveness Measure  
 Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12	13
Year	Change in Electric Supply Costs (\$000s)	Utility's Program Costs (\$000s)	Participants' Program Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2020	\$0	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	(\$3)
2021	\$0	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	(\$5)
2022	\$0	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	(\$7)
2023	\$0	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	(\$9)
2024	\$0	\$3	\$0	\$0	\$0	(\$121)	\$0	\$0	\$3	\$121	\$118	\$80
2025	\$0	\$3	\$0	\$0	\$0	(\$131)	\$0	\$0	\$3	\$131	\$128	\$171
2026	\$0	\$3	\$0	\$0	\$0	(\$133)	\$0	\$0	\$3	\$133	\$130	\$256
2027	\$0	\$3	\$0	\$0	\$0	(\$135)	\$0	\$0	\$3	\$135	\$132	\$337
2028	\$0	\$3	\$0	\$0	\$0	(\$137)	\$0	\$0	\$3	\$137	\$134	\$414
2029	\$0	\$3	\$0	\$0	\$0	(\$138)	\$0	\$0	\$3	\$138	\$136	\$486
2030	\$0	\$3	\$0	\$0	\$0	(\$140)	\$0	\$0	\$3	\$140	\$138	\$555
2031	\$0	\$3	\$0	\$0	\$0	(\$142)	\$0	\$0	\$3	\$142	\$140	\$619
2032	\$0	\$3	\$0	\$0	\$0	(\$144)	\$0	\$0	\$3	\$144	\$142	\$681
2033	\$0	\$3	\$0	\$0	\$0	(\$147)	\$0	\$0	\$3	\$147	\$144	\$739
2034	\$0	\$3	\$0	\$0	\$0	(\$149)	\$0	\$0	\$3	\$149	\$146	\$793
<b>Nominal NPV</b>		\$38	\$0.000	\$0.000	\$0.000	(\$1,517)	\$0.000	\$0.000	\$38	\$1,517	\$1,479	
<b>Discount Rate =</b>		\$24.034				(\$817.504)			\$24.034	\$817.504	\$793.470	
<b>Benefit/Cost Ratio =</b>		7.25%										
		34.01										

Run Date:

Filename: **Curtailable**

**Participants' Cost-Effectiveness Measure**  
**Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code**

1	2	3	4	5	6	7	8	9	10	11	12
Year	Customer Equip Costs (\$000s)	Customer O&M Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Change in Participants' Electric Bills (\$000s)	Tax Credits (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2020	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$83
2021	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$159
2022	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$231
2023	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$298
2024	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$360
2025	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$418
2026	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$473
2027	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$523
2028	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$570
2029	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$614
2030	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$655
2031	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$693
2032	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$729
2033	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$762
2034	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$0	\$83	\$83	\$793
<b>Nominal NPV</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$1,238	\$0,000	\$1,238	\$1,238	\$1,238
<b>Discount Rate =</b>											7.25%
<b>Benefit/Cost Ratio =</b>											#DIV/0!

Run Date:

Filename:

Ratepayers' Impact Cost-Effectiveness Measure  
Cost-Effectiveness Analysis per Rule 25-17.008 Florida Administrative Code

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Year	Change in Electric Supply Costs (\$000s)	Utility Program Costs (\$000s)	Utility Paid Rebates & Incentives (\$000s)	Change in Electric Revenues (\$000)	Incremental Generation Cap Costs (\$000s)	Incremental T&D Cap Costs (\$000s)	Incremental Prog Induced Fuel Costs (\$000s)	Other Costs (\$000s)	Other Benefits (\$000s)	Total Costs (\$000s)	Total Benefits (\$000s)	Total Net Benefits to All Customers (\$000s)	Cumulative Discounted Net Benefits (\$000s)
2020	\$0.000	\$2.500	\$82.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$0.000	\$85.000	(\$85.000)
2021	\$0.000	\$2.500	\$82.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$0.000	\$85.000	(\$164.251)
2022	\$0.000	\$2.500	\$82.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$0.000	\$85.000	(\$238.142)
2023	\$0.000	\$2.500	\$82.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$0.000	\$85.000	(\$307.035)
2024	\$0.000	\$2.500	\$82.500	\$0.000	(\$120.648)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$120.648	\$120.648	(\$280.096)
2025	\$0.000	\$2.500	\$82.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$130.935	\$45.935	(\$247.731)
2026	\$0.000	\$2.500	\$82.500	\$0.000	(\$132.753)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$132.753	\$47.753	(\$216.361)
2027	\$0.000	\$2.500	\$82.500	\$0.000	(\$134.610)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$134.610	\$49.610	(\$185.975)
2028	\$0.000	\$2.500	\$82.500	\$0.000	(\$136.504)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$136.504	\$51.504	(\$156.563)
2029	\$0.000	\$2.500	\$82.500	\$0.000	(\$138.439)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$138.439	\$53.439	(\$128.110)
2030	\$0.000	\$2.500	\$82.500	\$0.000	(\$140.413)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$140.413	\$55.413	(\$100.602)
2031	\$0.000	\$2.500	\$82.500	\$0.000	(\$142.429)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$142.429	\$57.429	(\$74.020)
2032	\$0.000	\$2.500	\$82.500	\$0.000	(\$144.487)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$144.487	\$59.487	(\$48.349)
2033	\$0.000	\$2.500	\$82.500	\$0.000	(\$146.587)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$146.587	\$61.587	(\$23.569)
2034	\$0.000	\$2.500	\$82.500	\$0.000	(\$148.732)	\$0.000	\$0.000	\$0.000	\$0.000	\$85.000	\$148.732	\$63.732	\$0.340
<b>Nominal NPV</b>		\$37.500	\$1,237.500	\$0.000	(\$1,516.537)	\$0.000	\$0.000	\$0.000	\$0.000	\$1,275.000	\$1,516.537	\$241.537	
<b>Discount Rate =</b>		\$24.034	\$793.130	\$0.000	(\$817.504)	\$0.000	\$0.000	\$0.000	\$0.000	\$817.764	\$817.504	\$0.340	
<b>Benefit/Cost Ratio =</b>													1.00
													7.25%

# **ATTACHMENT C**

## **Index of Existing and Proposed Demand-Side Management Plans and Programs**

**Index of Existing and Proposed Demand-Side Management Plans and Programs**

2020-2024 Existing FPL DSM Plan		2020-2024 Existing Gulf DSM Plan		2022-2024 Integrated DSM Plan		
Program	Page	Program	Page	Program	Page	Change
Residential Energy Survey	12	Residential Home Energy Survey	10	Residential Energy Survey	12	-
Residential Load Management (On Call®)	13	-	-	Residential Load Management (On Call®)	13	-
Residential Air Conditioning	14	Residential Heating, Ventilating, and Air Conditioning (HVAC)	14	Residential Air Conditioning	14	<ul style="list-style-type: none"> <li>• Includes Gulf heat pump option</li> <li>• Expands program eligibility beyond single-family homes</li> </ul>
Residential New Construction (BuildSmart®)	15	-	-	Residential New Construction (BuildSmart®)	15	<ul style="list-style-type: none"> <li>• Not previously offered in the Gulf area</li> </ul>
Residential Ceiling Insulation	16	Residential Ceiling Insulation	16	Residential Ceiling Insulation	16	<ul style="list-style-type: none"> <li>• Simplifies customer qualification</li> <li>• Eliminates rebate tiers</li> </ul>
Residential Low Income	17	Residential Low Income (Community Energy Saver)	12	Residential Low Income	17	<ul style="list-style-type: none"> <li>• Adds WAP agency channel in Gulf area</li> <li>• Maintains “Community Energy Saver” branding in Gulf area</li> <li>• Adds LED lighting in FPL area</li> </ul>
-	-	Residential High Efficiency Pool Pump	18	-	-	<ul style="list-style-type: none"> <li>• Discontinued</li> </ul>
-	-	Energy Select	20	-	-	<ul style="list-style-type: none"> <li>• Discontinued</li> </ul>
Business Energy Evaluation (BEE)	20	Business Energy Survey (BES)	24	Business Energy Evaluation (BEE)	20	-



2020-2024 Existing FPL DSM Plan		2020-2024 Existing Gulf DSM Plan		2022-2024 Integrated DSM Plan		
Program	Page	Program	Page	Program	Page	Change
Business On Call®	21	-	-	Business On Call®	21	• Not previously offered in the Gulf area
Commercial/Industrial Demand Reduction (CDR)	22	-	-	Commercial/Industrial Demand Reduction (CDR)	22	• Not previously offered in the Gulf area
Commercial/Industrial Load Control (CILC)	23	-	-	Commercial/Industrial Load Control (CILC)	23	-
		Curtable Load Rider (CL)	28	Curtable Load (CL)	24	• Closed to new participants
Business Heating, Ventilating & Air Conditioning (HVAC)	24	Business Heating, Ventilating, and Air Conditioning (HVAC)	26	Business Heating, Ventilating & Air Conditioning (HVAC)	25	• Adds Thermal Energy Storage (TES) measure for Gulf area
Business Lighting	25	-	-	Business Lighting	26	• Not previously offered in the Gulf area
Business Custom Incentive (BCI)	26	Business Custom Incentive (BCI)	29	Business Custom Incentive (BCI)	27	-
Conservation Research and Development (CRD)	28	Conservation Demonstration and Development (CDD)	32	Conservation Research and Development (CRD)	29	-
Cogeneration & Small Power Production	29	-	-	Cogeneration & Small Power Production	30	-

**ATTACHMENT D**

**Florida Power & Light Company  
Integrated Demand-Side Management Plan 2022-2024**

**FLORIDA POWER & LIGHT COMPANY**  
**2022-2024 INTEGRATED DEMAND-SIDE MANAGEMENT PLAN**

**BEFORE THE FLORIDA PUBLIC SERVICE**  
**COMMISSION**

**AUGUST 6, 2021**

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>2</b>
<b>SECTION I – OVERVIEW .....</b>	<b>5</b>
<b>A. COMPOSITION OF INTEGRATED DSM PLAN .....</b>	<b>5</b>
<b>B. COST-EFFECTIVENESS SCREENING ANALYSIS .....</b>	<b>7</b>
<b>C. PROGRAM STANDARDS.....</b>	<b>8</b>
<b>SECTION II – DSM PROGRAM DESCRIPTIONS.....</b>	<b>9</b>
<b>RESIDENTIAL SECTOR PROGRAM PORTFOLIO .....</b>	<b>11</b>
<i>Residential Energy Survey.....</i>	<i>12</i>
<i>Residential Load Management (On Call®).....</i>	<i>13</i>
<i>Residential Air Conditioning .....</i>	<i>14</i>
<i>Residential New Construction (BuildSmart®).....</i>	<i>15</i>
<i>Residential Ceiling Insulation .....</i>	<i>16</i>
<i>Residential Low Income.....</i>	<i>17</i>
<b>BUSINESS SECTOR PROGRAM PORTFOLIO .....</b>	<b>19</b>
<i>Business Energy Evaluation (BEE) .....</i>	<i>20</i>
<i>Business On Call®.....</i>	<i>21</i>
<i>Commercial/Industrial Demand Reduction (CDR).....</i>	<i>22</i>
<i>Commercial/Industrial Load Control (CILC).....</i>	<i>23</i>
<i>Curtailable Load (CL).....</i>	<i>24</i>
<i>Business Heating, Ventilating &amp; Air Conditioning (HVAC).....</i>	<i>25</i>
<i>Business Lighting.....</i>	<i>26</i>
<i>Business Custom Incentive (BCI) .....</i>	<i>27</i>
<b>OTHER PROGRAMS.....</b>	<b>28</b>
<i>Conservation Research and Development (CRD) .....</i>	<i>29</i>
<i>Cogeneration &amp; Small Power Production.....</i>	<i>30</i>
<b>SECTION III – PROGRAM PROJECTIONS .....</b>	<b>31</b>
<b>APPENDIX A – DISCONTINUED PROGRAMS.....</b>	<b>37</b>
<b>APPENDIX B – PROGRAM-LEVEL COST-EFFECTIVENESS ANALYSES .....</b>	<b>39</b>

## INTRODUCTION

Florida Power & Light Company (FPL) and Gulf Power Company (Gulf)<sup>1</sup> have been delivering cost-effective Demand-Side Management (DSM) programs for more than 40 years. These programs have included customer education, load management and energy efficiency initiatives. FPL and Gulf's DSM combined efforts through 2020 have resulted in a cumulative Summer peak reduction of 5,387 Megawatts (MW) at the generator and estimated cumulative energy savings of 93,189 Gigawatt Hours (GWh) at the generator. Accounting for reserve margin requirements, FPL and Gulf's DSM efforts through 2020 have eliminated the need to construct the equivalent of approximately 65 new 100 MW generating units. Over the years, FPL and Gulf have built one of the largest and most successful DSM programs in the nation and remain committed to continuing to provide a variety of cost-effective DSM programs to FPL and Gulf's customers.

On August 28, 2020, the Florida Public Service Commission (Commission) approved separate DSM Plans for FPL and Gulf (Order No. PSC-2020-0291-CO-EG) to meet their respective 2020-2024 Goals for combined Summer MW, Winter MW and GWh for the Residential and Business sectors established by the Commission (Order No. PSC-2019-0509-FOF-EG). As a result of FPL

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<sup>1</sup> The terms "FPL" and "Gulf" will be used throughout this document. Unless otherwise specifically stated or dictated by context, those references will mean the following:

- In discussing operations or time periods prior to NextEra Energy's January 1, 2019 acquisition of Gulf, "FPL" and "Gulf" will refer to their pre-acquisition status, when they were legally and operationally separate companies.
- In discussing operations or time periods between the January 1, 2019 acquisition and January 1, 2022 (when consolidation will be essentially complete), "FPL" and "Gulf" will refer to their status as separate ratemaking entities, recognizing that they were merged legally on January 1, 2021 and that consolidation proceeded throughout this period.
- In discussing operations and time periods after January 1, 2022, most references will be only to "FPL" because Gulf will be consolidated into FPL, in the former FPL and Gulf service areas (also referred to as peninsular and Northwest Florida throughout this Plan).

and Gulf's legal merger on January 1, 2021, and FPL's petition for approval of unified rates in Docket No. 20210015-EI, FPL is submitting this integrated DSM Plan (Integrated DSM Plan) designed to address the approved Goals for FPL and Gulf on a combined basis. The Commission established FPL and Gulf's 2020-2024 DSM Goals by ordering the continuation of those Goals approved in the 2014 Goals proceeding (Order No. PSC-14-0696-FOF-EU). The Goals set in that 2014 proceeding were based on FPL and Gulf's full Achievable Potential projection (*i.e.*, not limited by FPL or Gulf's actual resource needs) comprised of measures that were cost-effective in 2014 pursuant to the Rate Impact Measure (RIM) and Participant cost-effectiveness screening tests, but not necessarily cost-effective in 2019. Subsequently, in 2020, the Commission approved DSM Plans for FPL and Gulf implementing those goals. See Order No. PSC-2020-0274-PAA-EG, issued August 3, 2020.

The Integrated DSM Plan proposed here is designed to meet the combined FPL and Gulf 2022-2024 Goals by merging the two DSM Plans and integrating or consolidating the FPL and Gulf programs into one set of DSM programs that would apply throughout the FPL and former Gulf service areas, continuing most of the existing programs with some minor modifications. The Integrated DSM Plan sunsets two Gulf programs as discussed in Appendix A. The Integrated DSM Plan represents a comprehensive portfolio of 16 DSM programs offering a wide variety of programs for customers of the integrated company. It includes six Residential programs, eight Business programs, a Conservation Research and Development (CRD) program for evaluating new technologies, and a Cogeneration and Small Power Production program.

All of these programs (except Low Income) were previously cost-effective under the RIM and Participant screening tests when approved in the 2015 DSM Plan but are not cost-effective today.

Accordingly, FPL and Gulf will retain the Commission-approved cap on program participation each year for the Residential and Business sectors individually once their respective MW and GWh Goals have been achieved in order to mitigate the financial impact of the non-cost-effective programs on the general body of customers.

The DSM Plan includes FPL's Residential Energy Survey and Business Energy Evaluation education programs which have been foundational components of FPL's DSM portfolio for decades with over 4 million surveys having been performed since inception. The surveys are offered through online, phone and in-person channels and provide education on actions customers can take to reduce their electricity cost by participating in FPL's DSM programs and also by taking actions and implementing measures, many at low or no cost.

The Integrated DSM Plan contains three Sections and two Appendices.

- **Section I** – Overview of the Integrated DSM Plan summarizing how the Plan will achieve FPL's combined Goals, the programs and measures, and program cost-effectiveness.
- **Section II** – Detailed description of the DSM Programs.
- **Section III** – Projections for the 2022-2024 Goals period of customers, incremental participation and penetration, and kW and kWh savings at the meter and the generator.
- **Appendix A** – Discontinued Programs.
- **Appendix B** – Program-level cost-effectiveness analyses.

## SECTION I – OVERVIEW

### A. Composition of Integrated DSM Plan

Table 1 shows FPL’s combined annual Residential and Business Goals for Summer MW, Winter MW, and GWh established by Order No. PSC-2019-0509-FOF-EG.

**Table 1 – FPL Combined Annual Residential and Business Goals  
(at the Generator)**

Year	Summer MW			Winter MW			GWh		
	Residential	Business	Total	Residential	Business	Total	Residential	Business	Total
2022	35.7	28.0	63.7	21.8	17.2	39.0	34.8	34.6	69.4
2023	36.8	28.5	65.3	22.5	17.6	40.1	36.3	36.3	72.6
2024	37.8	29.1	66.9	23.1	18.0	41.1	37.8	38.1	75.9
<b>Total</b>	<b>110.3</b>	<b>85.6</b>	<b>195.9</b>	<b>67.4</b>	<b>52.8</b>	<b>120.2</b>	<b>108.9</b>	<b>109.0</b>	<b>217.9</b>

The Integrated DSM Plan’s programs and associated measures are shown in Table 2 with detailed descriptions of each provided in Section II. All of these programs are included in FPL and/or Gulf’s current DSM Plan. As with prior DSM Plans, FPL anticipates that the Integrated DSM Plan could change over time due to: changes in market conditions or system needs; program experience; measurement and evaluation; customer research; or new technology options which may become available. Section III demonstrates how the Integrated DSM Plan meets the DSM Goals in Table 1 above. FPL does not count kW or kWh savings for the educational programs (*i.e.*, Residential Energy Survey and Business Energy Evaluation), the CRD program, or the Cogeneration and Small Power Production program.



**Table 2 – Residential and Business Programs & Measures<sup>2</sup>**

<b>Programs</b>	<b>Measures (if multiple per Program)</b>
<b>Residential Energy Survey</b>	Home Energy Survey (HES)
	Online Home Energy Survey (OHES)
	Phone Energy Survey (PES)
<b>Residential Load Management (On Call<sup>®</sup>)</b>	
<b>Residential Air Conditioning</b>	Straight-Cool
	Heat Pump
<b>Residential New Construction (BuildSmart<sup>®</sup>)</b>	
<b>Residential Ceiling Insulation</b>	
<b>Residential Low Income</b>	Energy Survey
	Weatherization (Caulking/Stripping/Door Sweeps)
	Duct Testing & Repair
	Air Conditioning Unit Maintenance
	Air Conditioning Outdoor Coil Cleaning
	Faucet Aerators
	Low-Flow Showerhead
	Water Heater Pipe Wrap
LED Bulbs	
<b>Business Energy Evaluation (BEE)</b>	Field BEE
	Online BEE
	Phone BEE
<b>Business On Call<sup>®</sup></b>	
<b>Commercial/Industrial Demand Reduction</b>	
<b>Commercial/Industrial Load Control (Closed)</b>	
<b>Curtable Load (Closed)</b>	
<b>Business Heating, Ventilating, &amp; Air Conditioning (HVAC)</b>	Chillers
	Thermal Energy Storage (TES)
	Split/Packaged Direct Expansion (DX)
	Demand Control Ventilation (DCV)
<b>Business Lighting</b>	Energy Recovery Ventilation (ERV)
	Compact Fluorescent Lamps (CFL)
	Pulse Start Metal Halide (PSMH) Lighting
	Premium Linear Fluorescent Lamps with High Efficiency Electronic Ballasts
<b>Business Custom Incentive (BCI)</b>	High Bay Light Emitting Diodes (LED)
<b>Conservation Research &amp; Development (CRD)</b>	
<b>Cogeneration &amp; Small Power Production</b>	

<sup>2</sup> Measures listed only when there are multiple measures associated with a program.

## **B. Cost-Effectiveness Screening Analysis**

The Commission-established cost-effectiveness methodology required by Rule 25-17.008, F.A.C. to determine the cost-effectiveness of DSM programs includes the following three screening tests: (a) the RIM test; (b) the Total Resource Cost (TRC) test; and (c) the Participant test. The results for signing up new participants, unless otherwise noted, for each program under the three preliminary screening tests are summarized in Table 3. The individual program cost-effectiveness screening analyses can be found in Appendix B.

**Table 3 – Cost-Effectiveness Screening Test Results for the Integrated System<sup>3</sup>**

<b>Program</b>	<b>RIM</b>	<b>TRC</b>	<b>Participant</b>
<b>Residential Sector Programs</b>			
Residential Load Management (On-Call) - New Signups	0.692	1.354	Infinite
Residential Load Management (On-Call) - Existing Customers and New Signups	1.698	4.801	Infinite
Residential Air Conditioning	0.491	0.481	1.243
Residential New Construction (BuildSmart®)	0.470	0.556	1.583
Residential Ceiling Insulation	0.493	1.437	3.862
Residential Low-Income	0.389	2.698	Infinite
<b>Business Sector Programs</b>			
Business On-Call	0.471	1.262	Infinite
Commercial/Industrial Demand Reduction (CDR) - New Signups*	0.568	23.470	Infinite
Commercial/Industrial Demand Reduction (CDR) - Existing Customers and New Signups*	1.451	103.069	Infinite
Business Heating, Ventilating, & Air-Conditioning (HVAC)	0.427	0.990	2.449
Business Lighting	0.554	2.171	4.525

\* Based on the incentive level proposed in FPL's Rate Case

The cost-effectiveness screening tests used current FPL system assumptions and DSM program costs based on 2020 actual costs. Incentives are per FPL 's Program Standards with the exception of the Commercial/Industrial Demand Reduction (CDR) program which reflects the proposed monthly bill credit reduction proposed in FPL 's 2021 Rate Case (Docket No. 20210015-EI).

<sup>3</sup> "Infinite" means that the participant has no out-of-pocket costs.

All of these programs (except Residential Low Income) were previously cost-effective under the RIM and Participant screening tests when approved in the 2015 DSM Plan proceeding. But all programs are no longer cost-effective today (for new customer signups) due to substantially lower FPL system costs and the increased impact of Codes & Standards. As in 2015, FPL's Low Income program includes measures that do not pass the RIM screening test and some that have customer payback periods of less than two years. As with the currently-approved FPL DSM Plans, the Integrated DSM Plan retains these types of measures to achieve the 2022-2024 Residential Goals. Cost-effectiveness screening was not performed for the previously-mentioned educational, CRD and Cogeneration & Small Power Production programs (for which FPL does not count kW or kWh savings), the Commercial/Industrial Load Control program (which is closed to new participants), the Curtailable Load program (which is closed to new participants), and the Business Custom Incentive programs (for which FPL does not count kW or kWh savings).

### **C. Program Standards**

The Program Standards contain the specifics regarding each program's operations. These will be subject to periodic review and may change over time based on factors such as, but not limited to: changes in Codes & Standards; technological advances; operational needs; program results; and technology application assumptions. All program participants and contractors must comply with the requirements specified in the Program Standards. Unless otherwise noted, the currently approved Program Standards from FPL's 2020 DSM Plan remain in effect for the Integrated DSM Plan. FPL has filed updated versions of the Program Standards for three programs in conjunction with the Integrated DSM Plan.

## **SECTION II – DSM PROGRAM DESCRIPTIONS**

The Integrated DSM Plan incorporates a wide array of programs. It is comprised of 16 DSM programs: six Residential programs, eight Business programs, a CRD program for evaluating new technologies, and a Cogeneration and Small Power Production program. All of these programs are included in FPL or Gulf's current DSM Plan.

This section includes summaries for each of the programs and provides a general description of each program's objectives, features, and administration. Additional specifics on each program and its operations are provided in the Program Standards filed in conjunction with the Integrated DSM Plan. The primary objective of all of the programs included in the portfolio is to reduce growth of coincident peak demand and energy consumption. The portfolio addresses the major drivers of a customer's energy consumption, and its program mix is designed to address the diversity of FPL's customer types and their needs through providing financial incentives and investing in customer awareness through education.

**Post-Installation Verification** – Verification will be conducted for all programs where a financial incentive is provided. In order to ensure compliance with Program Standards, FPL will, at a minimum, perform verifications of the installations as required by Rule 25-17.003(10), F.A.C. For certain programs, FPL will verify 100% of the installations (*e.g.*, Commercial/Industrial Demand Reduction, Business Custom Incentive). Participating customers are required to provide FPL access to perform the verifications.

**Definitions** – Below are definitions of certain terms used throughout the program summaries.

- **Last Modified** – month and year of the last Commission-approved program modification.
- **Existing Customers** – Customers of record who have a certificate of occupancy (CO).
- **New Construction Customers** – Customers of record who do not have a CO.
- **All Customers** – Both Existing and New Construction customers.
- **Participant Financial Incentive** – Unless otherwise indicated, these represent the current incentives per the Program Standards. These were determined for the 2015 DSM Plan to be cost-effective under the RIM test, including having a payback not less than two years of the participant’s incremental cost. For all programs, these incentives are no longer cost-effective under current conditions. For programs/measures where there are multiple incentive levels depending on one or more parameters (*e.g.*, rate classes, building types), the value shown represents the weighted average of the various incentive amounts.
- **“Customer” (for Demand/Energy Savings and Financial Incentives values)** – Represents a single premise for Residential programs. Represents one Summer kW of demand reduction for Business programs. This method has been used for many years to account for and normalize the wide diversity in sizes, types, and energy usages of businesses.

**RESIDENTIAL SECTOR PROGRAM PORTFOLIO**

## **Residential Energy Survey**

**Start Date** – January 1981

**Last Modified** – January 2006

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Residential programs. Surveys are delivered through three channels:

- (1) Home Energy Survey (HES) – performed by an FPL representative at the customer's home
- (2) Online Home Energy Survey (OHES) – performed by the customer using FPL's online systems
- (3) Phone Energy Survey (PES) – performed by an FPL representative using FPL's online systems

**Eligibility** – All FPL residential customers.

**Participant Financial Incentive** – Free to the participant. Residential Energy Surveys can identify opportunities for customers to receive incentives through other FPL Residential programs.

**Marketing Channels** – Television, radio and digital and print media.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Residential Load Management (On Call®)**

**Start Date** – July 1986

**Last Modified** – November 2020

This program allows FPL to turn off customers' appliances consistent with the applicable tariff during capacity constraints, system emergencies or for system frequency regulation. FPL-installed equipment is connected to eligible customer-selected end-use equipment (*i.e.*, central air conditioning, central electric heating, electric water heaters, and pool pumps), allowing FPL to control these loads.

**Eligibility** – FPL residential customers who have eligible end-use equipment. Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill as specified in Tariff Sheet No. 8.217. The credit amount is dependent on the end-use equipment selected by the customer.

**Marketing Channels** – Residential Energy Survey and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with metered data during events and from periodic system tests of participants' appliances.



## **Residential Air Conditioning**

**Start Date** – October 1990

**Last Modified** – January 2022

This program encourages customers to install high-efficiency central air conditioning systems.

**Eligibility** – Existing FPL residential customers with central air conditioning systems who install a replacement straight-cool or heat pump system.

**Participant Financial Incentive** – \$150 per participant. Provided as a credit toward the installation cost on a customer’s invoice from a Participating Independent Contractor (PIC).

**Marketing Channels** – Residential Energy Survey, PICs, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential New Construction (BuildSmart®)**

**Start Date** – February 1996

**Last Modified** – January 2006

This program encourages builders and developers to design and construct new homes in a manner that moves toward ENERGY STAR® qualifications.

**Eligibility** – All builders, developers and owner-builders of a new home in FPL’s service territory. Homes must be single-family detached or single-family attached where each housing unit is separated from its neighbors by a ground-to-roof wall with no housing units above or below. The energy code compliance score for the home must be better than that required by the Florida Building Code as specified in FPL’s Program Standards. Florida Building Commission-approved energy code compliance software will be used for certification.

**Participant Financial Incentive** – \$50 promotional incentive and optional \$75 verification reimbursement per participant. Paid to builders, developers, owner-builders, or their designees.

**Marketing Channels** – FPL personnel, builders, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential Ceiling Insulation**

**Start Date** – October 1981

**Last Modified** – January 2022

This program encourages customers to improve the building envelope's thermal efficiency.

**Eligibility** – Existing FPL residential customers whose homes: (1) have verified below-code insulation; and (2) have whole house central electric air conditioning/heating.

**Participant Financial Incentive** – \$220 per participant. Provided as a credit toward the installation cost on a customer's invoice from a PIC or as a rebate from FPL for a qualifying self-installed insulation.

**Marketing Channels** – Residential Energy Survey, PICs, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Residential Low Income**

**Start Date** – March 2005

**Last Modified** – January 2022

This program is specifically designed to assist low income customers. Delivery is provided through two channels. The first channel is through FPL’s “Power to Save” and “Community Energy Saver” energy retrofits in selected neighborhoods. FPL, or its agents, will conduct an Energy Survey for each customer and install, as appropriate, measures which address their main areas of energy use: weatherization/infiltration (caulking, weather stripping and door sweeps); air conditioning (duct testing and repair, air conditioning unit maintenance, and outdoor unit coil cleaning); water heating (low flow showerheads, faucet aerators and pipe wrap); and lighting. The second channel is through state Weatherization Assistance Provider (WAP) agencies to which FPL will provide incentives for certain energy measures as part of the total assistance they provide to their selected low-income customers. Several of these measures did not pass the RIM cost-effectiveness screening test and/or the two-year participant payback. However, FPL has retained these types of measures to achieve the 2020-2024 Residential Goals and in response to the emphasis placed by the Commission on this customer segment in the 2014 DSM Goals Order (Order No. PSC-14-0696-FOF-EU).

**Eligibility** – Existing FPL residential customers who meet certain low-income criteria.

- FPL Power to Save/Community Energy Saver – conducted in areas where the majority of customers’ incomes are below 200% of the federal poverty level and all FPL customers in these areas may participate.
- WAP-delivered – customers who are eligible for financial assistance from federally-funded programs as verified by federal grantees or their designees.

**Participant Financial Incentive** – Participants will receive the measures for free whether provided by FPL or a WAP agency. Incentives will be paid to the WAP agency or its designee for measures which they install. The incentives per participant are:

- Weatherization/Infiltration – \$90
- Air Conditioning: Duct testing & repair – \$60; Unit maintenance – \$80; Outdoor coil cleaning – \$60
- Water Heating: Low flow showerhead – \$30; Faucet aerator – \$10; Pipe wrap – \$40
- LED light bulbs – \$6

**Marketing Channels** – FPL personnel, WAP agencies, community-based organizations, faith-based organizations, and digital and print media. These channels will be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with statistical billing analysis.

## **BUSINESS SECTOR PROGRAM PORTFOLIO**

## **Business Energy Evaluation (BEE)**

**Start Date** – October 1990

**Last Modified** – March 2005

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Business programs. There are three delivery channels for the BEE:

- (1) Field BEE – performed by an FPL representative at the customer's facility
- (2) Online BEE – performed by the customer using FPL's online systems
- (3) Phone BEE – performed by an FPL representative using FPL's online systems

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Free to the participant. The BEE helps to determine which practices are most appropriate for a particular facility and how to qualify for incentives through other FPL Business programs.

**Marketing Channels** – FPL personnel, television, radio, and digital and print media. FPL may also provide BEEs proactively. These channels will also be supported, as appropriate, by promotional activities.

**Demand/Energy Savings Measurement & Evaluation** – Not applicable. Savings are not attributed to this program.

## **Business On Call**<sup>®</sup>

**Start Date** – June 1995

**Last Modified** – September 2006

This program allows FPL to turn off customers' direct expansion (DX) central electric air conditioning units consistent with the applicable tariff during capacity constraints or system emergencies. FPL-installed equipment is connected to the customer's DX units allowing FPL to control this load.

**Eligibility** – FPL business customers who meet the requirements of Tariff Sheet No. 8.109. Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill as specified in Tariff Sheet No. 8.109. The credit amount is dependent on the tonnage of the customer-selected air conditioning connected to FPL's load management equipment.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated with metered data during events and from periodic system tests of participants' equipment.



## **Commercial/Industrial Demand Reduction (CDR)**

**Start Date** – May 2000

**Last Modified** – April 2019

This program allows FPL to control customer-determined loads of 200 kW or greater consistent with the applicable tariff during capacity constraints or system emergencies. FPL equipment is installed at the customer's facility to allow FPL to control customer loads.

**Eligibility** – FPL business customers who meet the requirements of the CDR Rider (Tariff Sheet Nos. 8.680 – 8.685). Participation may be limited based on system load shape analysis.

**Participant Financial Incentive** – Monthly credit on the electric bill calculated as specified in the CDR Rider.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

## **Commercial/Industrial Load Control (CILC)**

(Closed to New Participants)

**Start Date** – October 1990

**Last Modified** – January 2021

This program allows FPL to control customer-determined loads of 200 kW or greater consistent with the applicable tariff during capacity constraints or system emergencies. FPL equipment is installed at the customer's facility to allow FPL to control customer loads.

**Eligibility** – This program was closed to new participants December 31, 2000. It remains available only to existing CILC customers who entered into a CILC Agreement as of March 19, 1996 and continue to meet the requirements of the CILC Tariff (Tariff Sheet Nos. 8.650 – 8.659).

**Participant Financial Incentive** – Lower rate for electric service than the otherwise applicable rate as specified in the CILC Tariff.

**Marketing Channels** – Not applicable. This program is closed to new participants.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

**Curtable Load (CL)**  
(Closed to New Participants)

**Start Date** – July 2018

**Last Modified** – July 2018

This program allows FPL to control customer-determined loads of 4,000 kW or greater consistent with the applicable tariff during capacity constraints or system emergencies.

**Eligibility** – This program is closed to new participants when this Integrated DSM Plan is approved by the Commission. It remains available only to existing CL customers who entered into a CL Agreement prior to approval of this Integrated DSM Plan and continue to meet the requirements of the Gulf CL Rider (Tariff Sheet No. 8.686).

**Participant Financial Incentives** – Monthly credit on the electric bill calculated as specified in CL Rider.

**Marketing Channels** – Not applicable. This program is closed to new participants.

**Demand/Energy Savings Measurement & Evaluation** – Metered performance of participants during events and system tests.

## **Business Heating, Ventilating & Air Conditioning (HVAC)**

**Start Date** – February 1990

**Last Modified** – November 2015

This program encourages customers to install high-efficiency HVAC systems. The primary types of eligible HVAC systems include: chillers; split/package direct expansion (DX); demand control ventilation (DCV); energy recovery ventilation (ERV); and thermal energy storage (TES).

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Paid to customers, their designees or designers. Incentive per customer (Summer kW reduced):

- Chillers – \$160
- DX – \$165
- DCV – \$2,000
- ERV – \$1,250
- TES – \$200 - \$600 depending on circumstances

**Marketing Channels** – BEE, FPL personnel, FPL-sponsored seminars, digital and print media, architectural and engineering firms, contractors, and energy services companies. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Business Lighting**

**Start Date** – June 1984

**Last Modified** – November 2015

This program encourages customers to install high-efficiency lighting systems. The primary types of eligible lighting systems include: high bay light-emitting diodes (LED); premium linear fluorescents with high-efficiency electronic ballasts; compact fluorescent lights (CFL); and pulse-start metal halides (PSMH).

**Eligibility** – All FPL business customers.

**Participant Financial Incentive** – Paid to customers, their designees or designers. Incentive per customer (Summer kW reduced):

- High Bay LED – \$80
- Premium Linear Fluorescents – \$55
- CFL – \$60
- PSMH – \$160

**Marketing Channels** – BEE, FPL personnel, digital and print media, architectural and engineering firms, contractors, and energy services companies. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Engineering modeling analyses calibrated using both end-use metering data and statistical billing analysis.

## **Business Custom Incentive (BCI)**

**Start Date** – April 1993

**Last Modified** – March 2005

This program encourages customers to install unique high-efficiency technologies not covered by other FPL DSM programs. The primary types of customized technologies include, but are not limited to, process controls, efficient machinery and other measures unique to particular industrial processes or business applications.

**Eligibility** – All FPL business customers. Projects must demonstrate at least the minimum Summer kW reductions specified in the Program Standards. Projects that represent operational or maintenance improvements that are not permanent, fuel switching, power generation technology, or wheeling of any type are not eligible.

**Participant Financial Incentive** – Project-specific amount calculated by FPL based on passing both the RIM and Participant tests, including having a payback not less than two years of the participant's incremental cost.

**Marketing Channels** – BEE, FPL personnel, and digital and print media. These channels will also be supported, as appropriate, by promotional activities and other marketing approaches.

**Demand/Energy Savings Measurement & Evaluation** – Evaluated using one or more of the following methods: engineering modeling analysis; end-use metering; statistical billing analysis; a feasibility study performed by an independent registered professional engineer; and/or lab testing.

## **OTHER PROGRAMS**

## **Conservation Research and Development (CRD)**

**Start Date** – November 1990

**Last Modified** – November 2020

This program identifies and scientifically evaluates the energy and demand reductions and customer economics of emerging energy efficiency and demand response technologies and practices under FPL's climate conditions. FPL-specific analysis is essential to provide accurate assessments of cost-effectiveness and applicability for possible inclusion in a future DSM Plan. Since CRD's inception, FPL has evaluated a wide variety of residential and business technologies, such as: smart and programmable thermostats; variable-speed pool pumps; occupancy sensors; and smart air conditioning controls. The studies have resulted in several measures being incorporated into FPL's DSM portfolio and also served as an authoritative source for providing FPL's customers with accurate information and responses to their energy technology questions.

FPL typically collaborates with other utilities, Florida-based universities, the U.S. Department of Energy, and other independent research organizations to conduct joint studies to maximize the cost-efficiency of research funds. CRD projects are conducted in laboratory and field settings. All results are weather-normalized and weighted for FPL's regional population distribution.

Total program expenditures for the 2020-2024 period will not exceed \$5,000,000.



## **Cogeneration & Small Power Production**

**Start Date** – March 1981

**Last Modified** – March 2005

This program was established to recover administrative costs through the Energy Conservation Cost Recovery (ECCR) clause for executing FPL's obligations to facilities defined as Qualifying Facilities (QF) under the Public Utility Regulatory Policies Act of 1978 (PURPA) and Commission rules. These costs include: (a) interconnection; (b) installation, inspection, calibration and maintenance of meters; (c) administration of power billing and accounting processes; (d) Commission reporting; (e) contract negotiation; (f) contract administration, including legal expenses resulting from litigation; (g) facility verifications and audits; (h) communications; (i) operating coordination; and (j) problem resolution.

This program's objectives are to: (i) comply with all regulatory requirements and applicable law relating to the purchase of energy and capacity from QFs; (ii) interconnect as necessary to accomplish purchases, sales, and operation in parallel; (iii) transmit energy and capacity to another utility for purchase by that utility; and (iv) assist customers in the evaluation of potential cogeneration applications, including self-generation, while minimizing costs.

This program does not include the costs associated with FPL payments for firm capacity and energy or as-available energy made to QFs pursuant to FPL's tariff. These costs are instead recoverable by FPL through the Commission's periodic review of its Fuel and Capacity clauses.

## SECTION III – PROGRAM PROJECTIONS

### Notes for the following tables:

- Values for programs which do not contribute toward MW or GWh Goals achievement are not included (*i.e.*, Residential Energy Survey, BEE, CRD, and Cogen and Small Power Production).
- **“Customers”** – Represents a single premise for Residential programs. Represents one Summer kW of demand reduction for Business programs. This method has been used by FPL for many years to account for and normalize the wide diversity in sizes, types and energy usages of businesses.
- **Cumulative Penetration Levels** – represents penetration starting in 2022 (*i.e.*, excludes any prior period participation).

<b>Table 4 - Total Customers</b>			
	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential (Premises)</b>	5,050,726	5,108,019	5,165,418
<b>Business (Summer kW)</b>	9,542,169	9,615,355	9,688,055

<b>Table 5 - Eligible Customers</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	3,925,757	3,971,801	4,025,866
Residential Air Conditioning	1,765,181	1,859,084	1,952,865
Residential New Construction (BuildSmart)	49,545	50,383	51,142
Residential Ceiling Insulation	1,646,944	1,644,918	1,642,677
Residential Low Income	1,039,019	1,041,396	1,048,638
<b>Business Portfolio</b>			
Business On Call	517,390	520,719	524,267
Commercial/Industrial Demand Reduction	5,712,114	5,744,642	5,776,784
Business Heating, Ventilating, & Air Conditioning (HVAC)	2,091,034	2,093,996	2,096,178
Business Lighting	635,810	636,573	637,021
Business Custom Incentive (BCI)	1,156,003	1,162,972	1,169,866

<b>Table 6 - Annual Participants</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	8,125	8,375	8,500
Residential Air Conditioning	28,250	28,600	29,275
Residential New Construction (BuildSmart)	4,550	4,575	4,600
Residential Ceiling Insulation	5,150	5,150	5,150
Residential Low Income	9,550	10,700	12,300
<b>Business Portfolio</b>			
Business On Call	750	500	400
Commercial/Industrial Demand Reduction	9,700	9,600	9,600
Business Heating, Ventilating, & Air Conditioning (HVAC)	11,370	11,900	12,220
Business Lighting	4,540	4,785	5,085
Business Custom Incentive (BCI)	100	100	100

<b>Table 7 - Cumulative Penetration Levels *</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	0%	0%	1%
Residential Air Conditioning	2%	3%	4%
Residential New Construction (BuildSmart)	9%	9%	9%
Residential Ceiling Insulation	0%	1%	1%
Residential Low Income	1%	2%	3%
<b>Business Portfolio</b>			
Business On Call	0%	0%	0%
Commercial/Industrial Demand Reduction	0%	0%	1%
Business Heating, Ventilating, & Air Conditioning (HVAC)	1%	1%	2%
Business Lighting	1%	1%	2%
Business Custom Incentive (BCI)	0%	0%	0%

\* Represents penetration starting in 2022 (i.e., excludes any prior period participation)

<b>Table 8 - Total Summer kW Savings (at the Generator)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	21,098	21,747	22,072
Residential Air Conditioning	8,160	8,261	8,455
Residential New Construction (BuildSmart)	1,643	1,652	1,661
Residential Ceiling Insulation	1,818	1,818	1,818
Residential Low Income	2,996	3,340	3,800
<b>Business Portfolio</b>			
Business On Call	798	532	426
Commercial/Industrial Demand Reduction	10,321	10,214	10,214
Business Heating, Ventilating, & Air Conditioning (HVAC)	12,096	12,660	13,001
Business Lighting	4,828	5,089	5,408
Business Custom Incentive (BCI)	106	106	106
<b>Residential Subtotal</b>	<b>35,715</b>	<b>36,818</b>	<b>37,805</b>
<b>Business Subtotal</b>	<b>28,150</b>	<b>28,602</b>	<b>29,155</b>
<b>Grand Total</b>	<b>63,864</b>	<b>65,420</b>	<b>66,960</b>

<b>Table 9 - Total Winter kW Savings (at the Generator)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	19,887	20,499	20,805
Residential Air Conditioning	2,498	2,524	2,575
Residential New Construction (BuildSmart)	580	583	586
Residential Ceiling Insulation	3,976	3,976	3,976
Residential Low Income	1,072	1,184	1,321
<b>Business Portfolio</b>			
Business On Call	0	0	0
Commercial/Industrial Demand Reduction	6,631	6,563	6,563
Business Heating, Ventilating, & Air Conditioning (HVAC)	8,101	8,462	8,680
Business Lighting	3,090	3,257	3,461
Business Custom Incentive (BCI)	106	106	106
<b>Residential Subtotal</b>	<b>28,013</b>	<b>28,767</b>	<b>29,262</b>
<b>Business Subtotal</b>	<b>17,929</b>	<b>18,389</b>	<b>18,811</b>
<b>Grand Total</b>	<b>45,942</b>	<b>47,155</b>	<b>48,073</b>

<b>Table 10 - Total Annual kWh Savings (at the Generator)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	8,527	8,790	8,921
Residential Air Conditioning	18,602,592	18,822,620	19,246,959
Residential New Construction (BuildSmart)	5,084,172	5,112,082	5,139,992
Residential Ceiling Insulation	5,873,942	5,873,942	5,873,942
Residential Low Income	7,710,848	8,589,457	9,750,802
<b>Business Portfolio</b>			
Business On Call	787	525	420
Commercial/Industrial Demand Reduction	109,884	108,729	108,729
Business Heating, Ventilating, & Air Conditioning (HVAC)	10,372,597	10,798,117	11,055,034
Business Lighting	23,763,161	25,045,092	26,614,934
Business Custom Incentive (BCI)	362,602	362,602	362,602
<b>Residential Subtotal</b>	<b>37,280,081</b>	<b>38,406,889</b>	<b>40,020,615</b>
<b>Business Subtotal</b>	<b>34,609,031</b>	<b>36,315,065</b>	<b>38,141,719</b>
<b>Grand Total</b>	<b>71,889,113</b>	<b>74,721,954</b>	<b>78,162,334</b>

<b>Table 11 - Summer kW Savings (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	19,825	20,435	20,740
Residential Air Conditioning	7,673	7,767	7,949
Residential New Construction (BuildSmart)	1,547	1,556	1,564
Residential Ceiling Insulation	1,714	1,714	1,714
Residential Low Income	2,827	3,152	3,584
<b>Business Portfolio</b>			
Business On Call	750	500	400
Commercial/Industrial Demand Reduction	9,700	9,600	9,600
Business Heating, Ventilating, & Air Conditioning (HVAC)	11,370	11,900	12,220
Business Lighting	4,540	4,785	5,085
Business Custom Incentive (BCI)	100	100	100
<b>Residential Subtotal</b>	<b>33,586</b>	<b>34,623</b>	<b>35,551</b>
<b>Business Subtotal</b>	<b>26,460</b>	<b>26,885</b>	<b>27,405</b>
<b>Grand Total</b>	<b>60,046</b>	<b>61,508</b>	<b>62,956</b>

<b>Table 12 - Winter kW Savings (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	18,688	19,263	19,550
Residential Air Conditioning	2,353	2,377	2,424
Residential New Construction (BuildSmart)	546	549	552
Residential Ceiling Insulation	3,746	3,746	3,746
Residential Low Income	1,013	1,119	1,247
<b>Business Portfolio</b>			
Business On Call	0	0	0
Commercial/Industrial Demand Reduction	6,232	6,168	6,168
Business Heating, Ventilating, & Air Conditioning (HVAC)	7,619	7,958	8,163
Business Lighting	2,906	3,062	3,254
Business Custom Incentive (BCI)	100	100	100
<b>Residential Subtotal</b>	<b>26,344</b>	<b>27,053</b>	<b>27,518</b>
<b>Business Subtotal</b>	<b>16,856</b>	<b>17,288</b>	<b>17,685</b>
<b>Grand Total</b>	<b>43,200</b>	<b>44,341</b>	<b>45,203</b>

<b>Table 13 - Annual kWh Savings (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	8,125	8,375	8,500
Residential Air Conditioning	17,718,250	17,927,900	18,332,225
Residential New Construction (BuildSmart)	4,840,017	4,866,611	4,893,204
Residential Ceiling Insulation	5,588,350	5,588,350	5,588,350
Residential Low Income	7,334,116	8,170,550	9,277,120
<b>Business Portfolio</b>			
Business On Call	750	500	400
Commercial/Industrial Demand Reduction	104,700	103,600	103,600
Business Heating, Ventilating, & Air Conditioning (HVAC)	9,877,379	10,282,829	10,527,629
Business Lighting	22,636,440	23,858,010	25,353,810
Business Custom Incentive (BCI)	345,500	345,500	345,500
<b>Residential Subtotal</b>	<b>35,488,858</b>	<b>36,561,785</b>	<b>38,099,399</b>
<b>Business Subtotal</b>	<b>32,964,769</b>	<b>34,590,439</b>	<b>36,330,939</b>
<b>Grand Total</b>	<b>68,453,627</b>	<b>71,152,224</b>	<b>74,430,337</b>

Table 14- Summer kW Savings - per Customer (at the Generator)			
Programs	2022	2023	2024
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	2.60	2.60	2.60
Residential Air Conditioning	0.29	0.29	0.29
Residential New Construction (BuildSmart)	0.36	0.36	0.36
Residential Ceiling Insulation	0.35	0.35	0.35
Residential Low Income	0.31	0.31	0.31
<b>Business Portfolio</b>			
Business On Call	1.06	1.06	1.06
Commercial/Industrial Demand Reduction	1.06	1.06	1.06
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.06	1.06	1.06
Business Lighting	1.06	1.06	1.06
Business Custom Incentive (BCI)	1.06	1.06	1.06

Table 15 - Winter kW Savings - per Customer (at the Generator)			
Programs	2022	2023	2024
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	2.45	2.45	2.45
Residential Air Conditioning	0.09	0.09	0.09
Residential New Construction (BuildSmart)	0.13	0.13	0.13
Residential Ceiling Insulation	0.77	0.77	0.77
Residential Low Income	0.11	0.11	0.11
<b>Business Portfolio</b>			
Business On Call	0.00	0.00	0.00
Commercial/Industrial Demand Reduction	0.68	0.68	0.68
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.71	0.71	0.71
Business Lighting	0.68	0.68	0.68
Business Custom Incentive (BCI)	1.06	1.06	1.06

Table 16 - Annual kWh Savings - per Customer (at the Generator)			
Programs	2022	2023	2024
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	1	1	1
Residential Air Conditioning	658	658	657
Residential New Construction (BuildSmart)	1,117	1,117	1,117
Residential Ceiling Insulation	1,141	1,141	1,141
Residential Low Income	807	803	793
<b>Business Portfolio</b>			
Business On Call	1	1	1
Commercial/Industrial Demand Reduction	11	11	11
Business Heating, Ventilating, & Air Conditioning (HVAC)	912	907	905
Business Lighting	5,234	5,234	5,234
Business Custom Incentive (BCI)	3,626	3,626	3,626

<b>Table 17 - Summer kW Savings - per Customer (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	2.44	2.44	2.44
Residential Air Conditioning	0.27	0.27	0.27
Residential New Construction (BuildSmart)	0.34	0.34	0.34
Residential Ceiling Insulation	0.33	0.33	0.33
Residential Low Income	0.30	0.29	0.29
<b>Business Portfolio</b>			
Business On Call	1.00	1.00	1.00
Commercial/Industrial Demand Reduction	1.00	1.00	1.00
Business Heating, Ventilating, & Air Conditioning (HVAC)	1.00	1.00	1.00
Business Lighting	1.00	1.00	1.00
Business Custom Incentive (BCI)	1.00	1.00	1.00

<b>Table 18 - Winter kW Savings - per Customer (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	2.30	2.30	2.30
Residential Air Conditioning	0.08	0.08	0.08
Residential New Construction (BuildSmart)	0.12	0.12	0.12
Residential Ceiling Insulation	0.73	0.73	0.73
Residential Low Income	0.11	0.10	0.10
<b>Business Portfolio</b>			
Business On Call	0.00	0.00	0.00
Commercial/Industrial Demand Reduction	0.64	0.64	0.64
Business Heating, Ventilating, & Air Conditioning (HVAC)	0.67	0.67	0.67
Business Lighting	0.64	0.64	0.64
Business Custom Incentive (BCI)	1.00	1.00	1.00

<b>Table 19 - Annual kWh Savings - per Customer (at the Meter)</b>			
<b>Programs</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Residential Portfolio</b>			
Residential Load Management (On Call)	1	1	1
Residential Air Conditioning	627	627	626
Residential New Construction (BuildSmart)	1,064	1,064	1,064
Residential Ceiling Insulation	1,085	1,085	1,085
Residential Low Income	768	764	754
<b>Business Portfolio</b>			
Business On Call	1	1	1
Commercial/Industrial Demand Reduction	11	11	11
Business Heating, Ventilating, & Air Conditioning (HVAC)	869	864	862
Business Lighting	4,986	4,986	4,986
Business Custom Incentive (BCI)	3,455	3,455	3,455

## **Appendix A – Discontinued Programs**

**Residential Pool Pump** – This legacy Gulf program is being discontinued due to changes in U.S. Department of Energy (DOE) efficiency standards for residential pool pumps. Effective July 1, 2021, new DOE pool pump efficiency requirements effectively establish variable speed pool pumps as the baseline standard for most inground pool applications. Therefore, there is no incremental savings that can be counted towards the company’s energy and demand savings goals from this program. This standard applies to newly manufactured pumps and allows continued installation of non-compliant pumps that are inventoried through distributors and dealers until the supply is depleted. As such, FPL is proposing to continue this program through the end of 2021 to discourage installation of non-compliant pumps.

**Energy Select** – This legacy Gulf program is being discontinued due to limited equipment availability, decreasing customer interest, and to more cost-effectively achieve the integrated residential DSM goals.

Gulf has offered the Energy Select program in its DSM Plan since 2000. When initially launched, the availability of in-home energy management equipment like programmable thermostats was very limited, and Energy Select (also previously called Good Cents Select) offered customers a new technology to help them save energy. As other innovations in home energy management equipment like smart thermostats and voice-controlled appliances have become more widely adopted, customer interest in Energy Select has decreased. In order to keep the program viable through other changes like reduced use of landline telephones (which were initially required for



participation in the program), Gulf adopted newer technology platforms that relied on customers' wired internet service. Gulf has implemented new devices and in home wireless technologies as these markets have evolved, but each new device or technology platform adoption has required extensive development and integration work to seamlessly incorporate the 4-tiered Residential Service Variable Pricing (RSVP) rate that is associated with the program. The currently utilized programmable thermostat is no longer in production limiting the availability for new installations to the existing inventory on hand.

Although studies have indicated a reduction in overall energy use by customers in the program, average customer savings associated with the variable rate has decreased as many customers no longer actively manage their energy usage in accordance with the variable price tiers. Recent rate analysis indicates 24% of customers enrolled in the program would actually save by switching to Gulf's standard residential rate assuming their energy usage remains the same.

FPL proposes to minimize the negative impact of having goals for non-cost-effective programs to achieve the combined Residential demand goals with the Residential On Call (ROC) program. When accounting for new participants only, ROC currently has a RIM ratio of 0.692<sup>4</sup> versus Energy Select's RIM ratio of 0.246. The high capital costs associated with the in-home devices, installation, and platform licensing combined with ongoing maintenance are no longer cost-effective for the general body of customers at today's system costs. For these reasons, the Energy Select program is no longer included in FPL's DSM Plan.

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<sup>4</sup> In Table 3, ROC is projected to have a RIM ratio of 1.698 when accounting for both new and existing participants. This perspective is not applicable to the Energy Select program because there are no ongoing payments to existing participants.

## **Appendix B – Program-Level Cost-Effectiveness Analyses**

INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.85 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	1.1035 kW
(3) kW LINE LOSS PERCENT AGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	1.06 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42106
(5) K FACTOR FOR T & D .....	1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,740,799.7 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24,027,416.97 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	90 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	3.737763 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	1.61 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.471
(2) TRC TEST .....	1.262
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	46	16	0	61	0	0	0	0	0	0
2023	61	41	0	103	0	0	0	0	0	0
2024	74	60	0	134	0	0	0	0	0	0
2025	61	68	0	130	0	0	0	0	0	0
2026	58	68	0	126	0	0	0	0	0	0
2027	35	68	0	103	0	0	0	0	0	0
2028	19	68	0	88	0	0	0	0	0	0
2029	7	68	0	76	0	0	0	0	0	0
2030	8	68	0	76	0	0	0	0	0	0
2031	8	68	0	76	0	0	0	0	0	0
2032	8	68	0	76	0	0	0	0	0	0
2033	8	68	0	77	0	0	0	0	0	0
2034	8	68	0	76	0	0	0	0	0	0
2035	8	68	0	76	0	0	0	0	0	0
2036	8	68	0	76	0	0	0	0	0	0
2037	8	68	0	76	0	0	0	0	0	0
2038	8	68	0	76	0	0	0	0	0	0
2039	8	68	0	77	0	0	0	0	0	0
2040	8	68	0	77	0	0	0	0	0	0
2041	8	68	0	77	0	0	0	0	0	0
2042	81	68	0	150	0	0	0	0	0	0
2043	105	68	0	173	0	0	0	0	0	0
2044	123	68	0	191	0	0	0	0	0	0
2045	102	68	0	170	0	0	0	0	0	0
2046	95	68	0	163	0	0	0	0	0	0
2047	57	68	0	125	0	0	0	0	0	0
2048	31	68	0	100	0	0	0	0	0	0
2049	12	68	0	80	0	0	0	0	0	0
2050	12	68	0	81	0	0	0	0	0	0
2051	13	68	0	81	0	0	0	0	0	0
2052	13	68	0	81	0	0	0	0	0	0
2053	13	68	0	82	0	0	0	0	0	0
2054	13	68	0	82	0	0	0	0	0	0
2055	13	68	0	81	0	0	0	0	0	0
2056	13	68	0	81	0	0	0	0	0	0
2057	13	68	0	81	0	0	0	0	0	0
2058	13	68	0	81	0	0	0	0	0	0
2059	14	68	0	82	0	0	0	0	0	0
2060	14	68	0	82	0	0	0	0	0	0
2061	14	68	0	82	0	0	0	0	0	0
2062	133	68	0	202	0	0	0	0	0	0
2063	172	68	0	240	0	0	0	0	0	0
2064	201	68	0	270	0	0	0	0	0	0
2065	167	68	0	235	0	0	0	0	0	0
2066	155	68	0	224	0	0	0	0	0	0
2067	94	68	0	162	0	0	0	0	0	0
2068	51	68	0	120	0	0	0	0	0	0
2069	20	68	0	88	0	0	0	0	0	0
2070	20	68	0	89	0	0	0	0	0	0

NOM	2,234	3,261	0	5,495	11	0	0	0	0	0
NPV	479	803	0	1,283	2	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

Year	(1) CPP%	(2) PP-CA P%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2022	2.50	2.50	2.50	0.00	0.00	2.00	4.80	0.00	11.30
2023	2.50	2.50	2.50	0.00	0.00	2.00	4.98	0.00	13.38
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.06	0.00	14.45
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.19	0.00	15.29
2026	2.50	2.50	2.50	0.00	0.00	2.00	5.62	0.00	15.83
2027	2.50	2.50	2.50	0.00	0.00	2.00	6.01	0.00	16.31
2028	2.50	2.50	2.50	0.00	0.00	2.00	6.19	0.00	16.84
2029	2.50	2.50	2.50	0.00	0.00	2.00	6.40	0.00	17.30
2030	2.50	2.50	2.50	0.00	0.00	2.00	6.56	0.00	17.90
2031	2.50	2.50	2.50	3.74	90.35	2.00	6.67	0.00	18.50
2032	2.50	2.50	2.50	3.80	90.70	2.00	6.79	0.00	18.77
2033	2.50	2.50	2.50	3.89	90.65	2.00	6.92	0.00	19.10
2034	2.50	2.50	2.50	4.07	91.31	2.00	7.07	0.00	19.45
2035	2.50	2.50	2.50	4.16	91.26	2.00	7.21	0.00	19.76
2036	2.50	2.50	2.50	4.25	91.60	2.00	7.42	0.00	20.11
2037	2.50	2.50	2.50	4.31	91.74	2.00	7.79	0.00	20.53
2038	2.50	2.50	2.50	4.37	91.70	2.00	8.01	0.00	20.91
2039	2.50	2.50	2.50	4.37	91.80	2.00	8.25	0.00	21.30
2040	2.50	2.50	2.50	4.42	91.69	2.00	8.45	0.00	21.64
2041	2.50	2.50	2.50	4.42	91.92	2.00	8.68	0.00	22.01
2042	2.50	2.50	2.50	4.45	92.14	2.00	8.91	0.00	22.31
2043	2.50	2.50	2.50	4.45	91.95	2.00	9.03	0.00	22.63
2044	2.50	2.50	2.50	4.62	91.83	2.00	9.42	0.00	23.04
2045	2.50	2.50	2.50	4.71	91.77	2.00	9.76	0.00	23.33
2046	2.50	2.50	2.50	4.73	92.00	2.00	10.01	0.00	23.59
2047	2.50	2.50	2.50	4.81	91.97	2.00	10.31	0.00	24.00
2048	2.50	2.50	2.50	4.84	91.92	2.00	10.51	0.00	24.30
2049	2.50	2.50	2.50	4.86	91.95	2.00	10.65	0.00	24.59
2050	2.50	2.50	2.50	4.95	91.91	2.00	10.85	0.00	24.94
2051	2.50	2.50	2.50	4.88	91.81	2.00	11.09	0.00	25.33
2052	2.50	2.50	2.50	4.90	91.90	2.00	11.27	0.00	25.66
2053	2.50	2.50	2.50	4.81	91.97	2.00	11.45	0.00	25.99
2054	2.50	2.50	2.50	4.88	92.48	2.00	11.63	0.00	26.33
2055	2.50	2.50	2.50	4.84	91.92	2.00	11.82	0.00	26.66
2056	2.50	2.50	2.50	4.84	92.61	2.00	12.01	0.00	27.00
2057	2.50	2.50	2.50	4.81	92.01	2.00	12.21	0.00	27.34
2058	2.50	2.50	2.50	4.85	91.90	2.00	12.41	0.00	27.68
2059	2.50	2.50	2.50	5.04	92.43	2.00	12.61	0.00	28.03
2060	2.50	2.50	2.50	5.12	92.02	2.00	12.82	0.00	28.37
2061	2.50	2.50	2.50	5.11	91.94	2.00	13.03	0.00	28.72
2062	2.50	2.50	2.50	5.10	92.60	2.00	13.31	0.00	29.13
2063	2.50	2.50	2.50	5.13	92.00	2.00	13.59	0.00	29.56
2064	2.50	2.50	2.50	5.32	91.95	2.00	13.89	0.00	29.99
2065	2.50	2.50	2.50	5.23	92.71	2.00	14.18	0.00	30.42
2066	2.50	2.50	2.50	5.24	92.04	2.00	14.46	0.00	30.86
2067	2.50	2.50	2.50	5.26	92.04	2.00	14.73	0.00	31.30
2068	2.50	2.50	2.50	5.23	92.03	2.00	15.01	0.00	31.75
2069	2.50	2.50	2.50	5.23	92.03	2.00	15.29	0.00	32.21
2070	2.50	2.50	2.50	5.23	92.03	2.00	15.58	0.00	32.68

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

YEAR	(2) MID-YEAR RATE BASE \$'(000)	(3) DEBT \$'(000)	(4) PREFERRED STOCK \$'(000)	(5) COMMON EQUITY \$'(000)	(6) INCOME TAXES \$'(000)	(7) PROPERTY TAX \$'(000)	(8) PROPERTY INSURANCE \$'(000)	(9) DEPREC. \$'(000)	(10) DEFERRED TAXES \$'(000)	(11) ITC NORMALIZATION \$'(000)	(12) TOTAL FIXED CHARGES \$'(000)	(13) PRESENT WORTH FIXED CHARGES \$'(000)	(14) CUMULATIVE PW FIXED CHARGES \$'(000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$'(000)
2031	1,157	19	0	73	19	20	0	29	6	0	167	167	167	1,164
2032	1,120	19	0	70	32	20	0	29	(8)	0	163	151	318	1,135
2033	1,077	18	0	68	43	19	0	29	(20)	0	158	137	455	1,106
2034	1,037	17	0	65	53	19	0	29	(31)	0	153	123	578	1,077
2035	998	17	0	63	62	18	0	29	(40)	0	149	111	689	1,048
2036	960	16	0	60	69	18	0	29	(48)	0	144	100	790	1,018
2037	923	15	0	58	76	17	0	29	(55)	0	140	91	880	989
2038	887	15	0	56	81	17	0	29	(61)	0	136	82	962	960
2039	852	14	0	54	86	16	0	29	(67)	0	132	74	1,036	931
2040	817	14	0	51	91	16	0	29	(73)	0	128	67	1,103	902
2041	782	13	0	49	96	15	0	29	(79)	0	124	60	1,163	873
2042	747	12	0	47	101	15	0	29	(85)	0	120	54	1,217	844
2043	712	12	0	45	107	14	0	29	(91)	0	116	49	1,265	815
2044	677	11	0	43	112	14	0	29	(97)	0	112	44	1,309	786
2045	642	11	0	40	117	13	0	29	(102)	0	108	39	1,348	757
2046	607	10	0	38	122	13	0	29	(108)	0	104	35	1,383	727
2047	573	9	0	36	127	12	0	29	(114)	0	100	31	1,414	698
2048	538	9	0	34	132	12	0	29	(120)	0	96	28	1,442	669
2049	503	8	0	32	137	11	0	29	(126)	0	92	25	1,467	640
2050	468	8	0	29	142	11	0	29	(132)	0	88	22	1,489	611
2051	436	7	0	27	141	10	0	29	(131)	0	84	20	1,509	582
2052	410	7	0	26	134	10	0	29	(124)	0	81	18	1,526	553
2053	388	6	0	24	126	9	0	29	(117)	0	78	16	1,542	524
2054	366	6	0	23	119	9	0	29	(111)	0	75	14	1,556	495
2055	344	6	0	22	112	8	0	29	(104)	0	73	13	1,569	466
2056	322	5	0	20	104	8	0	29	(97)	0	70	11	1,581	436
2057	300	5	0	19	97	7	0	29	(90)	0	67	10	1,591	407
2058	277	5	0	17	89	7	0	29	(83)	0	64	9	1,600	378
2059	255	4	0	16	82	6	0	29	(76)	0	62	8	1,608	349
2060	233	4	0	15	75	6	0	29	(69)	0	59	7	1,615	320
2061	211	3	0	13	67	5	0	29	(62)	0	56	6	1,621	291
2062	189	3	0	12	60	5	0	29	(55)	0	53	6	1,627	262
2063	166	3	0	10	53	4	0	29	(48)	0	51	5	1,632	233
2064	144	2	0	9	45	4	0	29	(41)	0	48	4	1,636	204
2065	122	2	0	8	38	4	0	29	(35)	0	46	4	1,640	175
2066	100	2	0	6	30	4	0	29	(28)	0	44	3	1,644	146
2067	78	1	0	5	23	4	0	29	(21)	0	42	3	1,647	117
2068	55	1	0	3	16	4	0	29	(14)	0	39	3	1,650	88
2069	33	1	0	2	8	4	0	29	(7)	0	37	2	1,652	59
2070	11	0	0	1	1	4	0	29	(0)	0	35	2	1,654	30

SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	1,164
IN SERVICE YEAR	2031
BOOK LIFE (YRS)	40
EFFECT. TAX RATE	25.345%
DISCOUNT RATE	7.52%
PROPERTY TAX	1.73%
PROPERTY INSURANCE	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

YEAR	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2031		42	42	29	29	29	29	6	73	0	0	0	6	16
2032	3.75%	82	124	29	58	29	58	(8)	73	0	0	0	(8)	9
2033	7.22%	75	199	29	87	29	87	(20)	73	0	0	0	(20)	(11)
2034	6.68%	70	269	29	116	29	116	(31)	73	0	0	0	(31)	(42)
2035	5.71%	65	334	29	145	29	145	(40)	73	0	0	0	(40)	(82)
2036	5.29%	60	394	29	175	29	175	(48)	73	0	0	0	(48)	(130)
2037	4.89%	55	449	29	204	29	204	(55)	73	0	0	0	(55)	(185)
2038	4.52%	51	500	29	233	29	233	(61)	73	0	0	0	(61)	(247)
2039	4.46%	50	550	29	262	29	262	(67)	73	0	0	0	(67)	(314)
2040	4.46%	50	601	29	291	29	291	(73)	73	0	0	0	(73)	(387)
2041	4.46%	50	651	29	320	29	320	(79)	73	0	0	0	(79)	(466)
2042	4.46%	50	702	29	349	29	349	(85)	73	0	0	0	(85)	(551)
2043	4.46%	50	752	29	378	29	378	(91)	73	0	0	0	(91)	(642)
2044	4.46%	50	802	29	407	29	407	(97)	73	0	0	0	(97)	(738)
2045	4.46%	50	853	29	436	29	436	(102)	73	0	0	0	(102)	(841)
2046	4.46%	50	903	29	466	29	466	(108)	73	0	0	0	(108)	(949)
2047	4.46%	50	954	29	495	29	495	(114)	73	0	0	0	(114)	(1,064)
2048	4.46%	50	1,004	29	524	29	524	(120)	73	0	0	0	(120)	(1,184)
2049	4.46%	50	1,055	29	553	29	553	(126)	73	0	0	0	(126)	(1,310)
2050	4.46%	50	1,105	29	582	29	582	(132)	73	0	0	0	(132)	(1,441)
2051	2.23%	25	1,130	29	611	29	611	(131)	73	0	0	0	(131)	(1,573)
2052	0.00%	0	1,130	29	640	29	640	(124)	73	0	0	0	(124)	(1,697)
2053	0.00%	0	1,130	29	669	29	669	(117)	73	0	0	0	(117)	(1,815)
2054	0.00%	0	1,130	29	698	29	698	(111)	73	0	0	0	(111)	(1,925)
2055	0.00%	0	1,130	29	727	29	727	(104)	73	0	0	0	(104)	(2,029)
2056	0.00%	0	1,130	29	757	29	757	(97)	73	0	0	0	(97)	(2,126)
2057	0.00%	0	1,130	29	786	29	786	(90)	73	0	0	0	(90)	(2,215)
2058	0.00%	0	1,130	29	815	29	815	(83)	73	0	0	0	(83)	(2,298)
2059	0.00%	0	1,130	29	844	29	844	(76)	73	0	0	0	(76)	(2,374)
2060	0.00%	0	1,130	29	873	29	873	(69)	73	0	0	0	(69)	(2,443)
2061	0.00%	0	1,130	29	902	29	902	(62)	73	0	0	0	(62)	(2,506)
2062	0.00%	0	1,130	29	931	29	931	(55)	73	0	0	0	(55)	(2,561)
2063	0.00%	0	1,130	29	960	29	960	(48)	73	0	0	0	(48)	(2,609)
2064	0.00%	0	1,130	29	989	29	989	(41)	73	0	0	0	(41)	(2,651)
2065	0.00%	0	1,130	29	1,018	29	1,018	(35)	73	0	0	0	(35)	(2,685)
2066	0.00%	0	1,130	29	1,048	29	1,048	(28)	73	0	0	0	(28)	(2,713)
2067	0.00%	0	1,130	29	1,077	29	1,077	(21)	73	0	0	0	(21)	(2,734)
2068	0.00%	0	1,130	29	1,106	29	1,106	(14)	73	0	0	0	(14)	(2,748)
2069	0.00%	0	1,130	29	1,135	29	1,135	(7)	73	0	0	0	(7)	(2,754)
2070	0.00%	0	1,130	29	1,164	29	1,164	(0)	73	0	0	0	(0)	(2,754)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	10
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	73
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$ (000)	(4) DEFERRED TAX \$ (000)	(5) END OF YEAR NET PLANT IN SERVICE \$ (000)	(5a)* ACCUMULATED DEPRECIATION \$ (000)	(5b)* ACCUMULATED DEF TAXES \$ (000)	(6) BEGINNING YEAR RATE BASE \$ (000)	(7) ENDING OF YEAR RATE BASE \$ (000)	(8) MID-YEAR RATE BASE \$ (000)
2031	3.75%	42	6	1,135	29	16	1,174	1,141	1,157
2032	7.22%	82	(8)	1,106	58	9	1,141	1,098	1,120
2033	6.68%	75	(20)	1,077	87	(11)	1,098	1,057	1,077
2034	6.18%	70	(31)	1,048	116	(42)	1,057	1,017	1,037
2035	5.71%	65	(40)	1,018	145	(82)	1,017	978	998
2036	5.29%	60	(48)	989	175	(130)	978	941	960
2037	4.89%	55	(55)	960	204	(185)	941	905	923
2038	4.52%	51	(61)	931	233	(247)	905	870	887
2039	4.46%	50	(67)	902	262	(314)	870	835	852
2040	4.46%	50	(73)	873	291	(387)	835	800	817
2041	4.46%	50	(79)	844	320	(466)	800	765	782
2042	4.46%	50	(85)	815	349	(551)	765	730	747
2043	4.46%	50	(91)	786	378	(642)	730	695	712
2044	4.46%	50	(97)	757	407	(738)	695	660	677
2045	4.46%	50	(102)	727	436	(841)	660	625	642
2046	4.46%	50	(108)	698	466	(949)	625	590	607
2047	4.46%	50	(114)	669	495	(1,064)	590	555	573
2048	4.46%	50	(120)	640	524	(1,184)	555	520	538
2049	4.46%	50	(126)	611	553	(1,310)	520	485	503
2050	4.46%	50	(132)	582	582	(1,441)	485	450	468
2051	2.23%	25	(131)	553	611	(1,573)	450	422	436
2052	0.00%	0	(124)	524	640	(1,697)	422	399	410
2053	0.00%	0	(117)	495	669	(1,815)	399	377	388
2054	0.00%	0	(111)	466	698	(1,925)	377	355	366
2055	0.00%	0	(104)	436	727	(2,029)	355	333	344
2056	0.00%	0	(97)	407	757	(2,126)	333	311	322
2057	0.00%	0	(90)	378	786	(2,215)	311	288	300
2058	0.00%	0	(83)	349	815	(2,298)	288	266	277
2059	0.00%	0	(76)	320	844	(2,374)	266	244	255
2060	0.00%	0	(69)	291	873	(2,443)	244	222	233
2061	0.00%	0	(62)	262	902	(2,506)	222	200	211
2062	0.00%	0	(55)	233	931	(2,561)	200	177	189
2063	0.00%	0	(48)	204	960	(2,609)	177	155	166
2064	0.00%	0	(41)	175	989	(2,651)	155	133	144
2065	0.00%	0	(35)	145	1,018	(2,685)	133	111	122
2066	0.00%	0	(28)	116	1,048	(2,713)	111	89	100
2067	0.00%	0	(21)	87	1,077	(2,734)	89	67	78
2068	0.00%	0	(14)	58	1,106	(2,748)	67	44	55
2069	0.00%	0	(7)	29	1,135	(2,754)	44	22	33
2070	0.00%	0	(0)	(0)	1,164	(2,754)	22	(0)	11

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	1,069	1,069
EQUITY AFUDC	73	
DEBT AFUDC	21	61
CPI		
ITC Basis Reduction (Solar)		
TOTAL	1,164	1,130

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	750	750	2.42	8.87	2.42	0.00	1.00	1.00
2023	1,250	1,250	2.09	3.04	2.09	0.00	1.00	1.00
2024	1,650	1,650	2.10	4.85	2.10	0.00	1.00	1.00
2025	1,650	1,650	2.31	6.23	2.31	0.00	1.00	1.00
2026	1,650	1,650	2.20	2.73	2.20	0.00	1.00	1.00
2027	1,650	1,650	2.34	5.09	2.34	0.00	1.00	1.00
2028	1,650	1,650	2.38	2.95	2.38	0.00	1.00	1.00
2029	1,650	1,650	2.58	3.01	2.58	0.00	1.00	1.00
2030	1,650	1,650	2.66	3.44	2.66	0.00	1.00	1.00
2031	1,650	1,650	2.84	4.87	2.84	4.16	1.00	1.00
2032	1,650	1,650	2.98	6.66	2.98	4.30	1.00	1.00
2033	1,650	1,650	3.18	6.70	3.18	4.39	1.00	1.00
2034	1,650	1,650	3.21	4.55	3.21	4.54	1.00	1.00
2035	1,650	1,650	3.33	4.80	3.33	4.65	1.00	1.00
2036	1,650	1,650	3.45	5.93	3.45	4.74	1.00	1.00
2037	1,650	1,650	3.53	4.61	3.53	4.78	1.00	1.00
2038	1,650	1,650	3.62	5.36	3.62	4.88	1.00	1.00
2039	1,650	1,650	3.65	4.62	3.65	4.92	1.00	1.00
2040	1,650	1,650	3.74	5.61	3.74	5.00	1.00	1.00
2041	1,650	1,650	3.84	5.55	3.84	5.01	1.00	1.00
2042	1,650	1,650	3.85	5.35	3.85	5.10	1.00	1.00
2043	1,650	1,650	3.90	5.15	3.90	5.03	1.00	1.00
2044	1,650	1,650	4.09	5.73	4.09	5.20	1.00	1.00
2045	1,650	1,650	4.12	5.71	4.12	5.33	1.00	1.00
2046	1,650	1,650	4.11	5.45	4.11	5.30	1.00	1.00
2047	1,650	1,650	4.21	5.31	4.21	5.43	1.00	1.00
2048	1,650	1,650	4.23	5.67	4.23	5.42	1.00	1.00
2049	1,650	1,650	4.28	5.85	4.28	5.44	1.00	1.00
2050	1,650	1,650	4.36	5.93	4.36	5.56	1.00	1.00
2051	1,650	1,650	4.54	5.75	4.54	5.54	1.00	1.00
2052	1,650	1,650	4.44	5.71	4.44	5.50	1.00	1.00
2053	1,650	1,650	4.47	6.35	4.47	5.41	1.00	1.00
2054	1,650	1,650	4.52	5.99	4.52	5.46	1.00	1.00
2055	1,650	1,650	4.57	5.92	4.57	5.43	1.00	1.00
2056	1,650	1,650	4.73	6.50	4.73	5.47	1.00	1.00
2057	1,650	1,650	4.64	7.11	4.64	5.37	1.00	1.00
2058	1,650	1,650	4.68	5.75	4.68	5.50	1.00	1.00
2059	1,650	1,650	4.75	7.09	4.75	5.66	1.00	1.00
2060	1,650	1,650	4.75	6.71	4.75	5.82	1.00	1.00
2061	1,650	1,650	4.79	6.52	4.79	5.69	1.00	1.00
2062	1,650	1,650	4.80	6.26	4.80	5.73	1.00	1.00
2063	1,650	1,650	4.89	6.59	4.89	5.77	1.00	1.00
2064	1,650	1,650	5.15	6.32	5.15	6.56	1.00	1.00
2065	1,650	1,650	4.96	6.75	4.96	5.86	1.00	1.00
2066	1,650	1,650	5.07	7.07	5.07	5.84	1.00	1.00
2067	1,650	1,650	5.09	6.21	5.09	5.94	1.00	1.00
2068	1,650	1,650	5.09	6.63	5.09	5.97	1.00	1.00
2069	1,650	1,650	5.09	6.63	5.09	5.97	1.00	1.00
2070	1,650	1,650	5.09	6.63	5.09	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
 THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Business On-Call (BOC)

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	167	56	2	539	599	165
2032	163	57	2	549	622	150
2033	158	59	2	563	635	147
2034	153	60	3	593	661	148
2035	149	62	3	605	677	141
2036	144	63	3	620	692	139
2037	140	65	3	630	699	139
2038	136	67	3	640	714	131
2039	132	68	3	640	720	123
2040	128	70	3	647	732	116
2041	124	72	3	648	734	113
2042	120	73	3	670	750	117
2043	116	75	3	653	738	110
2044	112	77	3	676	761	107
2045	108	79	3	689	781	99
2046	104	81	3	694	777	105
2047	100	83	3	706	797	96
2048	96	85	4	710	794	100
2049	92	87	4	712	797	98
2050	88	90	4	725	815	91
2051	84	92	4	715	811	84
2052	81	94	4	718	806	90
2053	78	96	4	706	793	91
2054	75	99	4	720	806	92
2055	73	101	4	709	797	90
2056	70	104	4	715	808	86
2057	67	106	4	705	789	95
2058	64	109	5	712	806	84
2059	62	112	5	742	835	86
2060	59	115	5	752	854	76
2061	56	117	5	749	834	93
2062	53	120	5	753	846	86
2063	51	123	5	753	847	86
2064	48	127	5	780	962	-2
2065	46	130	5	773	867	88
2066	44	133	6	769	857	95
2067	42	136	6	772	872	84
2068	39	140	6	767	877	75
2069	37	143	6	767	877	76
2070	35	147	6	767	877	78

NOM	3,693	3,775	158	27,756	31,316	4,066
NPV	800.69	494.64	21	4,214	4,736	794

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0
2043	0	0	0	0	0	0	0	0
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
2060	0	0	0	0	0	0	0	0
2061	0	0	0	0	0	0	0	0
2062	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0
2064	0	0	0	0	0	0	0	0
2065	0	0	0	0	0	0	0	0
2066	0	0	0	0	0	0	0	0
2067	0	0	0	0	0	0	0	0
2068	0	0	0	0	0	0	0	0
2069	0	0	0	0	0	0	0	0
2070	0	0	0	0	0	0	0	0

NOM	0	0.00	0	0	0	0	0	0
NPV	0	0	0	0	0	0	5	1

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM/METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	0	0	0	0	0
2028	0	0	0	0	0
2029	0	0	0	0	0
2030	0	0	0	0	0
2031	33	37	0	0	(4)
2032	39	44	0	0	(5)
2033	46	52	0	0	(6)
2034	54	61	0	0	(7)
2035	68	77	0	0	(9)
2036	86	96	0	0	(11)
2037	105	118	0	0	(13)
2038	126	141	0	0	(16)
2039	149	168	0	0	(19)
2040	174	196	0	0	(22)
2041	200	225	0	0	(25)
2042	228	256	0	0	(29)
2043	257	290	0	0	(32)
2044	290	327	0	0	(37)
2045	326	367	0	0	(41)
2046	367	413	0	0	(46)
2047	387	436	0	0	(49)
2048	409	461	0	0	(52)
2049	433	487	0	0	(55)
2050	457	515	0	0	(58)
2051	467	525	0	0	(59)
2052	477	537	0	0	(60)
2053	487	549	0	0	(61)
2054	500	563	0	0	(63)
2055	508	572	0	0	(64)
2056	522	588	0	0	(66)
2057	530	596	0	0	(67)
2058	540	608	0	0	(68)
2059	555	625	0	0	(70)
2060	564	635	0	0	(71)
2061	575	648	0	0	(72)
2062	591	666	0	0	(74)
2063	600	676	0	0	(76)
2064	612	689	0	0	(77)
2065	630	710	0	0	(79)
2066	639	719	0	0	(80)
2067	652	734	0	0	(82)
2068	666	750	0	0	(84)
2069	680	766	0	0	(86)
2070	694	782	0	0	(87)

NOM	15,724	17,706	2	0	(1,980)
NPV	1,509	1,700	0	0	(190)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	46	0	0	46	0	0	0	0	0	0	(43)
2023	0	61	0	0	61	0	0	0	0	0	0	(96)
2024	0	74	0	0	74	0	0	0	0	0	0	(155)
2025	0	61	0	0	61	0	0	0	0	0	0	(200)
2026	0	58	0	0	58	0	0	0	0	0	0	(240)
2027	0	35	0	0	35	0	0	0	0	0	0	(263)
2028	0	19	0	0	19	0	0	0	0	0	0	(274)
2029	0	7	0	0	7	0	0	0	0	0	0	(278)
2030	0	8	0	0	8	0	0	0	0	0	0	(282)
2031	0	8	0	0	8	165	0	0	(4)	160	153	(208)
2032	0	8	0	0	8	150	0	0	(5)	145	138	(147)
2033	0	8	0	0	8	147	0	0	(6)	141	133	(91)
2034	0	8	0	0	8	148	0	0	(7)	142	133	(39)
2035	0	8	0	0	8	141	0	0	(9)	133	125	6
2036	0	8	0	0	8	139	0	0	(11)	128	120	47
2037	0	8	0	0	8	139	0	0	(13)	126	118	84
2038	0	8	0	0	8	131	0	0	(16)	115	107	141
2039	0	8	0	0	8	123	0	0	(19)	104	96	163
2040	0	8	0	0	8	116	0	0	(22)	94	86	181
2041	0	8	0	0	8	113	0	0	(25)	88	79	183
2042	0	81	0	0	81	117	0	0	(29)	88	7	177
2043	0	105	0	0	105	110	0	0	(32)	77	(27)	167
2044	0	123	0	0	123	107	0	0	(37)	71	(52)	160
2045	0	102	0	0	102	99	0	0	(41)	58	(44)	134
2046	0	95	0	0	95	105	0	0	(46)	59	(36)	152
2047	0	57	0	0	57	96	0	0	(49)	47	(10)	155
2048	0	31	0	0	31	100	0	0	(52)	17	17	159
2049	0	12	0	0	12	98	0	0	(55)	43	31	161
2050	0	12	0	0	12	91	0	0	(58)	33	21	163
2051	0	13	0	0	13	84	0	0	(59)	25	12	166
2052	0	13	0	0	13	90	0	0	(60)	30	17	166
2053	0	13	0	0	13	91	0	0	(61)	30	17	166
2054	0	13	0	0	13	92	0	0	(63)	30	16	168
2055	0	13	0	0	13	90	0	0	(64)	27	14	169
2056	0	13	0	0	13	86	0	0	(66)	20	8	169
2057	0	13	0	0	13	95	0	0	(67)	28	15	171
2058	0	13	0	0	13	84	0	0	(68)	16	4	171
2059	0	14	0	0	14	86	0	0	(70)	16	2	170
2060	0	14	0	0	14	76	0	0	(71)	5	(9)	171
2061	0	14	0	0	14	93	0	0	(72)	21	7	165
2062	0	133	0	0	133	86	0	0	(74)	12	(121)	157
2063	0	172	0	0	172	86	0	0	(76)	10	(161)	145
2064	0	201	0	0	201	(2)	0	0	(77)	(79)	(281)	138
2065	0	167	0	0	167	88	0	0	(79)	9	(158)	133
2066	0	155	0	0	155	95	0	0	(80)	14	(141)	129
2067	0	94	0	0	94	84	0	0	(82)	2	(60)	127
2068	0	51	0	0	51	75	0	0	(84)	(9)	(29)	127
2069	0	20	0	0	20	76	0	0	(86)	(9)	(30)	126
2070	0	20	0	0	20	78	0	0	(87)	(9)	(30)	126

NOM	0	2,234	0	0	2,234	4,065.75	0	5	(1,980)	2,091	(1,43)
NPV	0	479	0	0	479	794	0	1	(1,900)	605.11	126

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(11) / Col(6)) : 1.26

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	16	0	16	0	0	0	0	16	14
2023	0	0	41	0	41	0	0	0	0	41	50
2024	0	0	60	0	60	0	0	0	0	60	99
2025	0	0	68	0	69	0	0	0	0	69	150
2026	0	0	68	0	69	0	0	0	0	69	198
2027	0	0	68	0	69	0	0	0	0	69	242
2028	0	0	68	0	69	0	0	0	0	69	283
2029	0	0	68	0	69	0	0	0	0	69	322
2030	0	0	68	0	69	0	0	0	0	69	357
2031	0	0	68	0	69	0	0	0	0	69	390
2032	0	0	68	0	69	0	0	0	0	69	421
2033	0	0	68	0	69	0	0	0	0	69	450
2034	0	0	68	0	69	0	0	0	0	69	477
2035	0	0	68	0	69	0	0	0	0	69	502
2036	0	0	68	0	69	0	0	0	0	69	525
2037	0	0	68	0	69	0	0	0	0	69	546
2038	0	0	68	0	69	0	0	0	0	69	566
2039	0	0	68	0	69	0	0	0	0	69	585
2040	0	0	68	0	69	0	0	0	0	69	602
2041	0	0	68	0	69	0	0	0	0	69	618
2042	0	0	68	0	69	0	0	0	0	69	633
2043	0	0	68	0	69	0	0	0	0	69	647
2044	0	0	68	0	69	0	0	0	0	69	660
2045	0	0	68	0	69	0	0	0	0	69	672
2046	0	0	68	0	69	0	0	0	0	69	683
2047	0	0	68	0	69	0	0	0	0	69	693
2048	0	0	68	0	69	0	0	0	0	69	703
2049	0	0	68	0	69	0	0	0	0	69	712
2050	0	0	68	0	69	0	0	0	0	69	720
2051	0	0	68	0	69	0	0	0	0	69	728
2052	0	0	68	0	69	0	0	0	0	69	736
2053	0	0	68	0	69	0	0	0	0	69	742
2054	0	0	68	0	69	0	0	0	0	69	749
2055	0	0	68	0	69	0	0	0	0	69	754
2056	0	0	68	0	69	0	0	0	0	69	760
2057	0	0	68	0	69	0	0	0	0	69	765
2058	0	0	68	0	69	0	0	0	0	69	770
2059	0	0	68	0	69	0	0	0	0	69	774
2060	0	0	68	0	69	0	0	0	0	69	778
2061	0	0	68	0	69	0	0	0	0	69	782
2062	0	0	68	0	69	0	0	0	0	69	785
2063	0	0	68	0	69	0	0	0	0	69	788
2064	0	0	68	0	69	0	0	0	0	69	791
2065	0	0	68	0	69	0	0	0	0	69	794
2066	0	0	68	0	69	0	0	0	0	69	797
2067	0	0	68	0	69	0	0	0	0	69	799
2068	0	0	68	0	69	0	0	0	0	69	802
2069	0	0	68	0	69	0	0	0	0	69	804
2070	0	0	68	0	69	0	0	0	0	69	806
NOM	13	0	3,261	0	3,274	0	0	0	0	0	3,274
NPV	2	0	803	0	806	0	0	0	0	0	806

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) )

2031  
Infinite %

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Business On-Call (BOC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	46	16	0	0	61	0	0	0	0	0	(61)	(57)
2023	0	61	41	0	0	103	0	0	0	0	0	(103)	(146)
2024	0	74	60	0	0	134	0	0	0	0	0	(134)	(253)
2025	0	61	68	0	0	130	0	0	0	0	0	(130)	(350)
2026	0	58	68	0	0	126	0	0	0	0	0	(126)	(438)
2027	0	35	68	0	0	103	0	0	0	0	0	(103)	(505)
2028	0	19	68	0	0	88	0	0	0	0	0	(88)	(558)
2029	0	7	68	0	0	76	0	0	0	0	0	(76)	(600)
2030	0	8	68	0	0	76	0	0	0	0	0	(76)	(640)
2031	0	8	68	0	0	76	165	0	0	(4)	160	84	(599)
2032	0	8	68	0	0	76	150	0	0	(5)	145	69	(568)
2033	0	8	68	0	0	77	147	0	0	(6)	141	65	(541)
2034	0	8	68	0	0	77	148	0	0	(7)	142	65	(515)
2035	0	8	68	0	0	76	141	0	0	(9)	133	56	(495)
2036	0	8	68	0	0	76	139	0	0	(11)	128	52	(478)
2037	0	8	68	0	0	76	139	0	0	(13)	126	50	(462)
2038	0	8	68	0	0	76	131	0	0	(16)	115	39	(451)
2039	0	8	68	0	0	77	123	0	0	(19)	104	27	(443)
2040	0	8	68	0	0	77	116	0	0	(22)	94	17	(439)
2041	0	8	68	0	0	77	113	0	0	(25)	88	11	(436)
2042	0	81	68	0	0	150	117	0	0	(29)	88	(62)	(450)
2043	0	105	68	0	0	173	110	0	0	(32)	77	(96)	(469)
2044	0	123	68	0	0	191	107	0	0	(37)	71	(121)	(492)
2045	0	102	68	0	0	170	99	0	0	(41)	58	(113)	(512)
2046	0	95	68	0	0	163	105	0	0	(46)	59	(104)	(529)
2047	0	57	68	0	0	126	96	0	0	(49)	47	(79)	(541)
2048	0	31	68	0	0	100	100	0	0	(52)	49	(51)	(548)
2049	0	12	68	0	0	81	98	0	0	(55)	43	(37)	(553)
2050	0	12	68	0	0	81	91	0	0	(58)	33	(48)	(559)
2051	0	13	68	0	0	81	84	0	0	(59)	25	(56)	(565)
2052	0	13	68	0	0	82	90	0	0	(60)	30	(51)	(571)
2053	0	13	68	0	0	82	92	0	0	(61)	30	(52)	(576)
2054	0	13	68	0	0	82	93	0	0	(63)	30	(52)	(580)
2055	0	13	68	0	0	82	91	0	0	(64)	27	(55)	(585)
2056	0	13	68	0	0	81	86	0	0	(66)	20	(61)	(590)
2057	0	13	68	0	0	81	95	0	0	(67)	28	(53)	(594)
2058	0	13	68	0	0	81	84	0	0	(68)	16	(65)	(598)
2059	0	14	68	0	0	82	86	0	0	(70)	16	(66)	(602)
2060	0	14	68	0	0	82	76	0	0	(71)	5	(78)	(607)
2061	0	14	68	0	0	82	93	0	0	(72)	21	(62)	(610)
2062	0	133	68	0	0	202	87	0	0	(74)	12	(190)	(620)
2063	0	172	68	0	0	240	86	0	0	(76)	10	(230)	(631)
2064	0	201	68	0	0	270	(2)	0	0	(77)	(79)	(349)	(646)
2065	0	167	68	0	0	236	88	0	0	(79)	9	(656)	(656)
2066	0	155	68	0	0	224	95	0	0	(80)	14	(210)	(664)
2067	0	94	68	0	0	162	84	0	0	(82)	2	(670)	(670)
2068	0	51	68	0	0	120	75	0	0	(84)	(9)	(129)	(674)
2069	0	20	68	0	0	89	77	0	0	(86)	(9)	(98)	(677)
2070	0	20	68	0	0	89	78	0	0	(87)	(9)	(98)	(680)

NOM	0	2,234	3,261	11	0	5,505	4,070.76	0.00	0.00	(1,979.95)	2,091	(3,415)	
NPV	0	479	803	2	0	1,285	795	0	0	(1,900)	605	(680)	

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(12) / Col(7)) : 0.47

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :



**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.95 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	1,2340 kW
(3) kW LINE LOSS PERCENT AGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	911.66 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42106
(5) K FACTOR FOR T & D .....	1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,740,799.7 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	362,488,238.7 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	95,786.25 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24,027,416.97 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	3,963,343.231 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	2,733,632.729 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	90 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	3,737,763 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	1.61 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.427
(2) TRC TEST .....	0.990
(3) PARTICIPANT TEST .....	2.45

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Bus HVAC

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	
2022	520	7,694	0	8,214	233	871	18,033	45	18,078	
2023	558	8,053	0	8,611	720	2,864	19,345	49	19,394	
2024	587	8,269	0	8,857	1,252	5,137	20,362	51	20,413	
2025	0	0	0	0	1,641	6,429	0	0	0	
2026	0	0	0	0	1,761	6,623	0	0	0	
2027	0	0	0	0	1,811	6,836	0	0	0	
2028	0	0	0	0	1,875	7,022	0	0	0	
2029	0	0	0	0	1,923	7,264	0	0	0	
2030	0	0	0	0	1,955	7,508	0	0	0	
2031	0	0	0	0	1,989	7,612	0	0	0	
2032	0	0	0	0	2,029	7,747	0	0	0	
2033	0	0	0	0	2,074	7,886	0	0	0	
2034	0	0	0	0	2,117	8,011	0	0	0	
2035	0	0	0	0	2,181	8,152	0	0	0	
2036	0	0	0	0	2,294	8,318	0	0	0	
2037	0	0	0	0	2,359	8,474	0	0	0	
2038	0	0	0	0	2,433	8,629	0	0	0	
2039	0	0	0	0	2,494	8,763	0	0	0	
2040	0	0	0	0	2,562	8,911	0	0	0	
2041	0	0	0	0	2,634	9,031	0	0	0	
2042	0	0	0	0	2,668	9,159	0	0	0	
2043	0	0	0	0	2,790	9,326	0	0	0	
2044	0	0	0	0	2,893	9,438	0	0	0	
2045	0	0	0	0	2,969	9,545	0	0	0	
2046	0	0	0	0	3,061	9,706	0	0	0	
2047	0	0	0	0	3,120	9,829	0	0	0	
2048	0	0	0	0	3,165	9,943	0	0	0	
2049	0	0	0	0	3,226	10,083	0	0	0	
2050	0	0	0	0	3,297	10,237	0	0	0	
2051	0	0	0	0	3,351	10,370	0	0	0	
2052	0	0	0	0	3,406	10,503	0	0	0	
2053	0	0	0	0	3,462	10,638	0	0	0	
2054	0	0	0	0	3,519	10,772	0	0	0	
2055	1,175	7,694	0	8,869	3,577	10,908	40,733	103	40,836	
2056	1,260	8,053	0	9,313	3,636	11,044	43,698	110	43,808	
2057	1,327	8,269	0	9,596	3,697	11,180	45,995	116	46,111	
2058	0	0	0	0	3,758	11,318	0	0	0	
2059	0	0	0	0	3,821	11,456	0	0	0	
2060	0	0	0	0	3,885	11,594	0	0	0	
2061	0	0	0	0	3,972	11,761	0	0	0	
2062	0	0	0	0	4,058	11,930	0	0	0	
2063	0	0	0	0	4,149	12,101	0	0	0	
2064	0	0	0	0	4,236	12,273	0	0	0	
2065	0	0	0	0	4,321	12,447	0	0	0	
2066	0	0	0	0	4,406	12,626	0	0	0	
2067	0	0	0	0	4,490	12,805	0	0	0	
2068	0	0	0	0	4,575	12,988	0	0	0	
2069	0	0	0	0	4,662	13,175	0	0	0	
2070	0	0	0	0	4,752	13,365	0	0	0	

NOM	5,427	48,033	0	53,460	145,260	464,605	188,166	475	0	188,641
NPV	1,735	22,669	0	24,404	26,405	95,249	60,166	152	0	60,317

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Bus HVAC

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2022	2.50	2.50	2.50	0.00	0.00	2.00	4.80	0.00	11.30
2023	2.50	2.50	2.50	0.00	0.00	2.00	4.98	0.00	13.38
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.06	0.00	14.45
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.19	0.00	15.29
2026	2.50	2.50	2.50	0.00	0.00	2.00	5.62	0.00	15.83
2027	2.50	2.50	2.50	0.00	0.00	2.00	6.01	0.00	16.31
2028	2.50	2.50	2.50	0.00	0.00	2.00	6.19	0.00	16.84
2029	2.50	2.50	2.50	0.00	0.00	2.00	6.40	0.00	17.30
2030	2.50	2.50	2.50	0.00	0.00	2.00	6.56	0.00	17.90
2031	2.50	2.50	2.50	3.74	90.35	2.00	6.67	0.00	18.50
2032	2.50	2.50	2.50	3.80	90.70	2.00	6.79	0.00	18.77
2033	2.50	2.50	2.50	3.89	90.65	2.00	6.92	0.00	19.10
2034	2.50	2.50	2.50	4.07	91.31	2.00	7.07	0.00	19.45
2035	2.50	2.50	2.50	4.16	91.26	2.00	7.21	0.00	19.76
2036	2.50	2.50	2.50	4.25	91.60	2.00	7.42	0.00	20.11
2037	2.50	2.50	2.50	4.31	91.74	2.00	7.79	0.00	20.53
2038	2.50	2.50	2.50	4.37	91.70	2.00	8.01	0.00	20.91
2039	2.50	2.50	2.50	4.37	91.80	2.00	8.25	0.00	21.30
2040	2.50	2.50	2.50	4.42	91.69	2.00	8.45	0.00	21.64
2041	2.50	2.50	2.50	4.42	91.92	2.00	8.68	0.00	22.01
2042	2.50	2.50	2.50	4.45	92.14	2.00	8.91	0.00	22.31
2043	2.50	2.50	2.50	4.45	91.95	2.00	9.03	0.00	22.63
2044	2.50	2.50	2.50	4.62	91.83	2.00	9.42	0.00	23.04
2045	2.50	2.50	2.50	4.71	91.77	2.00	9.76	0.00	23.33
2046	2.50	2.50	2.50	4.73	92.00	2.00	10.01	0.00	23.59
2047	2.50	2.50	2.50	4.81	91.97	2.00	10.31	0.00	24.00
2048	2.50	2.50	2.50	4.84	91.92	2.00	10.51	0.00	24.30
2049	2.50	2.50	2.50	4.86	91.95	2.00	10.65	0.00	24.59
2050	2.50	2.50	2.50	4.95	91.91	2.00	10.85	0.00	24.94
2051	2.50	2.50	2.50	4.88	91.81	2.00	11.09	0.00	25.33
2052	2.50	2.50	2.50	4.90	91.90	2.00	11.27	0.00	25.66
2053	2.50	2.50	2.50	4.81	91.97	2.00	11.45	0.00	25.99
2054	2.50	2.50	2.50	4.88	92.48	2.00	11.63	0.00	26.33
2055	2.50	2.50	2.50	4.84	91.92	2.00	11.82	0.00	26.66
2056	2.50	2.50	2.50	4.84	92.61	2.00	12.01	0.00	27.00
2057	2.50	2.50	2.50	4.81	92.01	2.00	12.21	0.00	27.34
2058	2.50	2.50	2.50	4.85	91.90	2.00	12.41	0.00	27.68
2059	2.50	2.50	2.50	5.04	92.43	2.00	12.61	0.00	28.03
2060	2.50	2.50	2.50	5.12	92.02	2.00	12.82	0.00	28.37
2061	2.50	2.50	2.50	5.11	91.94	2.00	13.03	0.00	28.72
2062	2.50	2.50	2.50	5.10	92.60	2.00	13.31	0.00	29.13
2063	2.50	2.50	2.50	5.13	92.00	2.00	13.59	0.00	29.56
2064	2.50	2.50	2.50	5.32	91.95	2.00	13.89	0.00	29.99
2065	2.50	2.50	2.50	5.23	92.71	2.00	14.18	0.00	30.42
2066	2.50	2.50	2.50	5.24	92.04	2.00	14.46	0.00	30.86
2067	2.50	2.50	2.50	5.26	92.04	2.00	14.73	0.00	31.30
2068	2.50	2.50	2.50	5.23	92.03	2.00	15.01	0.00	31.75
2069	2.50	2.50	2.50	5.23	92.03	2.00	15.29	0.00	32.21
2070	2.50	2.50	2.50	5.23	92.03	2.00	15.58	0.00	32.68

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Bns HVAC

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2031	27,840	461	0	1,751	461	484	10	700	149	0	4,015	4,015	4,015	27,995
2032	26,928	446	0	1,693	772	472	10	700	(183)	0	3,911	3,637	7,652	27,295
2033	25,916	429	0	1,630	1,044	460	10	700	(476)	0	3,797	3,284	10,936	26,595
2034	24,939	413	0	1,568	1,283	448	9	700	(736)	0	3,686	2,965	13,901	25,895
2035	23,996	397	0	1,509	1,490	436	9	700	(963)	0	3,578	2,677	16,578	25,195
2036	23,084	382	0	1,451	1,669	424	9	700	(1,161)	0	3,474	2,417	18,995	24,496
2037	22,200	368	0	1,396	1,820	412	9	700	(1,331)	0	3,373	2,182	21,177	23,796
2038	21,342	354	0	1,342	1,947	400	8	700	(1,477)	0	3,274	1,970	23,147	23,096
2039	20,499	340	0	1,289	2,071	387	8	700	(1,618)	0	3,176	1,778	24,925	22,396
2040	19,658	326	0	1,236	2,194	375	8	700	(1,759)	0	3,079	1,603	26,528	21,696
2041	18,817	312	0	1,183	2,317	363	8	700	(1,900)	0	2,982	1,444	27,972	20,996
2042	17,975	298	0	1,130	2,440	351	7	700	(2,041)	0	2,885	1,299	29,271	20,296
2043	17,134	284	0	1,077	2,563	339	7	700	(2,183)	0	2,788	1,167	30,438	19,596
2044	16,293	270	0	1,024	2,687	327	7	700	(2,324)	0	2,691	1,048	31,486	18,897
2045	15,452	256	0	972	2,810	315	7	700	(2,465)	0	2,594	939	32,425	18,197
2046	14,611	242	0	919	2,933	303	6	700	(2,606)	0	2,496	841	33,266	17,497
2047	13,770	228	0	866	3,056	291	6	700	(2,747)	0	2,399	752	34,017	16,797
2048	12,929	214	0	813	3,179	278	6	700	(2,888)	0	2,302	671	34,688	16,097
2049	12,088	200	0	760	3,303	266	6	700	(3,030)	0	2,205	597	35,286	15,397
2050	11,247	186	0	707	3,426	254	5	700	(3,171)	0	2,108	531	35,817	14,697
2051	10,483	174	0	659	3,549	242	5	700	(3,313)	0	2,019	473	36,290	13,997
2052	9,873	164	0	621	3,672	230	5	700	(3,454)	0	1,945	424	36,714	13,298
2053	9,339	155	0	587	3,795	218	5	700	(3,595)	0	1,879	381	37,094	12,598
2054	8,805	146	0	554	3,918	206	4	700	(3,736)	0	1,812	342	37,436	11,898
2055	8,272	137	0	520	4,041	194	4	700	(3,877)	0	1,746	306	37,742	11,198
2056	7,738	128	0	487	4,164	182	4	700	(4,018)	0	1,680	274	38,016	10,498
2057	7,204	119	0	453	4,287	170	4	700	(4,159)	0	1,614	245	38,261	9,798
2058	6,671	110	0	419	4,410	157	3	700	(4,300)	0	1,548	218	38,479	9,098
2059	6,137	102	0	386	4,533	145	3	700	(4,441)	0	1,482	194	38,674	8,398
2060	5,603	93	0	352	4,656	133	3	700	(4,582)	0	1,416	173	38,846	7,699
2061	5,070	84	0	319	4,779	121	3	700	(4,723)	0	1,349	153	38,999	6,999
2062	4,536	75	0	285	4,902	109	2	700	(4,864)	0	1,283	135	39,135	6,299
2063	4,002	66	0	252	5,025	97	2	700	(5,005)	0	1,217	119	39,254	5,599
2064	3,469	57	0	218	5,148	86	2	700	(5,146)	0	1,163	106	39,360	4,899
2065	2,935	49	0	185	5,271	75	2	700	(5,287)	0	1,110	94	39,454	4,199
2066	2,401	40	0	151	5,394	64	2	700	(5,428)	0	1,056	83	39,538	3,499
2067	1,868	31	0	117	5,517	53	2	700	(5,569)	0	1,002	74	39,611	2,799
2068	1,334	22	0	84	5,640	42	2	700	(5,710)	0	948	65	39,676	2,099
2069	800	13	0	50	5,763	31	2	700	(5,851)	0	894	57	39,733	1,399
2070	267	4	0	17	5,886	21	2	700	(5,992)	0	841	50	39,783	699

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)

IN SERVICE YEAR	27,995
BOOK LIFE (YRS)	2031
EFFEC. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.52%
PROPERTY INSURANCE	1.73%
	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HVAC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$ (000)	ACCUMULATED TAX DEPRECIATION \$ (000)	BOOK DEPRECIATION \$ (000)	ACCUMULATED BOOK DEPRECIATION \$ (000)	BOOK DEPRECIATION FOR DEFERRED TAX \$ (000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$ (000)	DEFERRED TAX DUE TO DEPRECIATION \$ (000)	TOTAL EQUITY AFUDC \$ (000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$ (000)	SALVAGE TAX RATE \$ (000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) \$ (000)	ACCUMULATED DEFERRED TAX \$ (000)
2031	3.75%	1,019	1,019	700	700	700	700	149	1,762	0	0	0	149	389
2032	7.22%	1,962	2,982	700	1,400	700	1,400	(183)	1,762	0	0	0	(183)	207
2033	6.68%	1,815	4,797	700	2,100	700	2,100	(476)	1,762	0	0	0	(476)	(269)
2034	6.18%	1,679	6,476	700	2,799	700	2,799	(736)	1,762	0	0	0	(736)	(1,005)
2035	5.71%	1,553	8,029	700	3,499	700	3,499	(963)	1,762	0	0	0	(963)	(1,968)
2036	5.29%	1,437	9,465	700	4,199	700	4,199	(1,161)	1,762	0	0	0	(1,161)	(3,129)
2037	4.89%	1,329	10,794	700	4,899	700	4,899	(1,331)	1,762	0	0	0	(1,331)	(4,460)
2038	4.52%	1,229	12,023	700	5,599	700	5,599	(1,477)	1,762	0	0	0	(1,477)	(5,937)
2039	4.46%	1,213	13,236	700	6,299	700	6,299	(1,618)	1,762	0	0	0	(1,618)	(7,555)
2040	4.46%	1,213	14,449	700	6,999	700	6,999	(1,759)	1,762	0	0	0	(1,759)	(9,314)
2041	4.46%	1,213	15,662	700	7,699	700	7,699	(1,900)	1,762	0	0	0	(1,900)	(11,215)
2042	4.46%	1,213	16,874	700	8,398	700	8,398	(2,041)	1,762	0	0	0	(2,041)	(13,256)
2043	4.46%	1,213	18,087	700	9,098	700	9,098	(2,183)	1,762	0	0	0	(2,183)	(15,439)
2044	4.46%	1,213	19,300	700	9,798	700	9,798	(2,324)	1,762	0	0	0	(2,324)	(17,762)
2045	4.46%	1,213	20,513	700	10,498	700	10,498	(2,465)	1,762	0	0	0	(2,465)	(20,227)
2046	4.46%	1,213	21,726	700	11,198	700	11,198	(2,606)	1,762	0	0	0	(2,606)	(22,833)
2047	4.46%	1,213	22,938	700	11,898	700	11,898	(2,747)	1,762	0	0	0	(2,747)	(25,581)
2048	4.46%	1,213	24,151	700	12,598	700	12,598	(2,888)	1,762	0	0	0	(2,888)	(28,469)
2049	4.46%	1,213	25,364	700	13,298	700	13,298	(3,030)	1,762	0	0	0	(3,030)	(31,499)
2050	4.46%	1,213	26,577	700	13,997	700	13,997	(3,171)	1,762	0	0	0	(3,171)	(34,669)
2051	2.23%	606	27,183	700	14,697	700	14,697	(3,158)	1,762	0	0	0	(3,158)	(37,827)
2052	0.00%	0	27,183	700	15,397	700	15,397	(2,992)	1,762	0	0	0	(2,992)	(40,819)
2053	0.00%	0	27,183	700	16,097	700	16,097	(2,826)	1,762	0	0	0	(2,826)	(43,645)
2054	0.00%	0	27,183	700	16,797	700	16,797	(2,660)	1,762	0	0	0	(2,660)	(46,305)
2055	0.00%	0	27,183	700	17,497	700	17,497	(2,493)	1,762	0	0	0	(2,493)	(48,798)
2056	0.00%	0	27,183	700	18,197	700	18,197	(2,327)	1,762	0	0	0	(2,327)	(51,125)
2057	0.00%	0	27,183	700	18,897	700	18,897	(2,161)	1,762	0	0	0	(2,161)	(53,286)
2058	0.00%	0	27,183	700	19,596	700	19,596	(1,995)	1,762	0	0	0	(1,995)	(55,281)
2059	0.00%	0	27,183	700	20,296	700	20,296	(1,828)	1,762	0	0	0	(1,828)	(57,109)
2060	0.00%	0	27,183	700	20,996	700	20,996	(1,662)	1,762	0	0	0	(1,662)	(58,771)
2061	0.00%	0	27,183	700	21,696	700	21,696	(1,496)	1,762	0	0	0	(1,496)	(60,267)
2062	0.00%	0	27,183	700	22,396	700	22,396	(1,330)	1,762	0	0	0	(1,330)	(61,597)
2063	0.00%	0	27,183	700	23,096	700	23,096	(1,164)	1,762	0	0	0	(1,164)	(62,760)
2064	0.00%	0	27,183	700	23,796	700	23,796	(997)	1,762	0	0	0	(997)	(63,758)
2065	0.00%	0	27,183	700	24,496	700	24,496	(831)	1,762	0	0	0	(831)	(64,589)
2066	0.00%	0	27,183	700	25,195	700	25,195	(665)	1,762	0	0	0	(665)	(65,254)
2067	0.00%	0	27,183	700	25,895	700	25,895	(499)	1,762	0	0	0	(499)	(65,752)
2068	0.00%	0	27,183	700	26,595	700	26,595	(332)	1,762	0	0	0	(332)	(66,085)
2069	0.00%	0	27,183	700	27,295	700	27,295	(166)	1,762	0	0	0	(166)	(66,251)
2070	0.00%	0	27,183	700	27,995	700	27,995	0	1,762	0	0	0	0	(66,251)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	241
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,762
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bns HVAC

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031	3.75%	1,019	149	27,295	700	389	28,236	27,444	27,840
2032	7.22%	1,962	(183)	26,595	1,400	207	27,444	26,413	26,928
2033	6.68%	1,815	(476)	25,895	2,100	(269)	26,413	25,419	25,916
2034	6.18%	1,679	(736)	25,195	2,799	(1,005)	25,419	24,460	24,939
2035	5.71%	1,553	(963)	24,496	3,499	(1,968)	24,460	23,532	23,996
2036	5.29%	1,437	(1,161)	23,796	4,199	(3,129)	23,532	22,635	23,084
2037	4.89%	1,329	(1,331)	23,096	4,899	(4,460)	22,635	21,764	22,200
2038	4.52%	1,229	(1,477)	22,396	5,599	(5,937)	21,764	20,919	21,342
2039	4.46%	1,213	(1,618)	21,696	6,299	(7,555)	20,919	20,078	20,499
2040	4.46%	1,213	(1,759)	20,996	6,999	(9,314)	20,078	19,237	19,658
2041	4.46%	1,213	(1,900)	20,296	7,699	(11,215)	19,237	18,396	18,817
2042	4.46%	1,213	(2,041)	19,596	8,398	(13,256)	18,396	17,555	17,975
2043	4.46%	1,213	(2,183)	18,897	9,098	(15,439)	17,555	16,714	17,134
2044	4.46%	1,213	(2,324)	18,197	9,798	(17,762)	16,714	15,873	16,293
2045	4.46%	1,213	(2,465)	17,497	10,498	(20,227)	15,873	15,032	15,452
2046	4.46%	1,213	(2,606)	16,797	11,198	(22,833)	15,032	14,191	14,611
2047	4.46%	1,213	(2,747)	16,097	11,898	(25,581)	14,191	13,350	13,770
2048	4.46%	1,213	(2,888)	15,397	12,598	(28,469)	13,350	12,509	12,929
2049	4.46%	1,213	(3,030)	14,697	13,298	(31,499)	12,509	11,668	12,088
2050	4.46%	1,213	(3,171)	13,997	13,997	(34,669)	11,668	10,827	11,247
2051	2.23%	606	(3,158)	13,298	14,697	(37,827)	10,827	10,139	10,483
2052	0.00%	0	(2,992)	12,598	15,397	(40,819)	10,139	9,606	9,873
2053	0.00%	0	(2,826)	11,898	16,097	(43,645)	9,606	9,072	9,339
2054	0.00%	0	(2,660)	11,198	16,797	(46,305)	9,072	8,538	8,805
2055	0.00%	0	(2,493)	10,498	17,497	(48,798)	8,538	8,005	8,272
2056	0.00%	0	(2,327)	9,798	18,197	(51,125)	8,005	7,471	7,738
2057	0.00%	0	(2,161)	9,098	18,897	(53,286)	7,471	6,937	7,204
2058	0.00%	0	(1,995)	8,398	19,596	(55,281)	6,937	6,404	6,671
2059	0.00%	0	(1,828)	7,699	20,296	(57,109)	6,404	5,870	6,137
2060	0.00%	0	(1,662)	6,999	20,996	(58,771)	5,870	5,337	5,603
2061	0.00%	0	(1,496)	6,299	21,696	(60,267)	5,337	4,803	5,070
2062	0.00%	0	(1,330)	5,599	22,396	(61,597)	4,803	4,269	4,536
2063	0.00%	0	(1,164)	4,899	23,096	(62,760)	4,269	3,736	4,002
2064	0.00%	0	(997)	4,199	23,796	(63,758)	3,736	3,202	3,469
2065	0.00%	0	(831)	3,499	24,496	(64,589)	3,202	2,668	2,935
2066	0.00%	0	(665)	2,799	25,195	(65,254)	2,668	2,135	2,401
2067	0.00%	0	(499)	2,100	25,895	(65,752)	2,135	1,601	1,868
2068	0.00%	0	(332)	1,400	26,595	(66,085)	1,601	1,067	1,334
2069	0.00%	0	(166)	700	27,295	(66,251)	1,067	534	800
2070	0.00%	0	0	0	27,995	(66,251)	534	0	267

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)	
2021	-10	0.0%	1.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2022	-9	2.5%	1.025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2023	-8	2.5%	1.051	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2024	-7	2.5%	1.077	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2025	-6	2.5%	1.104	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2026	-5	2.5%	1.131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2027	-4	2.5%	1.160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2028	-3	2.5%	1.189	0.00	107.43	53.71	3.34	0.75	3.34	3.34	3.34	2.20	0.37	0.37	110.77	110.77	110.77	
2029	-2	2.5%	1.218	52.16	305.52	260.19	16.37	4.44	19.71	16.37	19.71	10.67	1.77	2.14	321.89	432.66	432.66	
2030	-1	2.5%	1.249	29.04	174.35	500.13	11.68	11.68	32.20	32.20	51.91	20.51	3.38	5.50	206.55	639.21	639.21	
							100.00		587.30									

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	25,721	25,721
EQUITY AFUDC	1,762	
DEBT AFUDC	512	1,462
CPI	512	
ITC Basis Reduction (Solar)		
TOTAL	27,995	27,183

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HVAC

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	11,370	11,370	2.42	5.59	2.49	0.00	1.00	1.00
2023	23,270	23,270	2.09	2.85	2.13	0.00	1.00	1.00
2024	35,490	35,490	2.10	3.09	2.14	0.00	1.00	1.00
2025	35,490	35,490	2.31	3.32	2.36	0.00	1.00	1.00
2026	35,490	35,490	2.20	2.57	2.24	0.00	1.00	1.00
2027	35,490	35,490	2.34	3.06	2.38	0.00	1.00	1.00
2028	35,490	35,490	2.38	2.86	2.42	0.00	1.00	1.00
2029	35,490	35,490	2.58	3.16	2.62	0.00	1.00	1.00
2030	35,490	35,490	2.66	3.08	2.70	0.00	1.00	1.00
2031	35,490	35,490	2.84	3.56	2.88	4.16	1.00	1.00
2032	35,490	35,490	2.98	4.13	3.03	4.30	1.00	1.00
2033	35,490	35,490	3.18	4.46	3.23	4.39	1.00	1.00
2034	35,490	35,490	3.21	3.86	3.26	4.54	1.00	1.00
2035	35,490	35,490	3.33	4.11	3.38	4.65	1.00	1.00
2036	35,490	35,490	3.45	4.21	3.49	4.74	1.00	1.00
2037	35,490	35,490	3.53	4.09	3.58	4.78	1.00	1.00
2038	35,490	35,490	3.62	4.23	3.67	4.88	1.00	1.00
2039	35,490	35,490	3.65	4.43	3.70	4.92	1.00	1.00
2040	35,490	35,490	3.74	4.42	3.79	5.00	1.00	1.00
2041	35,490	35,490	3.84	4.84	3.90	5.01	1.00	1.00
2042	35,490	35,490	3.85	4.51	3.91	5.10	1.00	1.00
2043	35,490	35,490	3.90	4.52	3.96	5.03	1.00	1.00
2044	35,490	35,490	4.09	4.70	4.13	5.20	1.00	1.00
2045	35,490	35,490	4.12	5.10	4.19	5.33	1.00	1.00
2046	35,490	35,490	4.11	4.79	4.18	5.30	1.00	1.00
2047	35,490	35,490	4.21	4.77	4.28	5.43	1.00	1.00
2048	35,490	35,490	4.23	4.97	4.30	5.42	1.00	1.00
2049	35,490	35,490	4.28	4.98	4.35	5.44	1.00	1.00
2050	35,490	35,490	4.36	5.06	4.43	5.56	1.00	1.00
2051	35,490	35,490	4.54	5.30	4.61	5.54	1.00	1.00
2052	35,490	35,490	4.44	5.19	4.52	5.50	1.00	1.00
2053	35,490	35,490	4.47	5.25	4.55	5.41	1.00	1.00
2054	35,490	35,490	4.52	5.36	4.60	5.46	1.00	1.00
2055	35,490	35,490	4.57	5.34	4.65	5.43	1.00	1.00
2056	35,490	35,490	4.73	5.40	4.78	5.47	1.00	1.00
2057	35,490	35,490	4.64	5.63	4.73	5.37	1.00	1.00
2058	35,490	35,490	4.68	5.47	4.76	5.50	1.00	1.00
2059	35,490	35,490	4.75	5.68	4.82	5.66	1.00	1.00
2060	35,490	35,490	4.75	5.72	4.83	5.82	1.00	1.00
2061	35,490	35,490	4.79	5.76	4.88	5.69	1.00	1.00
2062	35,490	35,490	4.80	5.81	4.89	5.73	1.00	1.00
2063	35,490	35,490	4.89	5.77	4.99	5.77	1.00	1.00
2064	35,490	35,490	5.15	5.92	5.20	6.56	1.00	1.00
2065	35,490	35,490	4.96	5.86	5.06	5.86	1.00	1.00
2066	35,490	35,490	5.07	6.11	5.18	5.84	1.00	1.00
2067	35,490	35,490	5.09	5.90	5.20	5.94	1.00	1.00
2068	35,490	35,490	5.09	6.03	5.19	5.97	1.00	1.00
2069	35,490	35,490	5.09	6.03	5.19	5.97	1.00	1.00
2070	35,490	35,490	5.09	6.03	5.19	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.



page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Bns HVAC

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	4,015	1,347	55	12956	14415	3958
2032	3,911	1,381	57	13217	14952	3614
2033	3,797	1,415	58	13542	15278	3534
2034	3,686	1,451	60	14261	15893	3564
2035	3,578	1,487	62	14552	16280	3399
2036	3,474	1,524	64	14918	16648	3332
2037	3,373	1,562	65	15164	16816	3348
2038	3,274	1,601	67	15390	17185	3147
2039	3,176	1,641	69	15387	17317	2956
2040	3,079	1,682	70	15553	17599	2786
2041	2,982	1,724	72	15595	17661	2713
2042	2,885	1,767	74	16122	18045	2804
2043	2,788	1,812	76	15704	17739	2640
2044	2,691	1,857	78	16260	18311	2575
2045	2,594	1,903	80	16581	18780	2377
2046	2,496	1,951	82	16692	18694	2528
2047	2,399	2,000	84	16986	19169	2301
2048	2,302	2,050	86	17080	19108	2410
2049	2,205	2,101	88	17131	19175	2349
2050	2,108	2,153	90	17437	19602	2187
2051	2,019	2,207	92	17198	19504	2012
2052	1,945	2,262	95	17265	19398	2170
2053	1,879	2,319	97	16988	19085	2198
2054	1,812	2,377	100	17322	19388	2223
2055	1,746	2,436	102	17051	19161	2175
2056	1,680	2,497	105	17207	19427	2063
2057	1,614	2,560	107	16968	18966	2283
2058	1,548	2,624	110	17117	19378	2021
2059	1,482	2,689	113	17855	20078	2061
2060	1,416	2,757	116	18079	20548	1819
2061	1,349	2,825	118	18007	20066	2234
2062	1,283	2,896	122	18122	20345	2078
2063	1,217	2,969	124	18123	20567	2066
2064	1,163	3,043	127	18758	23144	-52
2065	1,110	3,119	132	18602	20843	2119
2066	1,056	3,197	134	18508	20621	2274
2067	1,002	3,277	137	18562	20967	2011
2068	948	3,359	141	18450	21093	1804
2069	894	3,443	144	18450	21093	1838
2070	841	3,529	148	18450	21093	1874

NOM	88,816	90,794	3,804	667,609	753,232	97,791
NPV	19,258.51	11,897.27	497	101,347	113,901	19,099

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HVAC

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	843	150	0	0	198	0
2023	754	89	1,700	309	47	47	391	323
2024	1,545	155	2,549	472	102	102	574	475
2025	2,357	192	2,481	460	104	104	574	881
2026	2,285	196	2,413	448	107	107	555	1,140
2027	2,212	201	2,349	436	110	110	537	858
2028	2,142	206	2,288	425	112	112	529	1,038
2029	2,076	212	2,229	414	115	115	521	956
2030	2,012	217	2,171	403	118	118	513	1,059
2031	1,949	222	2,114	392	121	121	506	1,025
2032	1,886	228	2,057	382	124	124	499	1,198
2033	1,823	234	2,000	371	127	127	491	1,413
2034	1,760	239	1,943	361	130	130	484	1,529
2035	1,697	245	1,886	350	134	134	477	1,381
2036	1,634	252	1,829	340	137	137	470	1,413
2037	1,572	258	1,775	330	140	140	463	1,361
2038	1,511	264	1,727	319	144	144	456	1,408
2039	1,456	271	1,688	309	147	147	449	1,487
2040	1,410	278	1,656	298	151	151	443	1,476
2041	1,371	285	1,626	288	155	155	436	1,632
2042	1,335	292	1,597	278	159	159	431	1,505
2043	1,298	299	1,568	268	163	163	427	1,502
2044	1,261	306	1,539	260	167	167	422	1,559
2045	1,225	314	1,510	254	171	171	418	1,713
2046	1,188	322	1,481	247	175	175	414	1,594
2047	1,151	330	1,453	241	180	180	410	1,580
2048	1,115	338	1,425	234	184	184	408	1,658
2049	1,078	347	1,397	228	189	189	407	1,658
2050	1,041	355	1,370	221	193	193	406	1,685
2051	1,005	364	1,344	215	198	198	405	1,767
2052	968	373	1,319	209	203	203	405	1,729
2053	931	383	1,294	202	208	208	404	1,749
2054	895	392	1,269	196	214	214	404	1,790
2055	858	402	1,244	189	219	219	404	1,779
2056	821	412	1,219	183	224	224	404	1,947
2057	785	422	1,207	176	230	230	404	1,926
2058	748	433	1,181	170	236	236	405	1,968
2059	713	444	1,157	164	242	242	405	1,955
2060	680	455	1,135	157	248	248	406	2,044
2061	650	466	1,117	151	254	254	408	1,962
2062	621	478	1,099	144	260	260	410	2,013
2063	591	490	1,081	138	267	267	412	2,013
2064	561	502	1,063	132	273	273	415	2,013
2065	532	515	1,046	126	280	280	415	2,013
2066	502	528	1,029	121	287	287	415	2,013
2067	354	541	895	116	294	294	415	2,013
2068	187	554	742	111	302	302	415	2,013
2069	22	568	590	105	309	309	415	2,013
2070	(0)	582	582	105	309	309	415	2,013

NOM	56,568	16,452.38	73,021	12,494	8,736	21,230	75,699	0
NPV	19,289	2,931	22,220	4,024	1,556	5,580	15,261	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bns HVAC

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	15	0	15
2027	0	0	24	0	24
2028	0	0	41	0	41
2029	0	0	57	0	57
2030	0	0	70	0	70
2031	794	894	83	0	(177)
2032	943	1,062	99	0	(20)
2033	1,104	1,244	116	0	(24)
2034	1,293	1,456	134	0	(29)
2035	1,643	1,851	171	0	(36)
2036	2,060	2,319	214	0	(46)
2037	2,518	2,836	261	0	(57)
2038	3,022	3,403	313	0	(68)
2039	3,584	4,035	371	0	(81)
2040	4,195	4,724	435	0	(94)
2041	4,805	5,411	496	0	(109)
2042	5,478	6,168	565	0	(126)
2043	6,191	6,971	639	0	(141)
2044	6,977	7,857	722	0	(158)
2045	7,843	8,832	812	0	(177)
2046	8,819	9,930	910	0	(201)
2047	9,317	10,492	962	0	(212)
2048	9,844	11,085	1,017	0	(224)
2049	10,410	11,722	1,075	0	(237)
2050	11,003	12,390	1,137	0	(250)
2051	11,222	12,637	1,161	0	(254)
2052	11,470	12,915	1,185	0	(261)
2053	11,720	13,197	1,210	0	(267)
2054	12,032	13,549	1,236	0	(281)
2055	12,210	13,750	1,261	0	(278)
2056	12,560	14,144	1,288	0	(295)
2057	12,741	14,347	1,315	0	(291)
2058	12,993	14,631	1,343	0	(295)
2059	13,341	15,023	1,371	0	(311)
2060	13,562	15,272	1,400	0	(310)
2061	13,835	15,579	1,429	0	(315)
2062	14,227	16,020	1,459	0	(334)
2063	14,431	16,250	1,490	0	(330)
2064	14,726	16,583	1,521	0	(335)
2065	15,159	17,070	1,553	0	(358)
2066	15,366	17,303	1,585	0	(352)
2067	15,688	17,665	1,619	0	(359)
2068	16,016	18,035	1,653	0	(366)
2069	16,353	18,414	1,687	0	(374)
2070	16,696	18,801	1,723	0	(382)
NOM	378,193	425,866	39,225	0	(8,449)
NPV	36,302	40,878	3,869	0	(707)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HYAC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	520	18,078	0	18,598	0	0	323	0	323	(18,275)	(16,996)
2023	0	558	19,394	0	19,952	0	1,040	475	0	1,516	(18,436)	(32,943)
2024	0	587	20,413	0	21,001	0	2,091	881	0	2,971	(18,029)	(47,446)
2025	0	0	0	0	0	0	3,123	1,140	0	4,263	(44,257)	(44,257)
2026	0	0	0	0	0	0	3,046	858	15	3,918	(41,531)	(41,531)
2027	0	0	0	0	0	0	2,968	1,038	24	4,030	(38,923)	(38,923)
2028	0	0	0	0	0	0	2,894	956	41	3,892	(36,581)	(36,581)
2029	0	0	0	0	0	0	2,825	1,059	57	3,941	(34,375)	(34,375)
2030	0	0	0	0	0	0	2,757	1,025	70	3,852	(32,370)	(32,370)
2031	0	0	0	0	0	3,958	2,692	1,198	(17)	7,831	(28,579)	(28,579)
2032	0	0	0	0	0	3,614	2,627	1,413	(20)	7,634	(25,142)	(25,142)
2033	0	0	0	0	0	3,534	2,562	1,529	(24)	7,602	(21,959)	(21,959)
2034	0	0	0	0	0	3,564	2,498	1,292	(29)	7,326	(19,106)	(19,106)
2035	0	0	0	0	0	3,399	2,434	1,381	(36)	7,178	(16,506)	(16,506)
2036	0	0	0	0	0	3,332	2,370	1,413	(46)	7,068	(14,126)	(14,126)
2037	0	0	0	0	0	3,348	2,306	1,361	(57)	6,958	(11,946)	(11,946)
2038	0	0	0	0	0	3,147	2,245	1,408	(68)	6,732	(9,985)	(9,985)
2039	0	0	0	0	0	2,956	2,190	1,487	(81)	6,551	(8,210)	(8,210)
2040	0	0	0	0	0	2,786	2,144	1,476	(94)	6,311	(6,619)	(6,619)
2041	0	0	0	0	0	2,713	2,105	1,632	(109)	6,340	(5,134)	(5,134)
2042	0	0	0	0	0	2,804	2,069	1,505	(126)	6,251	(3,771)	(3,771)
2043	0	0	0	0	0	2,640	2,033	1,502	(141)	6,035	(2,548)	(2,548)
2044	0	0	0	0	0	2,575	1,999	1,559	(158)	5,975	(1,422)	(1,422)
2045	0	0	0	0	0	2,377	1,966	1,713	(177)	5,880	(391)	(391)
2046	0	0	0	0	0	2,528	1,935	1,594	(201)	5,855	564	564
2047	0	0	0	0	0	2,301	1,904	1,580	(212)	5,572	1,409	1,409
2048	0	0	0	0	0	2,410	1,873	1,658	(224)	5,718	2,215	2,215
2049	0	0	0	0	0	2,349	1,843	1,658	(237)	5,614	2,952	2,952
2050	0	0	0	0	0	2,187	1,813	1,685	(250)	5,435	3,615	3,615
2051	0	0	0	0	0	2,012	1,784	1,767	(254)	5,309	4,217	4,217
2052	0	0	0	0	0	2,170	1,755	1,729	(261)	5,393	4,786	4,786
2053	0	0	0	0	0	2,198	1,726	1,749	(267)	5,406	5,316	5,316
2054	0	0	0	0	0	2,223	1,697	1,790	(281)	5,430	5,812	5,812
2055	0	1,175	40,836	0	42,011	2,223	1,669	1,790	(278)	5,436	(36,665)	(36,665)
2056	0	1,260	43,808	0	45,068	2,063	1,642	1,791	(295)	5,200	(39,869)	(39,869)
2057	0	1,327	46,111	0	47,437	2,283	1,614	1,887	(291)	5,493	(41,944)	(41,944)
2058	0	0	0	0	0	2,021	1,587	1,822	(295)	5,135	(41,944)	(41,944)
2059	0	0	0	0	0	2,061	1,563	1,899	(311)	5,211	(41,944)	(41,944)
2060	0	0	0	0	0	1,819	1,541	1,917	(310)	4,966	(41,944)	(41,944)
2061	0	0	0	0	0	2,234	1,521	1,928	(315)	5,369	(41,944)	(41,944)
2062	0	0	0	0	0	2,078	1,503	1,947	(334)	5,194	(41,944)	(41,944)
2063	0	0	0	0	0	2,066	1,485	1,926	(330)	5,148	(41,944)	(41,944)
2064	0	0	0	0	0	(52)	1,468	1,968	(335)	5,148	(41,944)	(41,944)
2065	0	0	0	0	0	2,119	1,451	1,955	(358)	5,167	(41,944)	(41,944)
2066	0	0	0	0	0	2,274	1,436	2,044	(352)	5,402	(41,944)	(41,944)
2067	0	0	0	0	0	2,011	1,303	1,962	(359)	4,918	(41,944)	(41,944)
2068	0	0	0	0	0	1,804	1,152	2,013	(366)	4,603	(41,944)	(41,944)
2069	0	0	0	0	0	1,838	1,002	2,013	(374)	4,479	(41,944)	(41,944)
2070	0	0	0	0	0	1,874	997	2,013	(382)	4,502	(41,944)	(41,944)

NOM	0	5,427	188,641	0	194,068	97,791.24	94,251	75,699	(8,449)	259,292	65,224	65,224
NPV	0	1,735	60,317	0	62,053	19,099	27,800	15,261	(707)	61,452.62	(600)	(600)

Discount Rate:  %  
Benefit/Cost Ratio (Col(11) / Col(6)) :

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HYAC

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	1,152	0	7,694	0	8,846	18,033	45	0	18,078	(9,232)	(8,586)
2023	3,731	0	8,053	0	11,784	19,345	49	0	19,394	(7,610)	(15,168)
2024	6,646	0	8,269	0	14,915	20,362	51	0	20,413	(5,498)	(19,591)
2025	8,406	0	0	0	8,406	0	0	0	0	8,406	(13,302)
2026	8,744	0	0	0	8,744	0	0	0	0	8,744	(7,218)
2027	9,018	0	0	0	9,018	0	0	0	0	9,018	(1,383)
2028	9,280	0	0	0	9,280	0	0	0	0	9,280	4,202
2029	9,581	0	0	0	9,581	0	0	0	0	9,581	9,564
2030	9,863	0	0	0	9,863	0	0	0	0	9,863	14,698
2031	10,008	0	0	0	10,008	0	0	0	0	10,008	19,543
2032	10,192	0	0	0	10,192	0	0	0	0	10,192	24,131
2033	10,385	0	0	0	10,385	0	0	0	0	10,385	28,480
2034	10,561	0	0	0	10,561	0	0	0	0	10,561	32,592
2035	10,780	0	0	0	10,780	0	0	0	0	10,780	36,496
2036	11,082	0	0	0	11,082	0	0	0	0	11,082	40,229
2037	11,316	0	0	0	11,316	0	0	0	0	11,316	43,773
2038	11,561	0	0	0	11,561	0	0	0	0	11,561	47,141
2039	11,768	0	0	0	11,768	0	0	0	0	11,768	50,330
2040	11,998	0	0	0	11,998	0	0	0	0	11,998	53,353
2041	12,205	0	0	0	12,205	0	0	0	0	12,205	56,213
2042	12,374	0	0	0	12,374	0	0	0	0	12,374	58,910
2043	12,687	0	0	0	12,687	0	0	0	0	12,687	61,481
2044	12,923	0	0	0	12,923	0	0	0	0	12,923	63,918
2045	13,122	0	0	0	13,122	0	0	0	0	13,122	66,218
2046	13,394	0	0	0	13,394	0	0	0	0	13,394	68,402
2047	13,588	0	0	0	13,588	0	0	0	0	13,588	70,463
2048	13,757	0	0	0	13,757	0	0	0	0	13,757	72,403
2049	13,969	0	0	0	13,969	0	0	0	0	13,969	74,235
2050	14,209	0	0	0	14,209	0	0	0	0	14,209	75,968
2051	14,407	0	0	0	14,407	0	0	0	0	14,407	77,603
2052	14,607	0	0	0	14,607	0	0	0	0	14,607	79,144
2053	14,809	0	0	0	14,809	0	0	0	0	14,809	80,597
2054	15,012	0	0	0	15,012	0	0	0	0	15,012	81,967
2055	15,218	0	7,694	0	22,912	40,733	103	0	40,836	(17,924)	80,446
2056	15,425	0	8,053	0	23,478	43,698	110	0	43,808	(20,330)	78,841
2057	15,635	0	8,269	0	23,904	45,995	116	0	46,111	(22,207)	77,211
2058	15,846	0	0	0	15,846	0	0	0	0	15,846	78,292
2059	16,059	0	0	0	16,059	0	0	0	0	16,059	79,312
2060	16,275	0	0	0	16,275	0	0	0	0	16,275	80,273
2061	16,546	0	0	0	16,546	0	0	0	0	16,546	81,182
2062	16,820	0	0	0	16,820	0	0	0	0	16,820	82,041
2063	17,100	0	0	0	17,100	0	0	0	0	17,100	82,853
2064	17,377	0	0	0	17,377	0	0	0	0	17,377	83,621
2065	17,653	0	0	0	17,653	0	0	0	0	17,653	84,346
2066	17,934	0	0	0	17,934	0	0	0	0	17,934	85,032
2067	18,215	0	0	0	18,215	0	0	0	0	18,215	85,679
2068	18,500	0	0	0	18,500	0	0	0	0	18,500	86,290
2069	18,792	0	0	0	18,792	0	0	0	0	18,792	86,868
2070	19,090	0	0	0	19,090	0	0	0	0	19,090	87,414
NOM	639,617	0	48,033	0	687,650	188,166	475	0	188,641	499,009	
NPV	125,062	0	22,669	0	147,731	60,166	152	0	60,317	87,414	

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 2.45

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus HYAC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	520	7,694	1,104	0	9,319	323	0	0	0	323	(8,995)	(8,366)
2023	0	558	8,053	3,584	0	12,194	475	1,040	0	0	1,516	(10,679)	(17,603)
2024	0	587	8,269	6,389	0	15,246	881	2,091	0	0	2,971	(12,275)	(27,477)
2025	0	0	0	8,070	0	8,070	1,140	3,123	0	0	4,263	(3,807)	(30,325)
2026	0	0	0	8,383	0	8,383	858	3,046	0	15	3,918	(4,465)	(33,432)
2027	0	0	0	8,647	0	8,647	1,038	2,968	0	24	4,030	(4,617)	(36,419)
2028	0	0	0	8,896	0	8,896	956	2,894	0	41	3,892	(5,005)	(39,431)
2029	0	0	0	9,187	0	9,187	1,059	2,825	0	57	3,941	(5,246)	(42,367)
2030	0	0	0	9,462	0	9,462	1,025	2,757	0	70	3,852	(5,610)	(45,287)
2031	0	0	0	9,600	0	9,600	5,156	2,692	0	(17)	7,831	(1,769)	(46,143)
2032	0	0	0	9,776	0	9,776	5,027	2,627	0	(20)	7,634	(2,142)	(47,108)
2033	0	0	0	9,961	0	9,961	5,063	2,562	0	(24)	7,602	(2,358)	(48,095)
2034	0	0	0	10,128	0	10,128	4,857	2,498	0	(29)	7,326	(2,802)	(49,186)
2035	0	0	0	10,333	0	10,333	4,780	2,434	0	(36)	7,178	(3,155)	(50,329)
2036	0	0	0	10,612	0	10,612	4,745	2,370	0	(46)	7,068	(3,543)	(51,523)
2037	0	0	0	10,833	0	10,833	4,709	2,306	0	(57)	6,958	(3,875)	(52,736)
2038	0	0	0	11,062	0	11,062	4,555	2,245	0	(68)	6,732	(4,330)	(53,998)
2039	0	0	0	11,257	0	11,257	4,443	2,190	0	(81)	6,551	(4,705)	(55,273)
2040	0	0	0	11,473	0	11,473	4,262	2,144	0	(94)	6,311	(5,162)	(56,573)
2041	0	0	0	11,665	0	11,665	4,344	2,105	0	(109)	6,340	(5,325)	(57,821)
2042	0	0	0	11,827	0	11,827	4,308	2,069	0	(126)	6,251	(5,576)	(59,037)
2043	0	0	0	12,115	0	12,115	4,143	2,033	0	(141)	6,035	(6,080)	(60,269)
2044	0	0	0	12,331	0	12,331	4,134	1,999	0	(158)	5,975	(6,356)	(61,467)
2045	0	0	0	12,514	0	12,514	4,091	1,966	0	(177)	5,880	(6,634)	(62,630)
2046	0	0	0	12,767	0	12,767	4,122	1,935	0	(201)	5,855	(6,911)	(63,757)
2047	0	0	0	12,949	0	12,949	3,881	1,904	0	(212)	5,772	(7,377)	(64,876)
2048	0	0	0	13,108	0	13,108	4,068	1,873	0	(224)	5,718	(7,391)	(65,918)
2049	0	0	0	13,309	0	13,309	4,007	1,843	0	(237)	5,614	(7,695)	(66,928)
2050	0	0	0	13,534	0	13,534	3,871	1,813	0	(250)	5,435	(8,099)	(67,915)
2051	0	0	0	13,721	0	13,721	3,779	1,784	0	(254)	5,309	(8,412)	(68,870)
2052	0	0	0	13,909	0	13,909	3,899	1,755	0	(261)	5,393	(8,516)	(69,768)
2053	0	0	0	14,100	0	14,100	3,947	1,726	0	(267)	5,406	(8,694)	(70,631)
2054	0	0	0	14,291	0	14,291	4,014	1,697	0	(281)	5,430	(8,861)	(71,430)
2055	0	1,175	7,694	14,485	0	23,354	3,954	1,669	0	(288)	5,346	(8,808)	(72,958)
2056	0	1,260	8,053	14,680	0	23,993	3,854	1,642	0	(295)	5,200	(8,794)	(74,442)
2057	0	1,327	8,269	14,877	0	24,473	4,170	1,614	0	(291)	5,493	(8,980)	(75,835)
2058	0	0	0	15,076	0	15,076	3,843	1,587	0	(295)	5,135	(9,941)	(76,514)
2059	0	0	0	15,277	0	15,277	3,959	1,563	0	(311)	5,211	(10,066)	(77,153)
2060	0	0	0	15,479	0	15,479	3,735	1,541	0	(310)	4,966	(10,514)	(77,774)
2061	0	0	0	15,732	0	15,732	4,163	1,521	0	(315)	5,369	(10,364)	(78,343)
2062	0	0	0	15,988	0	15,988	4,025	1,503	0	(334)	5,194	(10,795)	(78,894)
2063	0	0	0	16,250	0	16,250	3,992	1,485	0	(330)	5,148	(11,102)	(79,422)
2064	0	0	0	16,509	0	16,509	1,916	1,468	0	(335)	3,048	(13,460)	(80,016)
2065	0	0	0	16,768	0	16,768	4,074	1,451	0	(338)	5,167	(11,601)	(80,493)
2066	0	0	0	17,032	0	17,032	4,318	1,436	0	(352)	5,402	(11,629)	(80,937)
2067	0	0	0	17,295	0	17,295	3,974	1,303	0	(359)	4,918	(12,377)	(81,377)
2068	0	0	0	17,563	0	17,563	3,817	1,152	0	(366)	4,603	(12,960)	(81,806)
2069	0	0	0	17,837	0	17,837	3,851	1,002	0	(374)	4,479	(13,358)	(82,216)
2070	0	0	0	18,117	0	18,117	3,887	997	0	(382)	4,502	(13,614)	(82,605)
NOM	0	5,427	48,033	609,865	0	663,325	173,490.45	94,250.57	0.00	(8,449.02)	259,292	(404,033)	
NPV	0	1,735	22,669	119,654	0	144,058	34,359	27,800	0	(707)	61,453	(82,605)	

7.52 %  
0.43

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :

INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER ..... 0.95 kW  
 (2) GENERATOR kW REDUCTION PER CUSTOMER ..... 1,238 kW  
 (3) kW LINE LOSS PERCENTAGE ..... 6.03 %  
 (4) GENERATOR kWh REDUCTION PER CUSTOMER ..... 5,232.45 kWh  
 (5) kWh LINE LOSS PERCENTAGE ..... 4.71 %  
 (6) GROUP LINE LOSS MULTIPLIER ..... 1.00  
 (7) CUSTOMER kWh INCREASE AT METER ..... 0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM ..... 50 YEARS  
 (2) GENERATOR ECONOMIC LIFE ..... 40 YEARS  
 (3) T&D ECONOMIC LIFE ..... 40 YEARS  
 (4) K FACTOR FOR GENERATION ..... 1.42106  
 (5) K FACTOR FOR T & D ..... 1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER ..... \*\*\* \$/CUST  
 (2) UTILITY RECURRING COST PER CUSTOMER ..... \*\*\* \$/CUST  
 (3) UTILITY COST ESCALATION RATE ..... \*\*\* %\*\*  
 (4) CUSTOMER EQUIPMENT COST ..... \*\*\* \$/CUST  
 (5) CUSTOMER EQUIPMENT ESCALATION RATE ..... \*\*\* %\*\*  
 (6) CUSTOMER O & M COST ..... \*\*\* \$/CUSTYR  
 (7) CUSTOMER O & M COST ESCALATION RATE ..... \*\*\* %\*\*  
 (8) INCREASED SUPPLY COSTS ..... \*\*\* %\*\*  
 (9) SUPPLY COSTS ESCALATION RATES ..... \*\*\* %\*\*  
 (10) UTILITY DISCOUNT RATE ..... 7.52 %  
 (11) UTILITY AFUDC RATE ..... 6.22 %  
 (12) UTILITY NON RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CUST  
 (13) UTILITY RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CUST  
 (14) UTILITY REBATE/INCENTIVE ESCALATION RATE ..... \*\*\* %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
 \*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR ..... 2021  
 (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT ..... 2031  
 (3) IN-SERVICE YEAR FOR AVOIDED T&D ..... 2023-2025  
 (4) BASE YEAR AVOIDED GENERATING COST ..... 480,740,799.7 \$/KW  
 (5) BASE YEAR AVOIDED TRANSMISSION COST ..... 362,488,238.7 \$/KW  
 (6) BASE YEAR DISTRIBUTION COST ..... 95,786.25 \$/KW  
 (7) GEN, TRAN & DIST COST ESCALATION RATE ..... 2.00 %\*\*  
 (8) GENERATOR FIXED O & M COST ..... 24,027,416.97 \$/KW/YR  
 (9) GENERATOR FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (10) TRANSMISSION FIXED O & M COST ..... 3,963,343.231 \$/KW  
 (11) DISTRIBUTION FIXED O & M COST ..... 2,733,632,729 \$/KW  
 (12) T&D FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (13) AVOIDED GEN UNIT VARIABLE O & M COSTS ..... 0.012498149 CENTS/\$kWh  
 (14) GENERATOR VARIABLE O&M COST ESCALATION RATE ..... 2.5 %\*\*  
 (15) GENERATOR CAPACITY FACTOR ..... 90 \*\* (In-service year)  
 (16) AVOIDED GENERATING UNIT FUEL COST ..... 3.737763 CENTS/\$kWh\*\* (In-service year)  
 (17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE ..... 1.61 %\*\*

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL ..... \*\*\* CENTS/\$kWh  
 (2) NON-FUEL COST ESCALATION RATE ..... \*\*\* %  
 (3) DEMAND CHARGE IN CUSTOMER BILL ..... \*\*\* \$/KW/MO  
 (4) DEMAND CHARGE ESCALATION RATE ..... \*\*\* %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST ..... 0.554  
 (2) TRC TEST ..... 2.171  
 (3) PARTICIPANT TEST ..... 4.52

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Bus Lighting

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	174	334	0	508	526	350	4,803	0	4,803	4,803
2023	188	352	0	540	1,626	1,155	5,189	0	5,189	5,189
2024	205	374	0	579	2,854	2,090	5,652	0	5,652	5,652
2025	0	0	0	0	3,763	2,629	0	0	0	0
2026	0	0	0	0	4,039	2,709	0	0	0	0
2027	0	0	0	0	4,156	2,796	0	0	0	0
2028	0	0	0	0	4,302	2,872	0	0	0	0
2029	0	0	0	0	4,413	2,971	0	0	0	0
2030	0	0	0	0	4,484	3,070	0	0	0	0
2031	0	0	0	0	4,564	3,113	0	0	0	0
2032	0	0	0	0	4,656	3,168	0	0	0	0
2033	0	0	0	0	4,761	3,225	0	0	0	0
2034	0	0	0	0	4,860	3,275	0	0	0	0
2035	0	0	0	0	5,007	3,333	0	0	0	0
2036	0	0	0	0	5,270	3,401	0	0	0	0
2037	252	334	0	586	5,421	3,464	6,957	0	6,957	6,957
2038	272	352	0	624	5,592	3,528	7,515	0	7,515	7,515
2039	297	374	0	670	5,733	3,583	8,186	0	8,186	8,186
2040	0	0	0	0	5,890	3,643	0	0	0	0
2041	0	0	0	0	6,058	3,692	0	0	0	0
2042	0	0	0	0	6,136	3,744	0	0	0	0
2043	0	0	0	0	6,419	3,812	0	0	0	0
2044	0	0	0	0	6,658	3,858	0	0	0	0
2045	0	0	0	0	6,836	3,901	0	0	0	0
2046	0	0	0	0	7,049	3,967	0	0	0	0
2047	0	0	0	0	7,186	4,017	0	0	0	0
2048	0	0	0	0	7,290	4,064	0	0	0	0
2049	0	0	0	0	7,430	4,121	0	0	0	0
2050	0	0	0	0	7,595	4,184	0	0	0	0
2051	0	0	0	0	7,720	4,238	0	0	0	0
2052	365	334	0	699	7,847	4,293	10,075	0	10,075	10,075
2053	394	352	0	746	7,977	4,347	10,884	0	10,884	10,884
2054	430	374	0	803	8,109	4,402	11,856	0	11,856	11,856
2055	0	0	0	0	8,244	4,458	0	0	0	0
2056	0	0	0	0	8,381	4,513	0	0	0	0
2057	0	0	0	0	8,521	4,569	0	0	0	0
2058	0	0	0	0	8,664	4,625	0	0	0	0
2059	0	0	0	0	8,809	4,681	0	0	0	0
2060	0	0	0	0	8,958	4,738	0	0	0	0
2061	0	0	0	0	9,158	4,806	0	0	0	0
2062	0	0	0	0	9,359	4,875	0	0	0	0
2063	0	0	0	0	9,570	4,945	0	0	0	0
2064	0	0	0	0	9,772	5,015	0	0	0	0
2065	0	0	0	0	9,968	5,086	0	0	0	0
2066	0	0	0	0	10,165	5,159	0	0	0	0
2067	529	334	0	862	10,359	5,232	14,592	0	14,592	14,592
2068	571	352	0	923	10,556	5,306	15,764	0	15,764	15,764
2069	622	374	0	996	10,760	5,383	17,171	0	17,171	17,171
2070	0	0	0	0	10,967	5,460	0	0	0	0

NOM	4,299	4,236	0	8,535	334,441	189,864	118,646	0	0	118,646
NPV	901	1,362	0	2,263	60,643	38,097	24,869	0	0	24,869

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS



INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Bus Lighting

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Oilpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2022	2.50	2.50	2.50	0.00	0.00	2.00	4.80	0.00	11.30
2023	2.50	2.50	2.50	0.00	0.00	2.00	4.98	0.00	13.38
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.06	0.00	14.45
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.19	0.00	15.29
2026	2.50	2.50	2.50	0.00	0.00	2.00	5.62	0.00	15.83
2027	2.50	2.50	2.50	0.00	0.00	2.00	6.01	0.00	16.31
2028	2.50	2.50	2.50	0.00	0.00	2.00	6.19	0.00	16.84
2029	2.50	2.50	2.50	0.00	0.00	2.00	6.40	0.00	17.30
2030	2.50	2.50	2.50	0.00	0.00	2.00	6.56	0.00	17.90
2031	2.50	2.50	3.74	3.80	90.35	2.00	6.67	0.00	18.50
2032	2.50	2.50	3.80	3.89	90.70	2.00	6.79	0.00	18.77
2033	2.50	2.50	3.89	3.89	90.65	2.00	6.92	0.00	19.10
2034	2.50	2.50	4.07	4.07	91.31	2.00	7.07	0.00	19.45
2035	2.50	2.50	4.16	4.16	91.26	2.00	7.21	0.00	19.76
2036	2.50	2.50	4.25	4.25	91.60	2.00	7.42	0.00	20.11
2037	2.50	2.50	4.31	4.31	91.74	2.00	7.79	0.00	20.53
2038	2.50	2.50	4.37	4.37	91.70	2.00	8.01	0.00	20.91
2039	2.50	2.50	4.37	4.37	91.80	2.00	8.25	0.00	21.30
2040	2.50	2.50	4.42	4.42	91.69	2.00	8.45	0.00	21.64
2041	2.50	2.50	4.42	4.42	91.92	2.00	8.68	0.00	22.01
2042	2.50	2.50	4.56	4.56	92.14	2.00	8.91	0.00	22.31
2043	2.50	2.50	4.45	4.45	91.95	2.00	9.03	0.00	22.63
2044	2.50	2.50	4.62	4.62	91.83	2.00	9.42	0.00	23.04
2045	2.50	2.50	4.71	4.71	91.77	2.00	9.76	0.00	23.33
2046	2.50	2.50	4.73	4.73	92.00	2.00	10.01	0.00	23.59
2047	2.50	2.50	4.81	4.81	91.97	2.00	10.31	0.00	24.00
2048	2.50	2.50	4.84	4.84	91.92	2.00	10.51	0.00	24.30
2049	2.50	2.50	4.86	4.86	91.95	2.00	10.65	0.00	24.59
2050	2.50	2.50	4.95	4.95	91.91	2.00	10.85	0.00	24.94
2051	2.50	2.50	4.88	4.88	91.81	2.00	11.09	0.00	25.33
2052	2.50	2.50	4.90	4.90	91.90	2.00	11.27	0.00	25.66
2053	2.50	2.50	4.81	4.81	91.97	2.00	11.45	0.00	25.99
2054	2.50	2.50	4.88	4.88	92.48	2.00	11.63	0.00	26.33
2055	2.50	2.50	4.84	4.84	91.92	2.00	11.82	0.00	26.66
2056	2.50	2.50	4.84	4.84	92.61	2.00	12.01	0.00	27.00
2057	2.50	2.50	4.81	4.81	92.01	2.00	12.21	0.00	27.34
2058	2.50	2.50	4.85	4.85	91.90	2.00	12.41	0.00	27.68
2059	2.50	2.50	5.04	5.04	92.43	2.00	12.61	0.00	28.03
2060	2.50	2.50	5.12	5.12	92.02	2.00	12.82	0.00	28.37
2061	2.50	2.50	5.11	5.11	91.94	2.00	13.03	0.00	28.72
2062	2.50	2.50	5.10	5.10	92.60	2.00	13.31	0.00	29.13
2063	2.50	2.50	5.13	5.13	92.00	2.00	13.59	0.00	29.56
2064	2.50	2.50	5.32	5.32	91.95	2.00	13.89	0.00	29.99
2065	2.50	2.50	5.23	5.23	92.71	2.00	14.18	0.00	30.42
2066	2.50	2.50	5.24	5.24	92.04	2.00	14.46	0.00	30.86
2067	2.50	2.50	5.26	5.26	92.04	2.00	14.73	0.00	31.30
2068	2.50	2.50	5.23	5.23	92.03	2.00	15.01	0.00	31.75
2069	2.50	2.50	5.23	5.23	92.03	2.00	15.29	0.00	32.21
2070	2.50	2.50	5.23	5.23	92.03	2.00	15.58	0.00	32.68

**Legend:**

**Column (1) used for:** Utility Cost  
Customer Equipment  
Supply Costs

**Column (3) used for:** Customer O&M Cost  
Generator Fixed O&M  
T&D Fixed O&M  
Generator Variable O&M  
Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Bus Lighting

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2031	11,250	186	0	707	186	196	4	283	60	0	1,623	1,623	1,623	11,313
2032	10,882	180	0	684	312	191	4	283	(74)	0	1,580	1,470	3,092	11,050
2033	10,473	173	0	659	422	186	4	283	(192)	0	1,534	1,327	4,419	10,747
2034	10,078	167	0	634	518	181	4	283	(297)	0	1,489	1,198	5,617	10,464
2035	9,697	161	0	610	602	176	4	283	(389)	0	1,446	1,082	6,699	10,182
2036	9,328	155	0	587	674	171	4	283	(469)	0	1,404	977	7,676	9,899
2037	8,971	149	0	564	736	166	3	283	(538)	0	1,363	882	8,558	9,616
2038	8,624	143	0	542	787	161	3	283	(597)	0	1,323	796	9,354	9,333
2039	8,284	137	0	521	837	157	3	283	(654)	0	1,284	718	10,072	9,050
2040	7,944	132	0	499	886	152	3	283	(711)	0	1,244	648	10,720	8,767
2041	7,604	126	0	478	936	147	3	283	(768)	0	1,205	583	11,303	8,485
2042	7,264	120	0	457	986	142	3	283	(825)	0	1,166	525	11,828	8,202
2043	6,924	115	0	435	1,036	137	3	283	(882)	0	1,127	472	12,300	7,919
2044	6,584	109	0	414	1,086	132	3	283	(939)	0	1,087	423	12,723	7,636
2045	6,244	103	0	393	1,135	127	3	283	(996)	0	1,048	380	13,103	7,353
2046	5,905	98	0	371	1,185	122	3	283	(1,053)	0	1,009	340	13,443	7,071
2047	5,565	92	0	350	1,235	117	2	283	(1,110)	0	970	304	13,747	6,788
2048	5,225	87	0	329	1,285	113	2	283	(1,167)	0	930	271	14,018	6,505
2049	4,885	81	0	307	1,335	108	2	283	(1,224)	0	891	241	14,259	6,222
2050	4,545	75	0	286	1,384	103	2	283	(1,281)	0	852	215	14,474	5,939
2051	4,236	70	0	266	1,373	98	2	283	(1,276)	0	816	191	14,665	5,656
2052	3,990	66	0	251	1,300	93	2	283	(1,209)	0	786	171	14,836	5,374
2053	3,774	63	0	237	1,228	88	2	283	(1,142)	0	759	154	14,990	5,091
2054	3,558	59	0	224	1,157	83	2	283	(1,075)	0	732	138	15,128	4,808
2055	3,343	55	0	210	1,085	78	2	283	(1,008)	0	706	124	15,252	4,525
2056	3,127	52	0	197	1,013	73	2	283	(940)	0	679	111	15,362	4,242
2057	2,911	48	0	183	941	68	1	283	(873)	0	652	99	15,461	3,959
2058	2,696	45	0	169	870	64	1	283	(806)	0	625	88	15,550	3,677
2059	2,480	41	0	156	798	59	1	283	(739)	0	599	79	15,628	3,394
2060	2,264	38	0	142	726	54	1	283	(672)	0	572	70	15,698	3,111
2061	2,049	34	0	129	654	49	1	283	(605)	0	545	62	15,760	2,828
2062	1,833	30	0	115	583	44	1	283	(537)	0	519	55	15,814	2,545
2063	1,617	27	0	102	511	39	1	283	(470)	0	492	48	15,863	2,263
2064	1,402	23	0	88	439	39	1	283	(403)	0	470	43	15,906	2,263
2065	1,186	20	0	75	367	39	1	283	(336)	0	448	38	15,944	2,263
2066	970	16	0	61	295	39	1	283	(269)	0	427	34	15,977	2,263
2067	755	13	0	47	224	39	1	283	(202)	0	405	30	16,007	2,263
2068	539	9	0	34	152	39	1	283	(134)	0	383	26	16,033	2,263
2069	323	5	0	20	80	39	1	283	(67)	0	361	23	16,056	2,263
2070	108	2	0	7	8	39	1	283	0	0	340	20	16,076	2,263

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)

11,313
2031
40
25,345%
7.52%
1.73%
0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031	3.75%	412	412	283	283	283	283	60	712	0	0	0	60	157
2032	7.22%	793	1,205	283	566	283	566	(74)	712	0	0	0	(74)	84
2033	6.68%	733	1,938	283	848	283	848	(192)	712	0	0	0	(192)	(109)
2034	6.18%	679	2,617	283	1,131	283	1,131	(297)	712	0	0	0	(297)	(406)
2035	5.71%	628	3,244	283	1,414	283	1,414	(389)	712	0	0	0	(389)	(795)
2036	5.29%	581	3,825	283	1,697	283	1,697	(469)	712	0	0	0	(469)	(1,264)
2037	4.89%	537	4,362	283	1,980	283	1,980	(538)	712	0	0	0	(538)	(1,802)
2038	4.52%	497	4,859	283	2,263	283	2,263	(597)	712	0	0	0	(597)	(2,399)
2039	4.46%	490	5,349	283	2,545	283	2,545	(654)	712	0	0	0	(654)	(3,053)
2040	4.46%	490	5,839	283	2,828	283	2,828	(711)	712	0	0	0	(711)	(3,764)
2041	4.46%	490	6,329	283	3,111	283	3,111	(768)	712	0	0	0	(768)	(4,532)
2042	4.46%	490	6,819	283	3,394	283	3,394	(825)	712	0	0	0	(825)	(5,357)
2043	4.46%	490	7,309	283	3,677	283	3,677	(882)	712	0	0	0	(882)	(6,239)
2044	4.46%	490	7,799	283	3,959	283	3,959	(939)	712	0	0	0	(939)	(7,178)
2045	4.46%	490	8,289	283	4,242	283	4,242	(996)	712	0	0	0	(996)	(8,174)
2046	4.46%	490	8,779	283	4,525	283	4,525	(1,053)	712	0	0	0	(1,053)	(9,227)
2047	4.46%	490	9,270	283	4,808	283	4,808	(1,110)	712	0	0	0	(1,110)	(10,357)
2048	4.46%	490	9,760	283	5,091	283	5,091	(1,167)	712	0	0	0	(1,167)	(11,504)
2049	4.46%	490	10,250	283	5,374	283	5,374	(1,224)	712	0	0	0	(1,224)	(12,729)
2050	4.46%	490	10,740	283	5,656	283	5,656	(1,281)	712	0	0	0	(1,281)	(14,010)
2051	2.23%	245	10,985	283	5,939	283	5,939	(1,276)	712	0	0	0	(1,276)	(15,286)
2052	0.00%	0	10,985	283	6,222	283	6,222	(1,209)	712	0	0	0	(1,209)	(16,495)
2053	0.00%	0	10,985	283	6,505	283	6,505	(1,142)	712	0	0	0	(1,142)	(17,637)
2054	0.00%	0	10,985	283	6,788	283	6,788	(1,075)	712	0	0	0	(1,075)	(18,712)
2055	0.00%	0	10,985	283	7,071	283	7,071	(1,008)	712	0	0	0	(1,008)	(19,719)
2056	0.00%	0	10,985	283	7,353	283	7,353	(940)	712	0	0	0	(940)	(20,660)
2057	0.00%	0	10,985	283	7,636	283	7,636	(873)	712	0	0	0	(873)	(21,533)
2058	0.00%	0	10,985	283	7,919	283	7,919	(806)	712	0	0	0	(806)	(22,339)
2059	0.00%	0	10,985	283	8,202	283	8,202	(739)	712	0	0	0	(739)	(23,078)
2060	0.00%	0	10,985	283	8,485	283	8,485	(672)	712	0	0	0	(672)	(23,750)
2061	0.00%	0	10,985	283	8,767	283	8,767	(605)	712	0	0	0	(605)	(24,354)
2062	0.00%	0	10,985	283	9,050	283	9,050	(537)	712	0	0	0	(537)	(24,892)
2063	0.00%	0	10,985	283	9,333	283	9,333	(470)	712	0	0	0	(470)	(25,362)
2064	0.00%	0	10,985	283	9,616	283	9,616	(403)	712	0	0	0	(403)	(25,765)
2065	0.00%	0	10,985	283	9,899	283	9,899	(336)	712	0	0	0	(336)	(26,101)
2066	0.00%	0	10,985	283	10,182	283	10,182	(269)	712	0	0	0	(269)	(26,369)
2067	0.00%	0	10,985	283	10,464	283	10,464	(202)	712	0	0	0	(202)	(26,571)
2068	0.00%	0	10,985	283	10,747	283	10,747	(134)	712	0	0	0	(134)	(26,705)
2069	0.00%	0	10,985	283	11,030	283	11,030	(67)	712	0	0	0	(67)	(26,772)
2070	0.00%	0	10,985	283	11,313	283	11,313	0	712	0	0	0	0	(26,772)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	97
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	712
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031	3.75%	412	60	11,030	283	157	11,410	11,090	11,250
2032	7.22%	793	(74)	10,747	566	84	11,090	10,673	10,882
2033	6.68%	733	(192)	10,464	848	(109)	10,673	10,272	10,473
2034	6.18%	679	(297)	10,182	1,131	(406)	10,272	9,884	10,078
2035	5.71%	628	(389)	9,899	1,414	(795)	9,884	9,510	9,697
2036	5.29%	581	(469)	9,616	1,697	(1,264)	9,510	9,147	9,328
2037	4.89%	537	(538)	9,333	1,980	(1,802)	9,147	8,795	8,971
2038	4.52%	497	(597)	9,050	2,263	(2,399)	8,795	8,453	8,624
2039	4.46%	490	(654)	8,767	2,545	(3,053)	8,453	8,114	8,284
2040	4.46%	490	(711)	8,485	2,828	(3,764)	8,114	7,774	7,944
2041	4.46%	490	(768)	8,202	3,111	(4,532)	7,774	7,434	7,604
2042	4.46%	490	(825)	7,919	3,394	(5,337)	7,434	7,094	7,264
2043	4.46%	490	(882)	7,636	3,677	(6,239)	7,094	6,754	6,924
2044	4.46%	490	(939)	7,353	3,959	(7,178)	6,754	6,414	6,584
2045	4.46%	490	(996)	7,071	4,242	(8,174)	6,414	6,074	6,244
2046	4.46%	490	(1,053)	6,788	4,525	(9,227)	6,074	5,735	5,905
2047	4.46%	490	(1,110)	6,505	4,808	(10,337)	5,735	5,395	5,565
2048	4.46%	490	(1,167)	6,222	5,091	(11,504)	5,395	5,055	5,225
2049	4.46%	490	(1,224)	5,939	5,374	(12,729)	5,055	4,715	4,885
2050	4.46%	490	(1,281)	5,656	5,656	(14,010)	4,715	4,375	4,545
2051	2.23%	245	(1,276)	5,374	5,939	(15,286)	4,375	4,035	4,205
2052	0.00%	0	(1,209)	5,091	6,222	(16,495)	4,035	3,695	3,865
2053	0.00%	0	(1,142)	4,808	6,505	(17,637)	3,695	3,355	3,525
2054	0.00%	0	(1,075)	4,525	6,788	(18,712)	3,355	3,015	3,185
2055	0.00%	0	(1,008)	4,242	7,071	(19,719)	3,015	2,675	2,845
2056	0.00%	0	(940)	3,959	7,353	(20,660)	2,675	2,335	2,505
2057	0.00%	0	(873)	3,677	7,636	(21,533)	2,335	2,000	2,170
2058	0.00%	0	(806)	3,394	7,919	(22,339)	2,000	1,665	1,835
2059	0.00%	0	(739)	3,111	8,202	(23,078)	1,665	1,330	1,500
2060	0.00%	0	(672)	2,828	8,485	(23,750)	1,330	1,000	1,170
2061	0.00%	0	(605)	2,545	8,767	(24,354)	1,000	675	845
2062	0.00%	0	(537)	2,263	9,050	(24,892)	675	350	520
2063	0.00%	0	(470)	1,980	9,333	(25,362)	350	25	100
2064	0.00%	0	(403)	1,697	9,616	(25,765)	25	0	50
2065	0.00%	0	(336)	1,414	9,899	(26,101)	0	0	50
2066	0.00%	0	(269)	1,131	10,182	(26,369)	0	0	50
2067	0.00%	0	(202)	848	10,464	(26,571)	0	0	50
2068	0.00%	0	(134)	566	10,747	(26,705)	0	0	50
2069	0.00%	0	(67)	283	11,030	(26,772)	0	0	50
2070	0.00%	0	0	0	11,313	(26,772)	0	0	50

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	10,394	10,394
EQUITY AFUDC	712	
DEBT AFUDC	207	591
CPI	207	
ITC Basis Reduction (Solar)		
TOTAL	11,313	10,985

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	4,540	4,540	2.42	2.91	3.21	0.00	1.00	1.00
2023	9,325	9,325	2.09	2.30	2.40	0.00	1.00	1.00
2024	14,410	14,410	2.10	2.33	2.44	0.00	1.00	1.00
2025	14,410	14,410	2.31	2.54	2.66	0.00	1.00	1.00
2026	14,410	14,410	2.20	2.38	2.47	0.00	1.00	1.00
2027	14,410	14,410	2.34	2.56	2.68	0.00	1.00	1.00
2028	14,410	14,410	2.38	2.56	2.66	0.00	1.00	1.00
2029	14,410	14,410	2.58	2.79	2.92	0.00	1.00	1.00
2030	14,410	14,410	2.66	2.83	2.95	0.00	1.00	1.00
2031	14,410	14,410	2.84	3.02	3.15	4.16	1.00	1.00
2032	14,410	14,410	2.98	3.21	3.37	4.30	1.00	1.00
2033	14,410	14,410	3.18	3.46	3.65	4.39	1.00	1.00
2034	14,410	14,410	3.21	3.42	3.57	4.54	1.00	1.00
2035	14,410	14,410	3.33	3.56	3.72	4.65	1.00	1.00
2036	14,410	14,410	3.45	3.67	3.80	4.74	1.00	1.00
2037	14,410	14,410	3.53	3.74	3.87	4.78	1.00	1.00
2038	14,410	14,410	3.62	3.85	3.98	4.88	1.00	1.00
2039	14,410	14,410	3.65	3.89	4.03	4.92	1.00	1.00
2040	14,410	14,410	3.74	3.96	4.10	5.00	1.00	1.00
2041	14,410	14,410	3.84	4.13	4.30	5.01	1.00	1.00
2042	14,410	14,410	3.85	4.09	4.24	5.10	1.00	1.00
2043	14,410	14,410	3.90	4.15	4.26	5.03	1.00	1.00
2044	14,410	14,410	4.09	4.31	4.40	5.20	1.00	1.00
2045	14,410	14,410	4.12	4.40	4.55	5.33	1.00	1.00
2046	14,410	14,410	4.11	4.37	4.50	5.30	1.00	1.00
2047	14,410	14,410	4.21	4.47	4.57	5.43	1.00	1.00
2048	14,410	14,410	4.23	4.51	4.66	5.42	1.00	1.00
2049	14,410	14,410	4.28	4.57	4.72	5.44	1.00	1.00
2050	14,410	14,410	4.36	4.64	4.79	5.56	1.00	1.00
2051	14,410	14,410	4.54	4.80	4.90	5.54	1.00	1.00
2052	14,410	14,410	4.44	4.74	4.80	5.50	1.00	1.00
2053	14,410	14,410	4.47	4.77	4.93	5.41	1.00	1.00
2054	14,410	14,410	4.52	4.82	4.98	5.46	1.00	1.00
2055	14,410	14,410	4.57	4.89	5.04	5.43	1.00	1.00
2056	14,410	14,410	4.73	4.99	5.05	5.47	1.00	1.00
2057	14,410	14,410	4.64	4.98	5.15	5.37	1.00	1.00
2058	14,410	14,410	4.68	5.00	5.17	5.50	1.00	1.00
2059	14,410	14,410	4.75	5.08	5.23	5.66	1.00	1.00
2060	14,410	14,410	4.75	5.08	5.20	5.82	1.00	1.00
2061	14,410	14,410	4.79	5.15	5.30	5.69	1.00	1.00
2062	14,410	14,410	4.80	5.14	5.31	5.73	1.00	1.00
2063	14,410	14,410	4.89	5.26	5.44	5.77	1.00	1.00
2064	14,410	14,410	5.15	5.41	5.47	6.56	1.00	1.00
2065	14,410	14,410	4.96	5.34	5.51	5.86	1.00	1.00
2066	14,410	14,410	5.07	5.43	5.59	5.84	1.00	1.00
2067	14,410	14,410	5.09	5.47	5.59	5.94	1.00	1.00
2068	14,410	14,410	5.09	5.51	5.66	5.97	1.00	1.00
2069	14,410	14,410	5.09	5.51	5.66	5.97	1.00	1.00
2070	14,410	14,410	5.09	5.51	5.66	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Bus Lighting

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	1,623	544	22	5235	5825	1599
2032	1,580	558	23	5341	6042	1460
2033	1,534	572	24	5472	6174	1428
2034	1,489	586	24	5763	6423	1440
2035	1,446	601	25	5880	6579	1373
2036	1,404	616	26	6028	6727	1346
2037	1,363	631	26	6128	6796	1353
2038	1,323	647	27	6219	6944	1272
2039	1,284	663	28	6218	6998	1195
2040	1,244	680	28	6285	7112	1126
2041	1,205	697	29	6302	7137	1096
2042	1,166	714	30	6515	7292	1133
2043	1,127	732	31	6346	7169	1067
2044	1,087	750	31	6571	7400	1040
2045	1,048	769	32	6700	7589	961
2046	1,009	788	33	6745	7554	921
2047	970	808	34	6864	7746	930
2048	930	828	35	6902	7722	974
2049	891	849	36	6923	7749	949
2050	852	870	36	7046	7921	884
2051	816	892	37	6950	7882	813
2052	786	914	38	6977	7839	877
2053	759	937	39	6865	7712	888
2054	732	961	40	7000	7835	898
2055	706	985	41	6890	7743	879
2056	679	1,009	43	6953	7850	834
2057	652	1,034	43	6857	7664	923
2058	625	1,060	44	6917	7831	817
2059	599	1,087	46	7215	8114	833
2060	572	1,114	47	7306	8304	735
2061	545	1,142	48	7277	8109	903
2062	519	1,170	49	7323	8222	840
2063	492	1,200	50	7324	8230	835
2064	470	1,230	52	7580	9353	-21
2065	448	1,260	53	7517	8423	856
2066	427	1,292	54	7479	8333	919
2067	405	1,324	56	7501	8473	813
2068	383	1,357	57	7456	8524	729
2069	361	1,391	58	7456	8524	743
2070	340	1,426	60	7456	8524	757

NOM	35,891	36,690	1,337	269,783	304,384	39,518
NPV	7,782.44	4,807.73	201	40,955	46,028	7,718

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	358	0
2023	300	35	335	60	19	79	851	0
2024	616	62	678	123	33	156	1,475	0
2025	953	77	1,031	191	41	232	1,950	0
2026	924	79	1,003	186	42	228	1,823	0
2027	894	81	976	181	43	224	1,964	0
2028	866	83	950	176	44	221	1,959	0
2029	840	86	925	172	45	217	2,134	0
2030	814	88	901	167	47	214	2,163	0
2031	788	90	878	163	48	211	2,307	0
2032	763	92	855	159	49	208	2,459	0
2033	737	94	832	154	50	205	2,652	0
2034	712	97	809	150	51	202	2,612	0
2035	687	99	786	146	53	199	2,717	0
2036	661	102	763	142	54	196	2,797	0
2037	636	104	740	138	55	193	2,848	0
2038	611	107	718	133	57	190	2,935	0
2039	589	109	698	129	58	187	2,969	0
2040	570	112	683	125	60	184	3,024	0
2041	555	115	670	121	61	182	3,159	0
2042	540	118	658	116	63	179	3,124	0
2043	525	121	646	112	64	176	3,163	0
2044	510	124	634	109	66	174	3,280	0
2045	495	127	622	105	67	173	3,359	0
2046	480	130	611	103	69	172	3,333	0
2047	466	133	599	100	71	171	3,407	0
2048	451	137	588	97	73	170	3,443	0
2049	436	140	576	95	74	169	3,491	0
2050	421	144	565	92	76	168	3,540	0
2051	406	147	554	90	78	168	3,657	0
2052	392	151	542	87	80	167	3,624	0
2053	377	155	531	84	82	166	3,644	0
2054	362	159	520	82	84	166	3,684	0
2055	347	162	510	79	86	165	3,738	0
2056	332	167	499	77	88	165	3,806	0
2057	317	171	488	74	91	165	3,811	0
2058	303	175	478	71	93	164	3,819	0
2059	288	179	468	69	95	164	3,883	0
2060	275	184	459	66	98	164	3,878	0
2061	263	188	452	64	100	164	3,936	0
2062	251	193	444	61	103	164	3,950	0
2063	239	198	437	58	105	163	4,025	0
2064	227	203	430	56	108	164	4,117	0
2065	215	208	423	53	110	164	4,089	0
2066	203	213	416	51	113	164	4,149	0
2067	144	219	363	49	116	165	4,180	0
2068	77	224	301	47	119	166	4,218	0
2069	9	230	239	45	122	167	4,218	0
2070	(0)	235	235	43	125	168	4,218	0

NOM	22,869	6,647.64	29,516	5,050	3,530	8,580	153,922	0
NPV	7,790	1,184	8,974	1,625	629	2,254	29,828	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.



AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	35	0	35
2027	0	0	55	0	55
2028	0	0	95	0	95
2029	0	0	132	0	132
2030	0	0	163	0	163
2031	321	361	195	0	154
2032	381	429	230	0	182
2033	446	503	270	0	213
2034	523	588	313	0	248
2035	664	748	399	0	315
2036	832	937	498	0	393
2037	1,018	1,146	608	0	479
2038	1,221	1,375	729	0	575
2039	1,448	1,631	864	0	681
2040	1,695	1,909	1,013	0	799
2041	1,942	2,186	1,157	0	912
2042	2,213	2,493	1,316	0	1,037
2043	2,502	2,817	1,490	0	1,175
2044	2,820	3,175	1,682	0	1,326
2045	3,169	3,569	1,891	0	1,492
2046	3,564	4,013	2,121	0	1,672
2047	3,765	4,240	2,242	0	1,767
2048	3,978	4,479	2,370	0	1,869
2049	4,207	4,737	2,506	0	1,975
2050	4,447	5,007	2,650	0	2,089
2051	4,535	5,107	2,705	0	2,134
2052	4,635	5,219	2,762	0	2,178
2053	4,736	5,333	2,820	0	2,223
2054	4,862	5,475	2,879	0	2,266
2055	4,934	5,556	2,940	0	2,318
2056	5,076	5,715	3,001	0	2,362
2057	5,149	5,798	3,064	0	2,415
2058	5,251	5,912	3,129	0	2,467
2059	5,391	6,071	3,194	0	2,515
2060	5,481	6,171	3,262	0	2,571
2061	5,591	6,295	3,330	0	2,625
2062	5,749	6,474	3,400	0	2,675
2063	5,852	6,567	3,471	0	2,736
2064	5,951	6,701	3,544	0	2,794
2065	6,126	6,898	3,619	0	2,846
2066	6,209	6,992	3,695	0	2,912
2067	6,340	7,139	3,772	0	2,973
2068	6,472	7,288	3,851	0	3,036
2069	6,608	7,441	3,932	0	3,099
2070	6,747	7,597	4,015	0	3,164

NOM	152,829	172,094	91,409	0	72,144
NPV	14,670	16,519	9,017	0	7,168

PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	174	4,803	0	4,977	0	0	358	0	358	(4,620)	(4,296)
2023	0	188	5,189	0	5,377	0	414	0	0	1,264	(4,113)	(7,854)
2024	0	205	5,652	0	5,857	0	835	1,475	0	2,310	(3,547)	(10,707)
2025	0	0	0	0	0	0	1,263	1,950	0	3,213	(3,213)	(8,303)
2026	0	0	0	0	0	0	1,232	1,823	35	3,090	(3,090)	(6,153)
2027	0	0	0	0	0	0	1,200	1,964	55	3,220	(4,070)	(4,070)
2028	0	0	0	0	0	0	1,171	1,959	95	3,225	(3,225)	(2,129)
2029	0	0	0	0	0	0	1,142	2,134	132	3,408	(3,408)	(222)
2030	0	0	0	0	0	0	1,115	2,163	163	3,441	(3,441)	1,569
2031	0	0	0	0	0	1,599	1,089	2,307	154	5,149	5,149	4,062
2032	0	0	0	0	0	1,460	1,062	2,459	182	5,164	5,164	6,387
2033	0	0	0	0	0	1,428	1,036	2,652	213	5,329	5,329	8,619
2034	0	0	0	0	0	1,440	1,010	2,612	248	5,310	5,310	10,686
2035	0	0	0	0	0	1,373	984	2,717	315	5,390	5,390	12,638
2036	0	0	0	0	0	1,346	958	2,797	393	5,495	5,495	14,489
2037	0	252	6,957	0	7,209	1,353	933	2,848	479	5,612	(1,596)	13,989
2038	0	272	7,515	0	7,788	1,272	908	2,935	575	5,690	(2,098)	13,378
2039	0	297	8,186	0	8,483	1,195	886	2,969	681	5,731	(2,752)	12,632
2040	0	0	0	0	0	1,126	867	3,024	799	5,816	5,816	14,098
2041	0	0	0	0	0	1,096	851	3,159	912	6,019	6,019	15,508
2042	0	0	0	0	0	1,133	837	3,124	1,037	6,130	6,130	16,844
2043	0	0	0	0	0	1,067	822	3,163	1,175	6,227	6,227	18,106
2044	0	0	0	0	0	1,040	808	3,280	1,326	6,455	6,455	19,323
2045	0	0	0	0	0	961	795	3,359	1,492	6,607	6,607	20,481
2046	0	0	0	0	0	1,021	782	3,333	1,672	6,809	6,809	21,592
2047	0	0	0	0	0	930	770	3,407	1,767	6,874	6,874	22,634
2048	0	0	0	0	0	974	758	3,443	1,869	7,043	7,043	23,627
2049	0	0	0	0	0	949	745	3,491	1,975	7,161	7,161	24,567
2050	0	0	0	0	0	884	733	3,540	2,089	7,246	7,246	25,451
2051	0	0	0	0	0	813	721	3,657	2,134	7,325	7,325	26,281
2052	0	365	10,075	0	10,440	877	710	3,624	2,178	7,388	(3,053)	25,959
2053	0	394	10,884	0	11,279	888	698	3,644	2,223	7,453	(3,826)	25,584
2054	0	430	11,856	0	12,286	898	686	3,684	2,266	7,535	(4,750)	25,150
2055	0	0	0	0	0	879	675	3,738	2,318	7,610	(5,610)	25,796
2056	0	0	0	0	0	834	664	3,806	2,362	7,665	(6,401)	26,401
2057	0	0	0	0	0	923	653	3,811	2,415	7,802	(7,802)	26,974
2058	0	0	0	0	0	817	642	3,819	2,467	7,744	(8,493)	27,503
2059	0	0	0	0	0	833	632	3,883	2,515	7,862	(9,002)	27,503
2060	0	0	0	0	0	735	623	3,878	2,571	7,807	(9,529)	28,002
2061	0	0	0	0	0	903	615	3,936	2,625	8,079	(10,000)	28,463
2062	0	0	0	0	0	840	608	3,930	2,675	8,079	(10,466)	28,907
2063	0	0	0	0	0	835	600	4,025	2,736	8,197	(10,919)	29,318
2064	0	0	0	0	0	(21)	593	4,117	2,794	7,484	(11,367)	29,707
2065	0	0	0	0	0	856	587	4,089	2,846	8,378	(11,800)	30,038
2066	0	0	0	0	0	919	581	4,149	2,912	8,560	(12,212)	30,382
2067	0	529	14,592	0	15,121	813	528	4,180	2,973	8,493	(12,605)	30,709
2068	0	571	15,764	0	16,335	729	467	4,218	3,036	8,450	(12,977)	31,043
2069	0	622	17,171	0	17,793	743	405	4,218	3,099	8,466	(13,326)	31,371
2070	0	0	0	0	0	757	403	4,218	3,164	8,543	(13,650)	31,711

NOM	0	4,299	118,646	0	122,945	39,517.81	38,097	153,922	72,144	303,681	180,735	180,735
NPV	0	901	24,869	0	25,770	7,718	11,227	29,828	7,168	55,941.08	30,171	30,171

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(11) / Col(6)) : 2.17

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	984	0	334	0	1,318	4,803	0	0	4,803	(3,486)	(3,242)
2023	3,114	0	352	0	3,466	5,189	0	0	5,189	(1,723)	(4,732)
2024	5,528	0	374	0	5,902	5,652	0	0	5,652	250	(4,532)
2025	7,163	0	0	0	7,163	0	0	0	0	7,163	827
2026	7,575	0	0	0	7,575	0	0	0	0	7,575	6,098
2027	7,802	0	0	0	7,802	0	0	0	0	7,802	11,147
2028	8,055	0	0	0	8,055	0	0	0	0	8,055	15,994
2029	8,287	0	0	0	8,287	0	0	0	0	8,287	20,633
2030	8,473	0	0	0	8,473	0	0	0	0	8,473	25,043
2031	8,611	0	0	0	8,611	0	0	0	0	8,611	29,211
2032	8,778	0	0	0	8,778	0	0	0	0	8,778	33,163
2033	8,961	0	0	0	8,961	0	0	0	0	8,961	36,916
2034	9,131	0	0	0	9,131	0	0	0	0	9,131	40,471
2035	9,366	0	0	0	9,366	0	0	0	0	9,366	43,863
2036	9,750	0	0	0	9,750	0	0	0	0	9,750	47,147
2037	9,996	0	334	0	10,330	6,957	0	0	6,957	3,373	48,204
2038	10,266	0	352	0	10,617	7,515	0	0	7,515	3,102	49,108
2039	10,489	0	374	0	10,863	8,186	0	0	8,186	2,677	49,833
2040	10,740	0	0	0	10,740	0	0	0	0	10,740	52,539
2041	10,990	0	0	0	10,990	0	0	0	0	10,990	55,115
2042	11,137	0	0	0	11,137	0	0	0	0	11,137	57,542
2043	11,545	0	0	0	11,545	0	0	0	0	11,545	59,882
2044	11,880	0	0	0	11,880	0	0	0	0	11,880	62,122
2045	12,138	0	0	0	12,138	0	0	0	0	12,138	64,249
2046	12,460	0	0	0	12,460	0	0	0	0	12,460	66,281
2047	12,675	0	0	0	12,675	0	0	0	0	12,675	68,203
2048	12,848	0	0	0	12,848	0	0	0	0	12,848	70,015
2049	13,073	0	0	0	13,073	0	0	0	0	13,073	71,730
2050	13,335	0	0	0	13,335	0	0	0	0	13,335	73,356
2051	13,539	0	0	0	13,539	0	0	0	0	13,539	74,892
2052	13,747	0	334	0	14,081	10,075	0	0	10,075	4,006	75,315
2053	13,958	0	352	0	14,310	10,884	0	0	10,884	3,426	75,651
2054	14,173	0	374	0	14,546	11,856	0	0	11,856	2,690	75,897
2055	14,390	0	0	0	14,390	0	0	0	0	14,390	77,118
2056	14,611	0	0	0	14,611	0	0	0	0	14,611	78,271
2057	14,836	0	0	0	14,836	0	0	0	0	14,836	79,360
2058	15,064	0	0	0	15,064	0	0	0	0	15,064	80,389
2059	15,295	0	0	0	15,295	0	0	0	0	15,295	81,360
2060	15,530	0	0	0	15,530	0	0	0	0	15,530	82,277
2061	15,840	0	0	0	15,840	0	0	0	0	15,840	83,147
2062	16,151	0	0	0	16,151	0	0	0	0	16,151	83,972
2063	16,474	0	0	0	16,474	0	0	0	0	16,474	84,754
2064	16,788	0	0	0	16,788	0	0	0	0	16,788	85,496
2065	17,096	0	0	0	17,096	0	0	0	0	17,096	86,198
2066	17,406	0	0	0	17,406	0	0	0	0	17,406	86,863
2067	17,713	0	334	0	18,046	14,592	0	0	14,592	3,454	86,986
2068	18,025	0	352	0	18,377	15,764	0	0	15,764	2,613	87,073
2069	18,346	0	374	0	18,720	17,171	0	0	17,171	1,549	87,120
2070	18,674	0	0	0	18,674	0	0	0	0	18,674	87,654
NOM	592,806	0	4,236	0	597,042	118,646	0	0	118,646	478,396	
NPV	111,161	0	1,362	0	112,523	24,869	0	0	24,869	87,654	

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ) 4.52

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Bus Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	174	334	876	0	1,384	358	0	0	0	358	(1,026)	(954)
2023	188	352	174	2,781	3,321	851	851	414	0	0	1,264	(2,056)	(2,733)
2024	0	205	374	4,944	6,393	5,522	1,475	835	0	0	2,310	(3,212)	(5,317)
2025	0	0	0	6,393	6,748	6,748	1,950	1,263	0	0	3,213	(3,180)	(7,695)
2026	0	0	0	6,951	7,174	6,951	1,823	1,232	0	35	3,090	(10,241)	(10,241)
2027	0	0	0	7,174	7,383	7,174	1,959	1,200	0	95	3,220	(3,731)	(12,655)
2028	0	0	0	7,383	7,555	7,383	2,134	1,171	0	95	3,225	(3,949)	(15,032)
2029	0	0	0	7,555	7,676	7,555	2,163	1,142	0	132	3,408	(4,257)	(17,257)
2030	0	0	0	7,676	7,824	7,676	2,163	1,115	0	163	3,441	(4,114)	(19,398)
2031	0	0	0	7,824	7,986	7,824	3,907	1,089	0	154	3,441	(4,114)	(19,398)
2032	0	0	0	7,986	8,136	7,986	4,080	1,062	0	182	5,164	(2,527)	(20,621)
2033	0	0	0	8,136	8,340	8,136	4,080	1,036	0	213	5,164	(2,527)	(20,621)
2034	0	0	0	8,340	8,544	8,340	4,052	1,010	0	248	5,329	(2,657)	(22,931)
2035	0	0	0	8,544	8,700	8,544	4,091	984	0	315	5,329	(2,657)	(22,931)
2036	0	0	0	8,700	8,866	8,700	4,144	958	0	393	5,495	(2,826)	(24,031)
2037	0	252	352	8,866	9,471	8,670	4,201	958	0	393	5,495	(2,826)	(24,031)
2038	0	272	352	9,120	9,471	8,670	4,201	933	0	479	5,670	(3,176)	(25,100)
2039	0	297	374	9,315	9,885	9,471	4,207	908	0	479	5,670	(3,176)	(25,100)
2040	0	0	0	9,533	9,885	9,885	4,164	886	0	575	5,690	(3,859)	(27,379)
2041	0	0	0	9,750	9,533	9,533	4,150	867	0	681	5,731	(4,054)	(28,560)
2042	0	0	0	9,880	9,750	9,750	4,255	851	0	799	5,816	(4,255)	(29,712)
2043	0	0	0	10,231	10,231	9,880	4,257	837	0	912	6,019	(4,255)	(29,712)
2044	0	0	0	10,516	10,231	10,231	4,230	822	0	1,037	6,130	(3,717)	(30,649)
2045	0	0	0	10,737	10,516	10,516	4,320	808	0	1,175	6,227	(3,152)	(31,523)
2046	0	0	0	11,016	10,737	10,737	4,320	795	0	1,326	6,455	(4,003)	(32,341)
2047	0	0	0	11,203	11,016	10,737	4,354	782	0	1,492	6,607	(4,062)	(33,152)
2048	0	0	0	11,354	11,203	11,203	4,337	770	0	1,672	6,809	(4,131)	(34,642)
2049	0	0	0	11,551	11,354	11,354	4,417	758	0	1,767	6,874	(4,207)	(35,328)
2050	0	0	0	11,779	11,551	11,551	4,440	745	0	1,869	7,043	(4,311)	(35,985)
2051	0	0	0	11,958	11,779	11,779	4,424	733	0	1,975	7,161	(4,311)	(36,593)
2052	0	0	0	12,140	11,958	11,958	4,470	721	0	2,089	7,246	(4,311)	(37,168)
2053	0	365	334	12,325	12,140	12,140	4,500	710	0	2,134	7,325	(4,311)	(37,721)
2054	0	394	352	12,512	13,071	13,071	4,532	698	0	2,178	7,388	(4,311)	(38,247)
2055	0	430	374	12,702	13,225	13,225	4,583	686	0	2,223	7,453	(4,311)	(38,822)
2056	0	0	0	12,895	13,415	13,415	4,613	675	0	2,266	7,535	(4,311)	(39,401)
2057	0	0	0	13,090	13,605	13,605	4,640	664	0	2,318	7,610	(4,311)	(39,901)
2058	0	0	0	13,289	13,800	13,800	4,670	653	0	2,362	7,685	(4,311)	(40,433)
2059	0	0	0	13,491	14,000	14,000	4,700	642	0	2,415	7,760	(4,311)	(40,974)
2060	0	0	0	13,695	14,200	14,200	4,734	632	0	2,467	7,844	(4,311)	(41,524)
2061	0	0	0	13,964	14,400	14,400	4,766	623	0	2,515	7,862	(4,311)	(42,082)
2062	0	0	0	14,234	14,600	14,600	4,839	615	0	2,571	7,807	(4,311)	(42,647)
2063	0	0	0	14,514	14,800	14,800	4,770	608	0	2,625	8,079	(4,311)	(43,219)
2064	0	0	0	14,786	15,000	15,000	4,860	600	0	2,675	8,053	(4,311)	(43,797)
2065	0	0	0	15,054	15,200	15,200	4,860	593	0	2,736	8,197	(4,311)	(44,379)
2066	0	0	0	15,324	15,400	15,400	4,945	581	0	2,794	8,378	(4,311)	(44,974)
2067	0	0	0	15,591	15,600	15,600	5,068	571	0	2,846	8,560	(4,311)	(45,582)
2068	0	571	352	15,863	16,453	16,453	4,992	528	0	2,912	8,493	(4,311)	(46,195)
2069	0	622	374	16,143	17,138	17,138	4,961	467	0	3,036	8,450	(4,311)	(46,817)
2070	0	0	0	16,427	16,427	16,427	4,976	403	0	3,099	8,466	(4,311)	(47,450)
2071	0	0	0	16,427	16,427	16,427	4,976	403	0	3,164	8,543	(4,311)	(48,093)

NOM	0	4,299	4,236	524,306	0	532,841	193,440.17	38,096.63	0.00	72,143.88	303,681	(229,160)	
NPV	0	901	1,362	98,740	0	101,003	37,546	11,227	0	7,168	55,941	(45,062)	

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(12) / Col(7)) : 0.55

INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

I. PROGRAM DEMAND SAVINGS & LINE LOSSES

(1) CUSTOMER kW REDUCTION AT METER .....	0.95 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	1,238 kW
(3) kW LINE LOSS PERCENTAGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	11.54 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

II. ECONOMIC LIFE & K FACTORS

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	1,42106
(4) K FACTOR FOR GENERATION .....	1.38286
(5) K FACTOR FOR T & D .....	

III. UTILITY & CUSTOMER COSTS

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

IV. AVOIDED GENERATOR AND T&D COSTS

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,740,799.7 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24,027,416.97 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	90 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	3.737763 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	1.61 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

VI. COST-EFFECTIVENESS RATIOS

(1) RIM TEST .....	0.568
(2) TRC TEST .....	23.470
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV. REQ  
 PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	61	296	0	356	2	0	0	0	0	0
2023	69	884	0	953	8	0	0	0	0	0
2024	78	1,469	0	1,547	13	0	0	0	0	0
2025	23	1,761	0	1,785	17	0	0	0	0	0
2026	24	1,761	0	1,785	18	0	0	0	0	0
2027	25	1,761	0	1,786	18	0	0	0	0	0
2028	25	1,761	0	1,786	19	0	0	0	0	0
2029	26	1,761	0	1,787	20	0	0	0	0	0
2030	26	1,761	0	1,788	20	0	0	0	0	0
2031	27	1,761	0	1,788	20	0	0	0	0	0
2032	28	1,761	0	1,789	21	0	0	0	0	0
2033	28	1,761	0	1,790	21	0	0	0	0	0
2034	29	1,761	0	1,790	22	0	0	0	0	0
2035	30	1,761	0	1,791	22	0	0	0	0	0
2036	31	1,761	0	1,792	23	0	0	0	0	0
2037	31	1,761	0	1,793	24	0	0	0	0	0
2038	32	1,761	0	1,794	25	0	0	0	0	0
2039	33	1,761	0	1,794	25	0	0	0	0	0
2040	34	1,761	0	1,795	26	0	0	0	0	0
2041	35	1,761	0	1,796	27	0	0	0	0	0
2042	36	1,761	0	1,797	27	0	0	0	0	0
2043	36	1,761	0	1,798	28	0	0	0	0	0
2044	37	1,761	0	1,799	29	0	0	0	0	0
2045	38	1,761	0	1,800	30	0	0	0	0	0
2046	39	1,761	0	1,801	31	0	0	0	0	0
2047	40	1,761	0	1,802	32	0	0	0	0	0
2048	41	1,761	0	1,803	32	0	0	0	0	0
2049	42	1,761	0	1,804	33	0	0	0	0	0
2050	43	1,761	0	1,805	34	0	0	0	0	0
2051	44	1,761	0	1,806	34	0	0	0	0	0
2052	46	1,761	0	1,807	35	0	0	0	0	0
2053	47	1,761	0	1,808	35	0	0	0	0	0
2054	48	1,761	0	1,809	36	0	0	0	0	0
2055	49	1,761	0	1,810	36	0	0	0	0	0
2056	50	1,761	0	1,812	37	0	0	0	0	0
2057	52	1,761	0	1,813	38	0	0	0	0	0
2058	53	1,761	0	1,814	38	0	0	0	0	0
2059	54	1,761	0	1,815	39	0	0	0	0	0
2060	55	1,761	0	1,817	40	0	0	0	0	0
2061	57	1,761	0	1,818	41	0	0	0	0	0
2062	58	1,761	0	1,820	41	0	0	0	0	0
2063	60	1,761	0	1,821	42	0	0	0	0	0
2064	61	1,761	0	1,823	43	0	0	0	0	0
2065	63	1,761	0	1,824	44	0	0	0	0	0
2066	64	1,761	0	1,826	45	0	0	0	0	0
2067	66	1,761	0	1,827	46	0	0	0	0	0
2068	68	1,761	0	1,829	47	0	0	0	0	0
2069	69	1,761	0	1,831	48	0	0	0	0	0
2070	71	1,761	0	1,832	49	0	0	0	0	0

NOM	2,185	83,666	0	85,852	1,481	0	0	0	0	0
NPV	512	20,381	0	20,893	269	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV. REQ  
 PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

Year	(1) CPP%	(2) PP-CA P%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	5.13	0.00	11.47
2022	2.50	2.50	2.50	0.00	0.00	2.00	4.80	0.00	11.30
2023	2.50	2.50	2.50	0.00	0.00	2.00	4.98	0.00	13.38
2024	2.50	2.50	2.50	0.00	0.00	2.00	5.06	0.00	14.45
2025	2.50	2.50	2.50	0.00	0.00	2.00	5.19	0.00	15.29
2026	2.50	2.50	2.50	0.00	0.00	2.00	5.62	0.00	15.83
2027	2.50	2.50	2.50	0.00	0.00	2.00	6.01	0.00	16.31
2028	2.50	2.50	2.50	0.00	0.00	2.00	6.19	0.00	16.84
2029	2.50	2.50	2.50	0.00	0.00	2.00	6.40	0.00	17.30
2030	2.50	2.50	2.50	0.00	0.00	2.00	6.56	0.00	17.90
2031	2.50	2.50	2.50	3.74	90.35	2.00	6.67	0.00	18.50
2032	2.50	2.50	2.50	3.80	90.70	2.00	6.79	0.00	18.77
2033	2.50	2.50	2.50	3.89	90.65	2.00	6.92	0.00	19.10
2034	2.50	2.50	2.50	4.07	91.31	2.00	7.07	0.00	19.45
2035	2.50	2.50	2.50	4.16	91.26	2.00	7.21	0.00	19.76
2036	2.50	2.50	2.50	4.25	91.60	2.00	7.42	0.00	20.11
2037	2.50	2.50	2.50	4.31	91.74	2.00	7.79	0.00	20.53
2038	2.50	2.50	2.50	4.37	91.70	2.00	8.01	0.00	20.91
2039	2.50	2.50	2.50	4.37	91.80	2.00	8.25	0.00	21.30
2040	2.50	2.50	2.50	4.42	91.69	2.00	8.45	0.00	21.64
2041	2.50	2.50	2.50	4.42	91.92	2.00	8.68	0.00	22.01
2042	2.50	2.50	2.50	4.42	91.92	2.00	8.91	0.00	22.31
2043	2.50	2.50	2.50	4.45	91.95	2.00	9.03	0.00	22.63
2044	2.50	2.50	2.50	4.45	91.83	2.00	9.42	0.00	23.04
2045	2.50	2.50	2.50	4.62	91.83	2.00	9.76	0.00	23.33
2046	2.50	2.50	2.50	4.71	91.77	2.00	10.01	0.00	23.59
2047	2.50	2.50	2.50	4.73	92.00	2.00	10.31	0.00	24.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	10.51	0.00	24.30
2049	2.50	2.50	2.50	4.84	91.92	2.00	10.51	0.00	24.59
2050	2.50	2.50	2.50	4.86	91.95	2.00	10.65	0.00	24.94
2051	2.50	2.50	2.50	4.95	91.91	2.00	10.85	0.00	25.33
2052	2.50	2.50	2.50	4.88	91.81	2.00	11.09	0.00	25.66
2053	2.50	2.50	2.50	4.90	91.90	2.00	11.27	0.00	26.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	11.45	0.00	26.33
2055	2.50	2.50	2.50	4.88	92.48	2.00	11.63	0.00	26.66
2056	2.50	2.50	2.50	4.84	91.92	2.00	11.82	0.00	27.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	12.01	0.00	27.34
2058	2.50	2.50	2.50	4.81	92.01	2.00	12.21	0.00	27.68
2059	2.50	2.50	2.50	4.85	91.90	2.00	12.41	0.00	28.03
2060	2.50	2.50	2.50	5.04	92.43	2.00	12.61	0.00	28.37
2061	2.50	2.50	2.50	5.12	92.02	2.00	12.82	0.00	28.72
2062	2.50	2.50	2.50	5.11	91.94	2.00	13.03	0.00	29.13
2063	2.50	2.50	2.50	5.10	92.60	2.00	13.31	0.00	29.56
2064	2.50	2.50	2.50	5.13	92.00	2.00	13.59	0.00	29.99
2065	2.50	2.50	2.50	5.32	91.95	2.00	13.89	0.00	30.42
2066	2.50	2.50	2.50	5.23	92.71	2.00	14.18	0.00	30.86
2067	2.50	2.50	2.50	5.24	92.04	2.00	14.46	0.00	31.30
2068	2.50	2.50	2.50	5.26	92.04	2.00	14.73	0.00	31.75
2069	2.50	2.50	2.50	5.23	92.03	2.00	15.01	0.00	32.21
2070	2.50	2.50	2.50	5.23	92.03	2.00	15.29	0.00	32.68

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

YEAR	(2) MID-YEAR RATE BASE \$(000)	(3) DEBT \$(000)	(4) PREFERRED STOCK \$(000)	(5) COMMON EQUITY \$(000)	(6) INCOME TAXES \$(000)	(7) PROPERTY TAX \$(000)	(8) PROPERTY INSURANCE \$(000)	(9) DEPREC. \$(000)	(10) DEFERRED TAXES \$(000)	(11) ITC NORMALIZATION \$(000)	(12) TOTAL FIXED CHARGES \$(000)	(13) PRESENT WORTH FIXED CHARGES \$(000)	(14) CUMULATIVE PW FIXED CHARGES \$(000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$(000)
2031	22,563	374	0	1,419	373	393	8	567	120	0	3,254	3,254	3,254	22,688
2032	21,824	361	0	1,372	626	383	8	567	(188)	0	3,170	2,948	6,202	22,121
2033	21,003	348	0	1,321	846	367	8	567	(386)	0	3,077	2,661	8,863	21,554
2034	20,212	335	0	1,271	1,040	353	8	567	(596)	0	2,987	2,403	11,266	20,987
2035	19,448	322	0	1,223	1,208	333	7	567	(780)	0	2,900	2,170	13,436	20,420
2036	18,708	310	0	1,176	1,352	343	7	567	(941)	0	2,815	1,959	15,395	19,852
2037	18,000	298	0	1,131	1,475	334	7	567	(1,079)	0	2,733	1,769	17,163	19,285
2038	17,296	286	0	1,088	1,578	324	7	567	(1,197)	0	2,653	1,597	18,760	18,718
2039	16,613	275	0	1,045	1,678	314	7	567	(1,311)	0	2,574	1,441	20,201	18,151
2040	15,931	264	0	1,002	1,778	304	6	567	(1,426)	0	2,496	1,299	21,500	17,584
2041	15,250	253	0	959	1,878	294	6	567	(1,540)	0	2,417	1,170	22,670	17,016
2042	14,568	241	0	916	1,978	285	6	567	(1,654)	0	2,338	1,053	23,722	16,449
2043	13,887	230	0	873	2,077	275	6	567	(1,769)	0	2,259	946	24,668	15,882
2044	13,205	219	0	830	2,177	265	6	567	(1,883)	0	2,181	849	25,518	15,315
2045	12,523	207	0	787	2,277	255	5	567	(1,998)	0	2,102	761	26,279	14,748
2046	11,842	196	0	745	2,377	245	5	567	(2,112)	0	2,023	681	26,960	14,180
2047	11,160	185	0	702	2,477	236	5	567	(2,227)	0	1,945	609	27,569	13,613
2048	10,479	174	0	659	2,577	226	5	567	(2,341)	0	1,866	544	28,113	13,046
2049	9,797	162	0	616	2,677	216	4	567	(2,455)	0	1,787	484	28,597	12,479
2050	9,115	151	0	573	2,776	206	4	567	(2,570)	0	1,708	430	29,028	11,911
2051	8,496	141	0	534	2,873	196	4	567	(2,684)	0	1,636	383	29,411	11,344
2052	8,001	133	0	503	2,968	186	4	567	(2,798)	0	1,576	344	29,755	10,777
2053	7,569	125	0	476	3,064	177	4	567	(2,912)	0	1,522	309	30,063	10,210
2054	7,136	118	0	449	3,160	167	3	567	(3,026)	0	1,469	277	30,340	9,643
2055	6,704	111	0	422	3,256	157	3	567	(3,140)	0	1,415	248	30,588	9,075
2056	6,271	104	0	394	3,352	147	3	567	(3,254)	0	1,362	222	30,810	8,508
2057	5,839	97	0	367	3,448	137	3	567	(3,368)	0	1,308	198	31,009	7,941
2058	5,406	90	0	340	3,544	128	3	567	(3,482)	0	1,254	177	31,186	7,374
2059	4,974	82	0	313	3,640	118	2	567	(3,596)	0	1,201	158	31,343	6,807
2060	4,541	75	0	286	3,736	108	2	567	(3,710)	0	1,147	140	31,483	6,239
2061	4,109	68	0	258	3,832	98	2	567	(3,824)	0	1,094	124	31,607	5,672
2062	3,676	61	0	231	3,928	88	2	567	(3,938)	0	1,040	110	31,717	5,105
2063	3,244	54	0	204	4,024	79	2	567	(4,052)	0	986	97	31,814	4,538
2064	2,811	47	0	177	4,120	70	2	567	(4,166)	0	943	86	31,900	4,538
2065	2,379	39	0	150	4,216	61	2	567	(4,280)	0	899	76	31,976	4,538
2066	1,946	32	0	122	4,312	53	2	567	(4,394)	0	856	68	32,043	4,538
2067	1,514	25	0	95	4,408	46	2	567	(4,508)	0	812	60	32,103	4,538
2068	1,081	18	0	68	4,504	40	2	567	(4,622)	0	768	52	32,156	4,538
2069	649	11	0	41	4,600	34	2	567	(4,736)	0	725	46	32,202	4,538
2070	216	4	0	14	4,696	29	2	567	(4,850)	0	681	40	32,242	4,538

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	22,688
IN SERVICE YEAR	2031
BOOK LIFE (YRS)	40
EFFEC. TAX RATE	25.345%
DISCOUNT RATE	7.52%
PROPERTY TAX	1.73%
PROPERTY INSURANCE	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106



DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
 PROGRAM METHOD SELECTED: REV. REQ.  
 PROGRAM NAME: Commercial/Industrial Demand Response (CDF)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031	3.75%	826	826	567	567	567	567	120	1,428	0	0	0	120	316
2032	7.22%	1,590	2,417	567	1,134	567	1,134	(148)	1,428	0	0	0	(148)	168
2033	6.68%	1,471	3,888	567	1,702	567	1,702	(386)	1,428	0	0	0	(386)	(218)
2034	6.18%	1,361	5,248	567	2,269	567	2,269	(596)	1,428	0	0	0	(596)	(815)
2035	5.71%	1,259	6,507	567	2,836	567	2,836	(780)	1,428	0	0	0	(780)	(1,595)
2036	5.29%	1,164	7,671	567	3,403	567	3,403	(941)	1,428	0	0	0	(941)	(2,536)
2037	4.89%	1,077	8,748	567	3,970	567	3,970	(1,079)	1,428	0	0	0	(1,079)	(3,615)
2038	4.52%	996	9,744	567	4,538	567	4,538	(1,197)	1,428	0	0	0	(1,197)	(4,812)
2039	4.46%	983	10,727	567	5,105	567	5,105	(1,311)	1,428	0	0	0	(1,311)	(6,123)
2040	4.46%	983	11,710	567	5,672	567	5,672	(1,426)	1,428	0	0	0	(1,426)	(7,549)
2041	4.46%	983	12,693	567	6,239	567	6,239	(1,540)	1,428	0	0	0	(1,540)	(9,089)
2042	4.46%	983	13,676	567	6,807	567	6,807	(1,654)	1,428	0	0	0	(1,654)	(10,743)
2043	4.46%	983	14,659	567	7,374	567	7,374	(1,769)	1,428	0	0	0	(1,769)	(12,512)
2044	4.46%	983	15,642	567	7,941	567	7,941	(1,883)	1,428	0	0	0	(1,883)	(14,396)
2045	4.46%	983	16,625	567	8,508	567	8,508	(1,998)	1,428	0	0	0	(1,998)	(16,393)
2046	4.46%	983	17,608	567	9,075	567	9,075	(2,112)	1,428	0	0	0	(2,112)	(18,505)
2047	4.46%	983	18,591	567	9,643	567	9,643	(2,227)	1,428	0	0	0	(2,227)	(20,752)
2048	4.46%	983	19,573	567	10,210	567	10,210	(2,341)	1,428	0	0	0	(2,341)	(23,141)
2049	4.46%	983	20,556	567	10,777	567	10,777	(2,455)	1,428	0	0	0	(2,455)	(25,528)
2050	4.46%	983	21,539	567	11,344	567	11,344	(2,570)	1,428	0	0	0	(2,570)	(28,098)
2051	2.23%	492	22,031	567	11,911	567	11,911	(2,560)	1,428	0	0	0	(2,560)	(30,657)
2052	0.00%	0	22,031	567	12,479	567	12,479	(2,425)	1,428	0	0	0	(2,425)	(33,082)
2053	0.00%	0	22,031	567	13,046	567	13,046	(2,290)	1,428	0	0	0	(2,290)	(35,372)
2054	0.00%	0	22,031	567	13,613	567	13,613	(2,155)	1,428	0	0	0	(2,155)	(37,528)
2055	0.00%	0	22,031	567	14,180	567	14,180	(2,021)	1,428	0	0	0	(2,021)	(39,548)
2056	0.00%	0	22,031	567	14,748	567	14,748	(1,886)	1,428	0	0	0	(1,886)	(41,434)
2057	0.00%	0	22,031	567	15,315	567	15,315	(1,751)	1,428	0	0	0	(1,751)	(43,186)
2058	0.00%	0	22,031	567	15,882	567	15,882	(1,617)	1,428	0	0	0	(1,617)	(44,802)
2059	0.00%	0	22,031	567	16,449	567	16,449	(1,482)	1,428	0	0	0	(1,482)	(46,284)
2060	0.00%	0	22,031	567	17,016	567	17,016	(1,347)	1,428	0	0	0	(1,347)	(47,631)
2061	0.00%	0	22,031	567	17,584	567	17,584	(1,212)	1,428	0	0	0	(1,212)	(48,844)
2062	0.00%	0	22,031	567	18,151	567	18,151	(1,078)	1,428	0	0	0	(1,078)	(49,921)
2063	0.00%	0	22,031	567	18,718	567	18,718	(943)	1,428	0	0	0	(943)	(50,864)
2064	0.00%	0	22,031	567	19,285	567	19,285	(808)	1,428	0	0	0	(808)	(51,673)
2065	0.00%	0	22,031	567	19,852	567	19,852	(674)	1,428	0	0	0	(674)	(52,346)
2066	0.00%	0	22,031	567	20,420	567	20,420	(539)	1,428	0	0	0	(539)	(52,885)
2067	0.00%	0	22,031	567	20,987	567	20,987	(404)	1,428	0	0	0	(404)	(53,289)
2068	0.00%	0	22,031	567	21,554	567	21,554	(269)	1,428	0	0	0	(269)	(53,558)
2069	0.00%	0	22,031	567	22,121	567	22,121	(135)	1,428	0	0	0	(135)	(53,693)
2070	0.00%	0	22,031	567	22,688	567	22,688	0	1,428	0	0	0	0	(53,693)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	195
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,428
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
 PROGRAM METHOD SELECTED: REV. REQ.  
 PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$(000)	(4) DEFERRED TAX \$(000)	(5) END OF YEAR NET PLANT IN SERVICE \$(000)	(5a)* ACCUMULATED DEPRECIATION \$(000)	(5b)* ACCUMULATED DEF. TAXES \$(000)	(6) BEGINNING YEAR RATE BASE \$(000)	(7) ENDING OF YEAR RATE BASE \$(000)	(8) MID-YEAR RATE BASE \$(000)
2031		826	120	22,121	567	316	22,884	22,242	22,563
2032	3.75%	1,590	(148)	21,554	1,134	168	22,242	21,406	21,824
2033	7.22%	1,471	(386)	20,987	1,702	(218)	21,406	20,601	21,003
2034	6.68%	1,361	(596)	20,420	2,269	(815)	20,601	19,823	20,212
2035	6.18%	1,259	(780)	19,852	2,836	(1,595)	19,823	19,072	19,448
2036	5.71%	1,164	(941)	19,285	3,403	(2,536)	19,072	18,344	18,708
2037	5.29%	1,077	(1,079)	18,718	3,970	(3,615)	18,344	17,639	17,992
2038	4.89%	996	(1,197)	18,151	4,538	(4,812)	17,639	16,954	17,296
2039	4.52%	983	(1,311)	17,584	5,105	(6,123)	16,954	16,272	16,613
2040	4.46%	983	(1,426)	17,016	5,672	(7,549)	16,272	15,591	15,931
2041	4.46%	983	(1,540)	16,449	6,239	(9,089)	15,591	14,909	15,250
2042	4.46%	983	(1,654)	15,882	6,807	(10,743)	14,909	14,227	14,568
2043	4.46%	983	(1,769)	15,315	7,374	(12,512)	14,227	13,546	13,887
2044	4.46%	983	(1,883)	14,748	7,941	(14,396)	13,546	12,864	13,205
2045	4.46%	983	(1,998)	14,180	8,508	(16,393)	12,864	12,183	12,523
2046	4.46%	983	(2,112)	13,613	9,075	(18,505)	12,183	11,501	11,842
2047	4.46%	983	(2,227)	13,046	9,643	(20,732)	11,501	10,819	11,160
2048	4.46%	983	(2,341)	12,479	10,210	(23,073)	10,819	10,138	10,479
2049	4.46%	983	(2,455)	11,911	10,777	(25,528)	10,138	9,456	9,797
2050	4.46%	983	(2,570)	11,344	11,344	(28,098)	9,456	8,775	9,115
2051	2.23%	492	(2,560)	10,777	11,911	(30,657)	8,775	8,217	8,496
2052	0.00%	0	(2,425)	10,210	12,479	(33,082)	8,217	7,785	8,001
2053	0.00%	0	(2,300)	9,643	13,046	(35,372)	7,785	7,352	7,569
2054	0.00%	0	(2,155)	9,075	13,613	(37,528)	7,352	6,920	7,136
2055	0.00%	0	(2,021)	8,508	14,180	(39,548)	6,920	6,487	6,704
2056	0.00%	0	(1,886)	7,941	14,748	(41,434)	6,487	6,055	6,271
2057	0.00%	0	(1,751)	7,374	15,315	(43,186)	6,055	5,622	5,839
2058	0.00%	0	(1,617)	6,807	15,882	(44,802)	5,622	5,190	5,406
2059	0.00%	0	(1,482)	6,239	16,449	(46,284)	5,190	4,757	4,974
2060	0.00%	0	(1,347)	5,672	17,016	(47,631)	4,757	4,325	4,541
2061	0.00%	0	(1,212)	5,105	17,584	(48,844)	4,325	3,892	4,109
2062	0.00%	0	(1,078)	4,538	18,151	(49,921)	3,892	3,460	3,676
2063	0.00%	0	(943)	3,970	18,718	(50,864)	3,460	3,027	3,244
2064	0.00%	0	(808)	3,403	19,285	(51,673)	3,027	2,595	2,811
2065	0.00%	0	(674)	2,836	19,852	(52,346)	2,595	2,162	2,379
2066	0.00%	0	(539)	2,269	20,420	(52,885)	2,162	1,730	1,946
2067	0.00%	0	(404)	1,702	20,987	(53,289)	1,730	1,297	1,514
2068	0.00%	0	(269)	1,134	21,554	(53,558)	1,297	865	1,081
2069	0.00%	0	(135)	567	22,121	(53,693)	865	432	649
2070	0.00%	0	0	(0)	22,688	(53,693)	432	(0)	216

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	20,846	20,846
EQUITY AFUDC	1,428	
DEBT AFUDC	415	
CPI		1,185
ITC Basis Reduction (Solar)		
TOTAL	22,688	22,031

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV. REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	9,700	9,700	2.42	8.87	2.42	0.00	1.00	1.00
2023	19,300	19,300	2.09	3.04	2.09	0.00	1.00	1.00
2024	28,900	28,900	2.10	4.85	2.10	0.00	1.00	1.00
2025	28,900	28,900	2.31	6.23	2.31	0.00	1.00	1.00
2026	28,900	28,900	2.20	2.73	2.20	0.00	1.00	1.00
2027	28,900	28,900	2.34	5.09	2.34	0.00	1.00	1.00
2028	28,900	28,900	2.38	2.95	2.38	0.00	1.00	1.00
2029	28,900	28,900	2.58	3.01	2.58	0.00	1.00	1.00
2030	28,900	28,900	2.66	3.44	2.66	0.00	1.00	1.00
2031	28,900	28,900	2.84	4.87	2.84	4.16	1.00	1.00
2032	28,900	28,900	2.98	6.66	2.98	4.30	1.00	1.00
2033	28,900	28,900	3.18	6.70	3.18	4.39	1.00	1.00
2034	28,900	28,900	3.21	4.55	3.21	4.54	1.00	1.00
2035	28,900	28,900	3.33	4.80	3.33	4.65	1.00	1.00
2036	28,900	28,900	3.45	5.93	3.45	4.74	1.00	1.00
2037	28,900	28,900	3.53	4.61	3.53	4.78	1.00	1.00
2038	28,900	28,900	3.62	5.36	3.62	4.88	1.00	1.00
2039	28,900	28,900	3.65	4.62	3.65	4.92	1.00	1.00
2040	28,900	28,900	3.74	5.61	3.74	5.00	1.00	1.00
2041	28,900	28,900	3.84	5.55	3.84	5.01	1.00	1.00
2042	28,900	28,900	3.85	5.35	3.85	5.10	1.00	1.00
2043	28,900	28,900	3.90	5.15	3.90	5.03	1.00	1.00
2044	28,900	28,900	4.09	5.73	4.09	5.20	1.00	1.00
2045	28,900	28,900	4.12	5.71	4.12	5.33	1.00	1.00
2046	28,900	28,900	4.11	5.45	4.11	5.30	1.00	1.00
2047	28,900	28,900	4.21	5.31	4.21	5.43	1.00	1.00
2048	28,900	28,900	4.23	5.67	4.23	5.42	1.00	1.00
2049	28,900	28,900	4.28	5.85	4.28	5.44	1.00	1.00
2050	28,900	28,900	4.36	5.93	4.36	5.56	1.00	1.00
2051	28,900	28,900	4.54	5.75	4.54	5.54	1.00	1.00
2052	28,900	28,900	4.44	5.71	4.44	5.50	1.00	1.00
2053	28,900	28,900	4.47	6.35	4.47	5.41	1.00	1.00
2054	28,900	28,900	4.52	5.99	4.52	5.46	1.00	1.00
2055	28,900	28,900	4.57	5.92	4.57	5.43	1.00	1.00
2056	28,900	28,900	4.73	6.50	4.73	5.47	1.00	1.00
2057	28,900	28,900	4.64	7.11	4.64	5.37	1.00	1.00
2058	28,900	28,900	4.68	4.68	4.68	5.50	1.00	1.00
2059	28,900	28,900	4.75	7.09	4.75	5.66	1.00	1.00
2060	28,900	28,900	4.75	6.71	4.75	5.82	1.00	1.00
2061	28,900	28,900	4.79	6.52	4.79	5.69	1.00	1.00
2062	28,900	28,900	4.80	6.26	4.80	5.73	1.00	1.00
2063	28,900	28,900	4.89	6.59	4.89	5.77	1.00	1.00
2064	28,900	28,900	5.15	6.32	5.15	6.56	1.00	1.00
2065	28,900	28,900	4.96	6.75	4.96	5.86	1.00	1.00
2066	28,900	28,900	5.07	7.07	5.07	5.84	1.00	1.00
2067	28,900	28,900	5.09	6.21	5.09	5.94	1.00	1.00
2068	28,900	28,900	5.09	6.63	5.09	5.97	1.00	1.00
2069	28,900	28,900	5.09	6.63	5.09	5.97	1.00	1.00
2070	28,900	28,900	5.09	6.63	5.09	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV. REQ  
 PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	3,254	1,092	45	10,500	11,683	3,208
2032	3,170	1,119	46	10,711	12,117	2,929
2033	3,077	1,147	47	10,975	12,382	2,864
2034	2,987	1,176	49	11,558	12,881	2,889
2035	2,900	1,205	50	11,793	13,194	2,755
2036	2,815	1,235	52	12,090	13,492	2,700
2037	2,733	1,266	53	12,290	13,629	2,713
2038	2,653	1,298	54	12,472	13,927	2,550
2039	2,574	1,330	56	12,470	14,034	2,396
2040	2,496	1,363	57	12,605	14,263	2,258
2041	2,417	1,397	59	12,639	14,314	2,198
2042	2,338	1,432	60	13,066	14,625	2,272
2043	2,259	1,468	62	12,728	14,377	2,140
2044	2,181	1,505	63	13,178	14,840	2,087
2045	2,102	1,543	65	13,438	15,220	1,927
2046	2,023	1,581	66	13,528	15,150	2,048
2047	1,945	1,621	68	13,767	15,535	1,864
2048	1,866	1,661	70	13,843	15,486	1,953
2049	1,787	1,703	71	13,884	15,541	1,904
2050	1,708	1,745	73	14,132	15,887	1,772
2051	1,636	1,789	75	13,938	15,807	1,631
2052	1,576	1,834	77	13,993	15,721	1,758
2053	1,522	1,879	79	13,768	15,467	1,782
2054	1,469	1,926	81	14,039	15,713	1,802
2055	1,415	1,975	83	13,819	15,529	1,763
2056	1,362	2,024	85	13,946	15,744	1,672
2057	1,308	2,075	87	13,751	15,371	1,850
2058	1,254	2,126	89	13,873	15,705	1,638
2059	1,201	2,180	92	14,470	16,272	1,670
2060	1,147	2,234	94	14,652	16,653	1,474
2061	1,094	2,290	96	14,594	16,263	1,811
2062	1,040	2,347	99	14,687	16,489	1,684
2063	986	2,406	101	14,688	16,506	1,675
2064	943	2,466	103	15,203	18,757	-42
2065	899	2,528	107	15,076	16,892	1,717
2066	856	2,591	109	15,000	16,712	1,843
2067	812	2,656	111	15,044	16,993	1,630
2068	768	2,722	114	14,953	17,095	1,462
2069	725	2,790	117	14,953	17,095	1,490
2070	681	2,860	120	14,953	17,095	1,519

NOM	71,981	73,584	3,083	541,065	610,457	79,255
NPV	15,608.08	9,642.16	403	82,137	92,311	15,479

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV. REQ.  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	6	0
2023	0	0	0	0	0	0	5	0
2024	0	0	0	0	0	0	15	0
2025	0	0	0	0	0	0	23	0
2026	0	0	0	0	0	0	9	0
2027	0	0	0	0	0	0	19	0
2028	0	0	0	0	0	0	10	0
2029	0	0	0	0	0	0	10	0
2030	0	0	0	0	0	0	12	0
2031	0	0	0	0	0	0	18	0
2032	0	0	0	0	0	0	25	0
2033	0	0	0	0	0	0	25	0
2034	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	17	0
2036	0	0	0	0	0	0	21	0
2037	0	0	0	0	0	0	16	0
2038	0	0	0	0	0	0	19	0
2039	0	0	0	0	0	0	16	0
2040	0	0	0	0	0	0	20	0
2041	0	0	0	0	0	0	20	0
2042	0	0	0	0	0	0	19	0
2043	0	0	0	0	0	0	18	0
2044	0	0	0	0	0	0	20	0
2045	0	0	0	0	0	0	20	0
2046	0	0	0	0	0	0	19	0
2047	0	0	0	0	0	0	18	0
2048	0	0	0	0	0	0	20	0
2049	0	0	0	0	0	0	21	0
2050	0	0	0	0	0	0	20	0
2051	0	0	0	0	0	0	21	0
2052	0	0	0	0	0	0	20	0
2053	0	0	0	0	0	0	22	0
2054	0	0	0	0	0	0	21	0
2055	0	0	0	0	0	0	21	0
2056	0	0	0	0	0	0	23	0
2057	0	0	0	0	0	0	25	0
2058	0	0	0	0	0	0	20	0
2059	0	0	0	0	0	0	25	0
2060	0	0	0	0	0	0	24	0
2061	0	0	0	0	0	0	23	0
2062	0	0	0	0	0	0	22	0
2063	0	0	0	0	0	0	23	0
2064	0	0	0	0	0	0	22	0
2065	0	0	0	0	0	0	24	0
2066	0	0	0	0	0	0	25	0
2067	0	0	0	0	0	0	21	0
2068	0	0	0	0	0	0	23	0
2069	0	0	0	0	0	0	23	0
2070	0	0	0	0	0	0	23	0

NOM	0	0.00	0	0	0	0	950	0
NPV	0	0	0	0	0	0	208	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV. REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	0	0	0	0	0
2028	0	0	0	0	0
2029	0	0	1	0	1
2030	0	0	0	0	0
2031	644	725	1	0	(80)
2032	861	861	1	0	(95)
2033	895	1,008	1	0	(112)
2034	1,048	1,180	1	0	(131)
2035	1,332	1,500	2	0	(166)
2036	1,669	1,880	2	0	(208)
2037	2,041	2,298	3	0	(255)
2038	2,449	2,758	3	0	(305)
2039	2,904	3,270	4	0	(362)
2040	3,400	3,829	4	0	(424)
2041	3,894	4,385	5	0	(486)
2042	4,439	4,999	6	0	(554)
2043	5,017	5,650	7	0	(626)
2044	5,655	6,367	7	0	(705)
2045	6,356	7,158	8	0	(793)
2046	7,147	8,048	9	0	(892)
2047	7,551	8,503	10	0	(942)
2048	7,978	8,983	10	0	(995)
2049	8,437	9,500	11	0	(1,052)
2050	8,918	10,042	12	0	(1,112)
2051	9,095	10,242	12	0	(1,135)
2052	9,296	10,467	12	0	(1,160)
2053	9,498	10,696	12	0	(1,185)
2054	9,752	10,981	13	0	(1,217)
2055	9,896	11,143	13	0	(1,234)
2056	10,179	11,463	13	0	(1,270)
2057	10,326	11,627	14	0	(1,288)
2058	10,530	11,858	14	0	(1,314)
2059	10,812	12,175	14	0	(1,349)
2060	10,992	12,377	14	0	(1,371)
2061	11,212	12,636	15	0	(1,399)
2062	11,530	12,984	15	0	(1,438)
2063	11,696	13,170	15	0	(1,459)
2064	11,935	13,440	16	0	(1,489)
2065	12,286	13,835	16	0	(1,533)
2066	12,453	14,023	16	0	(1,553)
2067	12,714	14,317	17	0	(1,586)
2068	12,980	14,617	17	0	(1,619)
2069	13,253	14,924	17	0	(1,653)
2070	13,531	15,237	18	0	(1,688)

NOM	306,507	345,144	404	0	(38,233)
NPV	29,421	33,129	40	0	(3,669)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	61	0	0	61	0	0	6	0	6	(55)	(51)
2023	0	69	0	0	69	0	0	5	0	5	(64)	(106)
2024	0	78	0	0	78	0	0	15	0	15	(63)	(157)
2025	0	23	0	0	23	0	0	23	0	23	(157)	(157)
2026	0	24	0	0	24	0	0	9	0	10	(14)	(167)
2027	0	25	0	0	25	0	0	19	0	19	(5)	(170)
2028	0	25	0	0	25	0	0	10	0	11	(15)	(179)
2029	0	26	0	0	26	0	0	10	0	11	(15)	(188)
2030	0	26	0	0	26	0	0	12	1	13	(14)	(195)
2031	0	27	0	0	27	3,208	0	18	(80)	3,145	3,118	3,118
2032	0	28	0	0	28	2,929	0	25	(95)	2,858	2,830	2,858
2033	0	28	0	0	28	2,864	0	25	(112)	2,777	2,749	2,749
2034	0	29	0	0	29	2,889	0	16	(131)	2,774	2,745	4,809
2035	0	30	0	0	30	2,755	0	17	(166)	2,605	2,575	5,742
2036	0	31	0	0	31	2,700	0	21	(208)	2,514	2,483	6,578
2037	0	31	0	0	31	2,713	0	16	(255)	2,475	2,443	7,343
2038	0	32	0	0	32	2,550	0	19	(305)	2,264	2,232	7,993
2039	0	33	0	0	33	2,396	0	16	(362)	2,049	2,016	8,540
2040	0	34	0	0	34	2,258	0	20	(424)	1,854	1,820	8,998
2041	0	35	0	0	35	2,198	0	20	(486)	1,732	1,698	9,396
2042	0	36	0	0	36	2,272	0	19	(554)	1,737	1,702	9,767
2043	0	36	0	0	36	2,140	0	18	(626)	1,532	1,496	10,070
2044	0	37	0	0	37	2,087	0	20	(705)	1,401	1,364	10,327
2045	0	38	0	0	38	1,927	0	20	(793)	1,154	1,116	10,523
2046	0	39	0	0	39	2,048	0	19	(892)	1,176	1,137	10,708
2047	0	40	0	0	40	1,864	0	18	(942)	941	901	10,845
2048	0	41	0	0	41	1,953	0	20	(995)	978	937	10,977
2049	0	42	0	0	42	1,904	0	21	(1,052)	872	830	11,086
2050	0	43	0	0	43	1,772	0	21	(1,112)	681	637	11,163
2051	0	44	0	0	44	1,631	0	20	(1,135)	516	472	11,217
2052	0	46	0	0	46	1,758	0	20	(1,160)	619	573	11,277
2053	0	47	0	0	47	1,782	0	22	(1,185)	619	573	11,334
2054	0	48	0	0	48	1,802	0	21	(1,217)	606	559	11,385
2055	0	49	0	0	49	1,763	0	21	(1,234)	549	500	11,427
2056	0	50	0	0	50	1,672	0	23	(1,270)	425	375	11,457
2057	0	52	0	0	52	1,850	0	23	(1,288)	588	536	11,496
2058	0	53	0	0	53	1,638	0	20	(1,314)	344	291	11,516
2059	0	54	0	0	54	1,670	0	25	(1,349)	346	292	11,534
2060	0	55	0	0	55	1,474	0	24	(1,371)	126	71	11,539
2061	0	57	0	0	57	1,811	0	23	(1,399)	435	378	11,559
2062	0	58	0	0	58	1,684	0	22	(1,438)	268	209	11,570
2063	0	60	0	0	60	1,675	0	23	(1,459)	239	179	11,579
2064	0	61	0	0	61	(42)	0	22	(1,489)	(1,509)	(1,570)	11,509
2065	0	63	0	0	63	1,717	0	24	(1,533)	208	146	11,515
2066	0	64	0	0	64	1,843	0	25	(1,553)	314	250	11,525
2067	0	66	0	0	66	1,630	0	21	(1,586)	66	(0)	11,525
2068	0	68	0	0	68	1,462	0	23	(1,619)	(134)	(201)	11,518
2069	0	69	0	0	69	1,490	0	23	(1,653)	(140)	(210)	11,512
2070	0	71	0	0	71	1,519	0	23	(1,688)	(146)	(217)	11,505

NOM	0	2,185	0	0	2,185	79,255.02	0	950	(38,233)	41,972	39,787
NPV	0	512	0	0	512	15,479	0	208	(3,669)	12,017.44	11,505

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(11) / Col(6)) : 23.47



PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	3	0	296	0	299	0	0	0	0	299	278
2023	9	0	884	0	893	0	0	0	0	893	1,050
2024	15	0	1,469	0	1,484	0	0	0	0	1,484	2,244
2025	20	0	1,761	0	1,781	0	0	0	0	1,781	3,576
2026	22	0	1,761	0	1,783	0	0	0	0	1,783	4,817
2027	22	0	1,761	0	1,783	0	0	0	0	1,783	5,971
2028	23	0	1,761	0	1,784	0	0	0	0	1,784	7,045
2029	24	0	1,761	0	1,785	0	0	0	0	1,785	8,044
2030	24	0	1,761	0	1,785	0	0	0	0	1,785	8,973
2031	24	0	1,761	0	1,786	0	0	0	0	1,786	9,837
2032	25	0	1,761	0	1,786	0	0	0	0	1,786	10,641
2033	25	0	1,761	0	1,787	0	0	0	0	1,787	11,389
2034	26	0	1,761	0	1,787	0	0	0	0	1,787	12,085
2035	27	0	1,761	0	1,788	0	0	0	0	1,788	12,733
2036	28	0	1,761	0	1,789	0	0	0	0	1,789	13,336
2037	29	0	1,761	0	1,790	0	0	0	0	1,790	13,896
2038	30	0	1,761	0	1,791	0	0	0	0	1,791	14,418
2039	31	0	1,761	0	1,792	0	0	0	0	1,792	14,904
2040	31	0	1,761	0	1,793	0	0	0	0	1,793	15,355
2041	32	0	1,761	0	1,794	0	0	0	0	1,794	15,776
2042	33	0	1,761	0	1,794	0	0	0	0	1,794	16,167
2043	34	0	1,761	0	1,796	0	0	0	0	1,796	16,531
2044	36	0	1,761	0	1,797	0	0	0	0	1,797	16,869
2045	36	0	1,761	0	1,798	0	0	0	0	1,798	17,185
2046	38	0	1,761	0	1,799	0	0	0	0	1,799	17,478
2047	38	0	1,761	0	1,800	0	0	0	0	1,800	17,751
2048	39	0	1,761	0	1,800	0	0	0	0	1,800	18,005
2049	40	0	1,761	0	1,801	0	0	0	0	1,801	18,241
2050	41	0	1,761	0	1,802	0	0	0	0	1,802	18,461
2051	41	0	1,761	0	1,802	0	0	0	0	1,802	18,665
2052	42	0	1,761	0	1,803	0	0	0	0	1,803	18,855
2053	43	0	1,761	0	1,804	0	0	0	0	1,804	19,032
2054	43	0	1,761	0	1,805	0	0	0	0	1,805	19,197
2055	44	0	1,761	0	1,805	0	0	0	0	1,805	19,350
2056	45	0	1,761	0	1,806	0	0	0	0	1,806	19,493
2057	45	0	1,761	0	1,807	0	0	0	0	1,807	19,625
2058	46	0	1,761	0	1,807	0	0	0	0	1,807	19,749
2059	47	0	1,761	0	1,808	0	0	0	0	1,808	19,864
2060	48	0	1,761	0	1,809	0	0	0	0	1,809	19,970
2061	49	0	1,761	0	1,810	0	0	0	0	1,810	20,070
2062	50	0	1,761	0	1,811	0	0	0	0	1,811	20,162
2063	51	0	1,761	0	1,812	0	0	0	0	1,812	20,248
2064	52	0	1,761	0	1,813	0	0	0	0	1,813	20,329
2065	53	0	1,761	0	1,814	0	0	0	0	1,814	20,403
2066	54	0	1,761	0	1,815	0	0	0	0	1,815	20,473
2067	55	0	1,761	0	1,817	0	0	0	0	1,817	20,537
2068	56	0	1,761	0	1,818	0	0	0	0	1,818	20,597
2069	57	0	1,761	0	1,819	0	0	0	0	1,819	20,653
2070	58	0	1,761	0	1,820	0	0	0	0	1,820	20,705
NOM	1,785	0	83,666	0	85,451	0	0	0	0	85,451	85,451
NPV	324	0	20,381	0	20,705	0	0	0	0	20,705	20,705

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ) Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Commercial/Industrial Demand Response (CDR)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	61	296	2	0	359	6	0	0	0	6	(353)	(328)
2023	0	69	884	8	0	960	5	0	0	0	5	(955)	(1,154)
2024	0	78	1,469	13	0	1,560	15	0	0	0	15	(1,545)	(2,397)
2025	0	23	1,761	17	0	1,801	23	0	0	0	23	(1,778)	(3,727)
2026	0	24	1,761	18	0	1,803	9	0	0	0	9	(1,793)	(4,975)
2027	0	25	1,761	18	0	1,804	19	0	0	0	19	(1,785)	(6,130)
2028	0	25	1,761	19	0	1,806	10	0	0	0	10	(1,795)	(7,210)
2029	0	26	1,761	20	0	1,807	10	0	0	0	10	(1,796)	(8,215)
2030	0	26	1,761	20	0	1,808	12	0	0	0	12	(1,795)	(9,149)
2031	0	27	1,761	20	0	1,809	3,225	0	0	(80)	3,145	(8,502)	(8,502)
2032	0	28	1,761	21	0	1,810	2,954	0	0	(95)	2,858	(8,030)	(8,030)
2033	0	28	1,761	21	0	1,811	2,889	0	0	(112)	2,772	(7,626)	(7,626)
2034	0	29	1,761	22	0	1,812	2,905	0	0	(131)	2,774	(7,251)	(966)
2035	0	30	1,761	22	0	1,813	2,772	0	0	(166)	2,605	(6,964)	(6,964)
2036	0	31	1,761	22	0	1,815	2,722	0	0	(208)	2,514	(6,729)	(6,729)
2037	0	31	1,761	24	0	1,817	2,730	0	0	(255)	2,475	(6,523)	(6,523)
2038	0	32	1,761	25	0	1,818	2,569	0	0	(305)	2,264	(6,393)	(6,393)
2039	0	33	1,761	25	0	1,820	2,412	0	0	(362)	2,049	(6,331)	(6,331)
2040	0	34	1,761	26	0	1,821	2,278	0	0	(424)	1,854	(6,323)	(6,323)
2041	0	35	1,761	27	0	1,823	2,218	0	0	(486)	1,732	(6,344)	(6,344)
2042	0	36	1,761	28	0	1,824	2,291	0	0	(554)	1,737	(6,363)	(6,363)
2043	0	36	1,761	28	0	1,826	2,158	0	0	(626)	1,532	(6,422)	(6,422)
2044	0	37	1,761	29	0	1,828	2,107	0	0	(705)	1,401	(6,503)	(6,503)
2045	0	38	1,761	30	0	1,830	1,947	0	0	(793)	1,154	(6,621)	(6,621)
2046	0	39	1,761	31	0	1,832	2,068	0	0	(892)	1,176	(6,728)	(6,728)
2047	0	40	1,761	32	0	1,833	1,883	0	0	(942)	941	(6,863)	(6,863)
2048	0	41	1,761	32	0	1,835	1,973	0	0	(995)	978	(6,984)	(6,984)
2049	0	42	1,761	33	0	1,836	1,925	0	0	(1,052)	872	(7,111)	(7,111)
2050	0	43	1,761	34	0	1,838	1,793	0	0	(1,112)	681	(7,252)	(7,252)
2051	0	44	1,761	34	0	1,840	1,651	0	0	(1,135)	516	(7,402)	(7,402)
2052	0	46	1,761	35	0	1,842	1,778	0	0	(1,160)	619	(7,531)	(7,531)
2053	0	47	1,761	35	0	1,843	1,804	0	0	(1,185)	619	(7,651)	(7,651)
2054	0	48	1,761	36	0	1,845	1,823	0	0	(1,217)	606	(7,764)	(7,764)
2055	0	49	1,761	36	0	1,847	1,783	0	0	(1,239)	549	(7,874)	(7,874)
2056	0	50	1,761	37	0	1,849	1,695	0	0	(1,244)	425	(7,987)	(7,987)
2057	0	52	1,761	38	0	1,851	1,876	0	0	(1,270)	425	(8,124)	(8,124)
2058	0	53	1,761	38	0	1,852	1,658	0	0	(1,288)	588	(8,263)	(8,263)
2059	0	54	1,761	39	0	1,854	1,695	0	0	(1,314)	344	(8,408)	(8,408)
2060	0	55	1,761	40	0	1,856	1,498	0	0	(1,349)	346	(8,558)	(8,558)
2061	0	57	1,761	41	0	1,859	1,834	0	0	(1,371)	126	(8,708)	(8,708)
2062	0	58	1,761	41	0	1,861	1,706	0	0	(1,399)	435	(8,859)	(8,859)
2063	0	60	1,761	42	0	1,863	1,698	0	0	(1,438)	268	(9,010)	(9,010)
2064	0	61	1,761	43	0	1,866	(20)	0	0	(1,459)	239	(9,161)	(9,161)
2065	0	63	1,761	44	0	1,868	1,741	0	0	(1,489)	208	(9,312)	(9,312)
2066	0	64	1,761	45	0	1,871	1,868	0	0	(1,533)	314	(9,463)	(9,463)
2067	0	66	1,761	46	0	1,873	1,652	0	0	(1,586)	66	(9,614)	(9,614)
2068	0	68	1,761	47	0	1,876	1,486	0	0	(1,619)	(134)	(9,765)	(9,765)
2069	0	69	1,761	48	0	1,878	1,513	0	0	(1,653)	(140)	(9,916)	(9,916)
2070	0	71	1,761	49	0	1,881	1,542	0	0	(1,688)	(146)	(10,067)	(10,067)

NOM	0	2,185	83,666	1,481	0	87,333	80,205.18	0.00	0.00	(38,232.80)	41,972	(45,360)	(45,360)
NPV	0	512	20,381	269	0	21,162	15,686	0	0	(3,669)	12,017	(9,145)	(9,145)

7.52 %  
0.57

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :

INPUT DATA --PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.24 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	0.3150 kW
(3) kW LINE LOSS PERCENT AGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	688.20 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42106
(5) K FACTOR FOR T & D .....	1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,740,799.7 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	362,488,238.7 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	95,786.25 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24,027,416.97 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	3,963,343.231 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	2,733,632.729 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	90 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	3,737,763 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	1.61 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.491
(2) TRC TEST .....	0.481
(3) PARTICIPANT TEST .....	1.24

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Res Air Conditioning

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	
2022	620	4,238	0	4,857	934	0	23,667	0	23,667	
2023	643	4,290	0	4,933	2,946	0	24,560	0	24,560	
2024	675	4,391	0	5,066	5,149	0	25,768	0	25,768	
2025	0	0	0	0	6,539	0	0	0	0	
2026	0	0	0	0	6,874	0	0	0	0	
2027	0	0	0	0	7,077	0	0	0	0	
2028	0	0	0	0	7,285	0	0	0	0	
2029	0	0	0	0	7,501	0	0	0	0	
2030	0	0	0	0	7,688	0	0	0	0	
2031	0	0	0	0	7,795	0	0	0	0	
2032	0	0	0	0	7,933	0	0	0	0	
2033	0	0	0	0	8,082	0	0	0	0	
2034	0	0	0	0	8,221	0	0	0	0	
2035	0	0	0	0	8,404	0	0	0	0	
2036	0	0	0	0	8,688	0	0	0	0	
2037	898	4,238	0	5,135	8,882	0	34,277	0	34,277	
2038	932	4,290	0	5,222	9,090	0	35,570	0	35,570	
2039	978	4,391	0	5,369	9,262	0	37,319	0	37,319	
2040	0	0	0	0	9,456	0	0	0	0	
2041	0	0	0	0	9,641	0	0	0	0	
2042	0	0	0	0	9,763	0	0	0	0	
2043	0	0	0	0	10,062	0	0	0	0	
2044	0	0	0	0	10,296	0	0	0	0	
2045	0	0	0	0	10,480	0	0	0	0	
2046	0	0	0	0	10,724	0	0	0	0	
2047	0	0	0	0	10,887	0	0	0	0	
2048	0	0	0	0	11,020	0	0	0	0	
2049	0	0	0	0	11,196	0	0	0	0	
2050	0	0	0	0	11,399	0	0	0	0	
2051	0	0	0	0	11,559	0	0	0	0	
2052	1,300	4,238	0	5,538	11,722	0	49,644	0	49,644	
2053	1,349	4,290	0	5,639	11,886	0	51,515	0	51,515	
2054	1,416	4,391	0	5,807	12,053	0	54,050	0	54,050	
2055	0	0	0	0	12,223	0	0	0	0	
2056	0	0	0	0	12,394	0	0	0	0	
2057	0	0	0	0	12,568	0	0	0	0	
2058	0	0	0	0	12,745	0	0	0	0	
2059	0	0	0	0	12,924	0	0	0	0	
2060	0	0	0	0	13,105	0	0	0	0	
2061	0	0	0	0	13,337	0	0	0	0	
2062	0	0	0	0	13,571	0	0	0	0	
2063	0	0	0	0	13,814	0	0	0	0	
2064	0	0	0	0	14,049	0	0	0	0	
2065	0	0	0	0	14,282	0	0	0	0	
2066	0	0	0	0	14,517	0	0	0	0	
2067	1,883	4,238	0	6,121	14,751	0	71,899	0	71,899	
2068	1,954	4,290	0	6,244	14,988	0	74,610	0	74,610	
2069	2,051	4,391	0	6,442	15,232	0	78,280	0	78,280	
2070	0	0	0	0	15,480	0	0	0	0	

NOM	14,700	51,675	0	66,375	510,495	0	561,159	0	561,159
NPV	3,087	16,647	0	19,734	98,644	0	117,845	0	117,845

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Res Air Conditioning

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.51	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.00	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.45	0.00	0.00
2026	2.50	2.50	2.50	0.00	0.00	2.00	12.10	0.00	0.00
2027	2.50	2.50	2.50	0.00	0.00	2.00	12.68	0.00	0.00
2028	2.50	2.50	2.50	0.00	0.00	2.00	13.06	0.00	0.00
2029	2.50	2.50	2.50	0.00	0.00	2.00	13.44	0.00	0.00
2030	2.50	2.50	2.50	0.00	0.00	2.00	13.84	0.00	0.00
2031	2.50	2.50	2.50	3.74	90.35	2.00	14.19	0.00	0.00
2032	2.50	2.50	2.50	3.80	90.70	2.00	14.38	0.00	0.00
2033	2.50	2.50	2.50	3.89	90.65	2.00	14.64	0.00	0.00
2034	2.50	2.50	2.50	4.07	91.31	2.00	14.91	0.00	0.00
2035	2.50	2.50	2.50	4.16	91.26	2.00	15.17	0.00	0.00
2036	2.50	2.50	2.50	4.25	91.60	2.00	15.51	0.00	0.00
2037	2.50	2.50	2.50	4.31	91.74	2.00	16.03	0.00	0.00
2038	2.50	2.50	2.50	4.37	91.70	2.00	16.39	0.00	0.00
2039	2.50	2.50	2.50	4.37	91.80	2.00	16.77	0.00	0.00
2040	2.50	2.50	2.50	4.42	91.69	2.00	17.09	0.00	0.00
2041	2.50	2.50	2.50	4.42	91.92	2.00	17.45	0.00	0.00
2042	2.50	2.50	2.50	4.42	91.92	2.00	17.79	0.00	0.00
2043	2.50	2.50	2.50	4.56	92.14	2.00	18.01	0.00	0.00
2044	2.50	2.50	2.50	4.45	91.95	2.00	18.56	0.00	0.00
2045	2.50	2.50	2.50	4.62	91.83	2.00	18.99	0.00	0.00
2046	2.50	2.50	2.50	4.71	91.77	2.00	19.33	0.00	0.00
2047	2.50	2.50	2.50	4.73	92.00	2.00	19.78	0.00	0.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	20.08	0.00	0.00
2049	2.50	2.50	2.50	4.84	91.92	2.00	20.33	0.00	0.00
2050	2.50	2.50	2.50	4.86	91.95	2.00	20.65	0.00	0.00
2051	2.50	2.50	2.50	4.95	91.91	2.00	21.03	0.00	0.00
2052	2.50	2.50	2.50	4.88	91.81	2.00	21.32	0.00	0.00
2053	2.50	2.50	2.50	4.90	91.90	2.00	21.62	0.00	0.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	21.93	0.00	0.00
2055	2.50	2.50	2.50	4.88	92.48	2.00	22.23	0.00	0.00
2056	2.50	2.50	2.50	4.84	91.92	2.00	22.55	0.00	0.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	22.86	0.00	0.00
2058	2.50	2.50	2.50	4.81	92.01	2.00	23.18	0.00	0.00
2059	2.50	2.50	2.50	4.85	91.90	2.00	23.51	0.00	0.00
2060	2.50	2.50	2.50	5.04	92.43	2.00	23.84	0.00	0.00
2061	2.50	2.50	2.50	5.12	92.02	2.00	24.17	0.00	0.00
2062	2.50	2.50	2.50	5.11	91.94	2.00	24.60	0.00	0.00
2063	2.50	2.50	2.50	5.10	92.60	2.00	25.03	0.00	0.00
2064	2.50	2.50	2.50	5.13	92.00	2.00	25.48	0.00	0.00
2065	2.50	2.50	2.50	5.32	91.95	2.00	25.91	0.00	0.00
2066	2.50	2.50	2.50	5.23	92.71	2.00	26.34	0.00	0.00
2067	2.50	2.50	2.50	5.24	92.04	2.00	26.77	0.00	0.00
2068	2.50	2.50	2.50	5.26	92.04	2.00	27.20	0.00	0.00
2069	2.50	2.50	2.50	5.23	92.03	2.00	27.64	0.00	0.00
2070	2.50	2.50	2.50	5.23	92.03	2.00	28.09	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

PROGRAM NAME: Res Air Conditioning  
 CALCULATION OF GEN K-FACTOR  
 PROGRAM METHOD SELECTED REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2031	17,296	286	0	1,088	286	301	6	435	92	0	2,495	2,495	2,495	17,393
2032	16,730	277	0	1,052	480	293	6	435	(113)	0	2,430	2,260	4,754	16,958
2033	16,101	267	0	1,012	649	286	6	435	(296)	0	2,359	2,040	6,794	16,523
2034	15,494	257	0	974	797	278	6	435	(457)	0	2,290	1,842	8,636	16,088
2035	14,908	247	0	937	926	271	6	435	(598)	0	2,223	1,663	10,300	15,653
2036	14,341	238	0	902	1,037	263	5	435	(721)	0	2,158	1,502	11,801	15,219
2037	13,792	228	0	867	1,131	256	5	435	(827)	0	2,095	1,356	13,157	14,784
2038	13,259	220	0	834	1,210	248	5	435	(918)	0	2,034	1,224	14,381	14,349
2039	12,735	211	0	801	1,286	241	5	435	(1,005)	0	1,973	1,104	15,486	13,914
2040	12,213	202	0	768	1,363	233	5	435	(1,093)	0	1,913	996	16,481	13,479
2041	11,690	194	0	735	1,439	226	5	435	(1,181)	0	1,853	897	17,378	13,045
2042	11,168	185	0	702	1,516	218	5	435	(1,268)	0	1,792	807	18,185	12,610
2043	10,645	176	0	669	1,593	211	4	435	(1,356)	0	1,732	725	18,911	12,175
2044	10,123	168	0	637	1,669	203	4	435	(1,444)	0	1,672	651	19,562	11,740
2045	9,600	159	0	604	1,746	196	4	435	(1,531)	0	1,611	584	20,145	11,305
2046	9,078	150	0	571	1,822	188	4	435	(1,619)	0	1,551	522	20,668	10,870
2047	8,555	142	0	538	1,899	181	4	435	(1,707)	0	1,491	467	21,134	10,436
2048	8,033	133	0	505	1,975	173	4	435	(1,794)	0	1,430	417	21,551	10,001
2049	7,510	124	0	472	2,052	165	3	435	(1,882)	0	1,370	371	21,922	9,566
2050	6,988	116	0	439	2,128	158	3	435	(1,970)	0	1,310	330	22,252	9,131
2051	6,513	108	0	410	2,110	150	3	435	(1,962)	0	1,254	294	22,546	8,696
2052	6,134	102	0	386	1,999	143	3	435	(1,859)	0	1,208	263	22,810	8,262
2053	5,802	96	0	365	1,889	135	3	435	(1,756)	0	1,167	237	23,046	7,827
2054	5,471	91	0	344	1,778	128	3	435	(1,652)	0	1,126	212	23,258	7,392
2055	5,139	85	0	323	1,668	120	3	435	(1,549)	0	1,085	190	23,449	6,957
2056	4,807	80	0	302	1,558	113	2	435	(1,446)	0	1,044	170	23,619	6,522
2057	4,476	74	0	281	1,447	105	2	435	(1,343)	0	1,003	152	23,771	6,087
2058	4,144	69	0	261	1,337	98	2	435	(1,239)	0	962	136	23,907	5,653
2059	3,813	63	0	240	1,227	90	2	435	(1,136)	0	921	121	24,027	5,218
2060	3,481	58	0	219	1,116	83	2	435	(1,033)	0	879	107	24,135	4,783
2061	3,150	52	0	198	1,006	75	2	435	(929)	0	838	95	24,230	4,348
2062	2,818	47	0	177	896	68	1	435	(826)	0	797	84	24,314	3,913
2063	2,487	41	0	156	785	60	1	435	(723)	0	756	74	24,388	3,479
2064	2,155	36	0	136	675	60	1	435	(620)	0	723	66	24,454	3,044
2065	1,824	30	0	115	565	60	1	435	(516)	0	689	59	24,512	2,609
2066	1,492	25	0	94	454	60	1	435	(413)	0	656	52	24,564	2,174
2067	1,160	19	0	73	344	60	1	435	(310)	0	622	46	24,610	1,739
2068	829	14	0	52	234	60	1	435	(207)	0	589	40	24,650	1,304
2069	497	8	0	31	123	60	1	435	(103)	0	556	35	24,685	869
2070	166	3	0	10	13	60	1	435	0	0	522	31	24,716	424

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	17,393
IN SERVICE YEAR	2031
BOOK LIFE (YRS)	40
EFFEC. TAX RATE	25.345%
DISCOUNT RATE	7.52%
PROPERTY TAX	1.73%
PROPERTY INSURANCE	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031	3.75%	633	633	435	435	435	435	92	1,095	0	0	0	92	242
2032	7.22%	1,219	1,852	435	870	435	870	(113)	1,095	0	0	0	(113)	129
2033	6.68%	1,128	2,980	435	1,304	435	1,304	(296)	1,095	0	0	0	(296)	(167)
2034	6.18%	1,043	4,023	435	1,739	435	1,739	(457)	1,095	0	0	0	(457)	(624)
2035	5.71%	965	4,988	435	2,174	435	2,174	(598)	1,095	0	0	0	(598)	(1,223)
2036	5.29%	893	5,881	435	2,609	435	2,609	(721)	1,095	0	0	0	(721)	(1,944)
2037	4.89%	826	6,706	435	3,044	435	3,044	(827)	1,095	0	0	0	(827)	(2,771)
2038	4.52%	764	7,470	435	3,479	435	3,479	(918)	1,095	0	0	0	(918)	(3,689)
2039	4.46%	754	8,223	435	3,913	435	3,913	(1,005)	1,095	0	0	0	(1,005)	(4,694)
2040	4.46%	753	8,977	435	4,348	435	4,348	(1,093)	1,095	0	0	0	(1,093)	(5,787)
2041	4.46%	754	9,730	435	4,783	435	4,783	(1,181)	1,095	0	0	0	(1,181)	(6,967)
2042	4.46%	753	10,484	435	5,218	435	5,218	(1,268)	1,095	0	0	0	(1,268)	(8,236)
2043	4.46%	754	11,237	435	5,653	435	5,653	(1,356)	1,095	0	0	0	(1,356)	(9,592)
2044	4.46%	753	11,991	435	6,087	435	6,087	(1,444)	1,095	0	0	0	(1,444)	(11,035)
2045	4.46%	754	12,744	435	6,522	435	6,522	(1,531)	1,095	0	0	0	(1,531)	(12,567)
2046	4.46%	753	13,498	435	6,957	435	6,957	(1,619)	1,095	0	0	0	(1,619)	(14,186)
2047	4.46%	754	14,251	435	7,392	435	7,392	(1,707)	1,095	0	0	0	(1,707)	(15,895)
2048	4.46%	753	15,005	435	7,827	435	7,827	(1,794)	1,095	0	0	0	(1,794)	(17,687)
2049	4.46%	754	15,758	435	8,262	435	8,262	(1,882)	1,095	0	0	0	(1,882)	(19,570)
2050	4.46%	753	16,512	435	8,696	435	8,696	(1,970)	1,095	0	0	0	(1,970)	(21,539)
2051	2.23%	377	16,888	435	9,131	435	9,131	(1,962)	1,095	0	0	0	(1,962)	(23,502)
2052	0.00%	0	16,888	435	9,566	435	9,566	(1,859)	1,095	0	0	0	(1,859)	(25,360)
2053	0.00%	0	16,888	435	10,001	435	10,001	(1,756)	1,095	0	0	0	(1,756)	(27,116)
2054	0.00%	0	16,888	435	10,436	435	10,436	(1,652)	1,095	0	0	0	(1,652)	(28,768)
2055	0.00%	0	16,888	435	10,870	435	10,870	(1,549)	1,095	0	0	0	(1,549)	(30,317)
2056	0.00%	0	16,888	435	11,305	435	11,305	(1,446)	1,095	0	0	0	(1,446)	(31,763)
2057	0.00%	0	16,888	435	11,740	435	11,740	(1,343)	1,095	0	0	0	(1,343)	(33,106)
2058	0.00%	0	16,888	435	12,175	435	12,175	(1,239)	1,095	0	0	0	(1,239)	(34,345)
2059	0.00%	0	16,888	435	12,610	435	12,610	(1,136)	1,095	0	0	0	(1,136)	(35,481)
2060	0.00%	0	16,888	435	13,045	435	13,045	(1,033)	1,095	0	0	0	(1,033)	(36,514)
2061	0.00%	0	16,888	435	13,479	435	13,479	(929)	1,095	0	0	0	(929)	(37,443)
2062	0.00%	0	16,888	435	13,914	435	13,914	(826)	1,095	0	0	0	(826)	(38,269)
2063	0.00%	0	16,888	435	14,349	435	14,349	(723)	1,095	0	0	0	(723)	(38,992)
2064	0.00%	0	16,888	435	14,784	435	14,784	(620)	1,095	0	0	0	(620)	(39,612)
2065	0.00%	0	16,888	435	15,219	435	15,219	(516)	1,095	0	0	0	(516)	(40,128)
2066	0.00%	0	16,888	435	15,653	435	15,653	(413)	1,095	0	0	0	(413)	(40,541)
2067	0.00%	0	16,888	435	16,088	435	16,088	(310)	1,095	0	0	0	(310)	(40,851)
2068	0.00%	0	16,888	435	16,523	435	16,523	(207)	1,095	0	0	0	(207)	(41,057)
2069	0.00%	0	16,888	435	16,958	435	16,958	(103)	1,095	0	0	0	(103)	(41,161)
2070	0.00%	0	16,888	435	17,393	435	17,393	0	1,095	0	0	0	0	(41,161)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	150
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,095
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031		633	92	16,938	433	242	17,542	17,050	17,296
2032	3.75%	1,219	(113)	16,523	870	129	17,050	16,410	16,730
2033	7.22%	1,128	(296)	16,088	1,304	(167)	16,410	15,792	16,101
2034	6.18%	1,043	(457)	15,653	1,739	(624)	15,792	15,196	15,494
2035	5.71%	965	(598)	15,219	2,174	(1,223)	15,196	14,620	14,908
2036	5.29%	893	(721)	14,784	2,609	(1,944)	14,620	14,063	14,341
2037	4.89%	826	(827)	14,349	3,044	(2,771)	14,063	13,522	13,792
2038	4.52%	764	(918)	13,914	3,479	(3,689)	13,522	12,997	13,259
2039	4.46%	754	(1,005)	13,479	3,913	(4,694)	12,997	12,474	12,735
2040	4.46%	753	(1,093)	13,045	4,348	(5,787)	12,474	11,952	12,213
2041	4.46%	754	(1,181)	12,610	4,783	(6,967)	11,952	11,429	11,690
2042	4.46%	753	(1,268)	12,175	5,218	(8,236)	11,429	10,907	11,168
2043	4.46%	754	(1,356)	11,740	5,653	(9,592)	10,907	10,384	10,645
2044	4.46%	753	(1,444)	11,305	6,087	(11,035)	10,384	9,862	10,123
2045	4.46%	754	(1,531)	10,870	6,522	(12,567)	9,862	9,339	9,600
2046	4.46%	753	(1,619)	10,436	6,957	(14,186)	9,339	8,817	9,078
2047	4.46%	754	(1,707)	10,001	7,392	(15,893)	8,817	8,294	8,555
2048	4.46%	753	(1,794)	9,566	7,827	(17,687)	8,294	7,772	8,033
2049	4.46%	754	(1,882)	9,131	8,262	(19,570)	7,772	7,249	7,510
2050	4.46%	753	(1,970)	8,696	8,696	(21,539)	7,249	6,726	6,988
2051	2.23%	377	(1,962)	8,262	9,131	(23,502)	6,726	6,299	6,513
2052	0.00%	0	(1,859)	7,827	9,566	(25,360)	6,299	5,968	6,134
2053	0.00%	0	(1,756)	7,392	10,001	(27,116)	5,968	5,636	5,802
2054	0.00%	0	(1,652)	6,957	10,436	(28,768)	5,636	5,305	5,471
2055	0.00%	0	(1,549)	6,522	10,870	(30,317)	5,305	4,973	5,139
2056	0.00%	0	(1,446)	6,087	11,305	(31,763)	4,973	4,642	4,807
2057	0.00%	0	(1,343)	5,653	11,740	(33,106)	4,642	4,310	4,476
2058	0.00%	0	(1,239)	5,218	12,175	(34,345)	4,310	3,979	4,144
2059	0.00%	0	(1,136)	4,783	12,610	(35,481)	3,979	3,647	3,813
2060	0.00%	0	(1,033)	4,348	13,045	(36,514)	3,647	3,315	3,481
2061	0.00%	0	(929)	3,913	13,479	(37,443)	3,315	2,984	3,150
2062	0.00%	0	(826)	3,479	13,914	(38,269)	2,984	2,652	2,818
2063	0.00%	0	(723)	3,044	14,349	(38,992)	2,652	2,321	2,487
2064	0.00%	0	(620)	2,609	14,784	(39,612)	2,321	1,989	2,155
2065	0.00%	0	(516)	2,174	15,219	(40,128)	1,989	1,658	1,824
2066	0.00%	0	(413)	1,739	15,653	(40,541)	1,658	1,326	1,492
2067	0.00%	0	(310)	1,304	16,088	(40,851)	1,326	995	1,160
2068	0.00%	0	(207)	870	16,523	(41,057)	995	663	829
2069	0.00%	0	(103)	435	16,958	(41,161)	663	332	497
2070	0.00%	0	0	(0)	17,393	(41,161)	332	(0)	166

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	15,980	15,980
EQUITY AFUDC	1,095	
DEBT AFUDC	318	908
CPI		
ITC Basis Reduction (Solar)		
TOTAL	17,393	16,888

IN-SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	28,250	28,250	2.42	3.82	2.67	0.00	1.00	1.00
2023	56,850	56,850	2.09	2.54	2.21	0.00	1.00	1.00
2024	86,125	86,125	2.10	2.62	2.22	0.00	1.00	1.00
2025	86,125	86,125	2.31	2.87	2.44	0.00	1.00	1.00
2026	86,125	86,125	2.20	2.57	2.30	0.00	1.00	1.00
2027	86,125	86,125	2.34	2.81	2.46	0.00	1.00	1.00
2028	86,125	86,125	2.38	2.73	2.48	0.00	1.00	1.00
2029	86,125	86,125	2.58	3.08	2.70	0.00	1.00	1.00
2030	86,125	86,125	2.66	3.05	2.76	0.00	1.00	1.00
2031	86,125	86,125	2.84	3.27	2.94	4.16	1.00	1.00
2032	86,125	86,125	2.98	3.55	3.10	4.30	1.00	1.00
2033	86,125	86,125	3.18	3.91	3.33	4.39	1.00	1.00
2034	86,125	86,125	3.21	3.73	3.33	4.54	1.00	1.00
2035	86,125	86,125	3.33	3.91	3.45	4.65	1.00	1.00
2036	86,125	86,125	3.45	3.97	3.57	4.74	1.00	1.00
2037	86,125	86,125	3.53	4.02	3.65	4.78	1.00	1.00
2038	86,125	86,125	3.62	4.08	3.75	4.88	1.00	1.00
2039	86,125	86,125	3.65	4.17	3.78	4.92	1.00	1.00
2040	86,125	86,125	3.74	4.24	3.87	5.00	1.00	1.00
2041	86,125	86,125	3.84	4.47	4.00	5.01	1.00	1.00
2042	86,125	86,125	3.85	4.37	3.99	5.10	1.00	1.00
2043	86,125	86,125	3.90	4.39	4.04	5.03	1.00	1.00
2044	86,125	86,125	4.09	4.51	4.20	5.20	1.00	1.00
2045	86,125	86,125	4.12	4.71	4.29	5.33	1.00	1.00
2046	86,125	86,125	4.11	4.59	4.26	5.30	1.00	1.00
2047	86,125	86,125	4.21	4.73	4.37	5.43	1.00	1.00
2048	86,125	86,125	4.23	4.78	4.39	5.42	1.00	1.00
2049	86,125	86,125	4.28	4.84	4.45	5.44	1.00	1.00
2050	86,125	86,125	4.36	4.90	4.52	5.56	1.00	1.00
2051	86,125	86,125	4.54	5.05	4.69	5.54	1.00	1.00
2052	86,125	86,125	4.44	5.02	4.62	5.50	1.00	1.00
2053	86,125	86,125	4.47	5.06	4.66	5.41	1.00	1.00
2054	86,125	86,125	4.52	5.10	4.70	5.46	1.00	1.00
2055	86,125	86,125	4.57	5.20	4.76	5.43	1.00	1.00
2056	86,125	86,125	4.73	5.18	4.87	5.47	1.00	1.00
2057	86,125	86,125	4.64	5.27	4.85	5.37	1.00	1.00
2058	86,125	86,125	4.68	5.29	4.88	5.50	1.00	1.00
2059	86,125	86,125	4.75	5.37	4.94	5.66	1.00	1.00
2060	86,125	86,125	4.75	5.39	4.95	5.82	1.00	1.00
2061	86,125	86,125	4.79	5.46	5.01	5.69	1.00	1.00
2062	86,125	86,125	4.80	5.48	5.02	5.73	1.00	1.00
2063	86,125	86,125	4.89	5.56	5.12	5.77	1.00	1.00
2064	86,125	86,125	5.15	5.66	5.29	6.56	1.00	1.00
2065	86,125	86,125	4.96	5.61	5.20	5.86	1.00	1.00
2066	86,125	86,125	5.07	5.72	5.30	5.84	1.00	1.00
2067	86,125	86,125	5.09	5.69	5.33	5.94	1.00	1.00
2068	86,125	86,125	5.09	5.81	5.35	5.97	1.00	1.00
2069	86,125	86,125	5.09	5.81	5.35	5.97	1.00	1.00
2070	86,125	86,125	5.09	5.81	5.35	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	2,495	837	34	8049	8956	2459
2032	2,430	858	35	8211	9289	2245
2033	2,359	879	36	8413	9492	2196
2034	2,290	901	37	8660	9874	2214
2035	2,223	924	38	9041	10115	2112
2036	2,158	947	40	9268	10343	2070
2037	2,095	971	41	9421	10448	2080
2038	2,034	995	42	9561	10677	1955
2039	1,973	1,020	43	9559	10759	1856
2040	1,913	1,045	44	9663	10934	1731
2041	1,853	1,071	45	9689	10973	1685
2042	1,792	1,098	46	10016	11211	1742
2043	1,732	1,126	47	9757	11021	1640
2044	1,672	1,154	48	10102	11376	1600
2045	1,611	1,183	49	10301	11668	1477
2046	1,551	1,212	51	10370	11614	1570
2047	1,491	1,242	52	10553	11909	1429
2048	1,430	1,273	53	10612	11871	1497
2049	1,370	1,305	55	10643	11913	1460
2050	1,310	1,338	56	10834	12179	1358
2051	1,254	1,371	57	10685	12118	1250
2052	1,208	1,406	59	10727	12051	1348
2053	1,167	1,441	60	10554	11857	1366
2054	1,126	1,477	62	10762	12046	1381
2055	1,085	1,514	63	10594	11904	1351
2056	1,044	1,552	65	10690	12070	1282
2057	1,003	1,590	67	10542	11783	1418
2058	962	1,630	68	10635	12039	1255
2059	921	1,671	70	11093	12474	1280
2060	879	1,713	72	11232	12766	1130
2061	838	1,755	74	11188	12467	1388
2062	797	1,799	76	11259	12640	1291
2063	756	1,844	77	11260	12654	1284
2064	723	1,890	79	11654	14379	-32
2065	689	1,938	82	11557	12949	1317
2066	656	1,986	83	11499	12811	1413
2067	622	2,036	85	11532	13026	1250
2068	589	2,087	88	11462	13105	1121
2069	556	2,139	90	11462	13105	1142
2070	522	2,192	92	11462	13105	1164

NOM	55,180	56,409	2,363	414,775	467,970	60,756
NPV	11,964.99	7,391.58	309	62,965	70,765	11,866

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	397	0
2023	479	56	535	96	0	125	753	0
2024	966	96	1,062	193	51	244	1,313	0
2025	1,463	119	1,583	293	63	356	1,729	0
2026	1,418	122	1,540	286	65	351	1,522	0
2027	1,373	125	1,498	278	66	345	1,675	0
2028	1,330	128	1,458	271	68	339	1,609	0
2029	1,289	131	1,420	264	70	333	1,837	0
2030	1,249	135	1,384	257	72	328	1,798	0
2031	1,210	138	1,348	250	73	323	1,928	0
2032	1,171	142	1,312	244	75	319	2,116	0
2033	1,132	145	1,277	237	77	314	2,347	0
2034	1,093	149	1,241	231	79	310	2,205	0
2035	1,054	152	1,206	224	81	305	2,321	0
2036	1,015	156	1,171	218	83	301	2,347	0
2037	976	160	1,136	211	85	296	2,363	0
2038	938	164	1,102	205	87	292	2,396	0
2039	904	168	1,072	198	89	287	2,456	0
2040	876	172	1,048	192	92	283	2,493	0
2041	851	177	1,028	185	94	279	2,644	0
2042	829	181	1,010	179	96	275	2,570	0
2043	806	186	992	172	99	271	2,576	0
2044	783	190	974	167	101	268	2,629	0
2045	760	195	955	162	104	265	2,779	0
2046	738	200	938	158	106	264	2,688	0
2047	715	205	920	154	109	262	2,771	0
2048	692	210	902	150	112	261	2,810	0
2049	669	215	885	146	114	260	2,846	0
2050	646	221	867	142	117	259	2,876	0
2051	624	226	850	138	120	258	2,952	0
2052	601	232	833	134	123	257	2,951	0
2053	578	238	816	130	126	256	2,972	0
2054	555	244	799	126	129	255	2,996	0
2055	533	250	782	122	133	254	3,059	0
2056	510	256	766	118	136	253	3,016	0
2057	487	262	750	114	139	253	3,100	0
2058	464	269	733	110	143	252	3,107	0
2059	443	276	718	106	146	252	3,153	0
2060	422	283	705	102	150	252	3,172	0
2061	404	290	693	98	154	251	3,212	0
2062	385	297	682	94	158	251	3,231	0
2063	367	304	671	90	162	251	3,272	0
2064	348	312	660	86	166	251	3,296	0
2065	330	320	650	82	170	252	3,295	0
2066	311	328	639	78	174	252	3,356	0
2067	218	336	554	75	178	254	3,332	0
2068	115	344	459	72	183	255	3,418	0
2069	13	353	366	69	187	256	3,418	0
2070	(0)	362	362	65	192	258	3,418	0

NOM	35,132	10,222.53	45,355	7,760	5,428	13,188	126,519	0
NPV	11,990	1,822	13,812	2,501	967	3,469	25,076	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	26	0	26
2027	0	0	42	0	42
2028	0	0	72	0	72
2029	0	0	99	0	99
2030	0	0	122	0	122
2031	493	556	146	0	84
2032	586	660	173	0	99
2033	686	773	203	0	116
2034	803	905	236	0	134
2035	1,021	1,150	300	0	171
2036	1,280	1,441	374	0	213
2037	1,565	1,762	457	0	260
2038	1,877	2,114	548	0	312
2039	2,226	2,507	649	0	369
2040	2,606	2,935	761	0	433
2041	2,985	3,362	870	0	493
2042	3,403	3,832	989	0	560
2043	3,846	4,331	1,120	0	635
2044	4,335	4,881	1,264	0	718
2045	4,873	5,487	1,422	0	808
2046	5,479	6,170	1,595	0	904
2047	5,789	6,518	1,686	0	956
2048	6,116	6,887	1,782	0	1,011
2049	6,468	7,283	1,884	0	1,069
2050	6,836	7,698	1,992	0	1,130
2051	6,972	7,851	2,034	0	1,155
2052	7,126	8,024	2,077	0	1,178
2053	7,281	8,199	2,120	0	1,202
2054	7,476	8,418	2,165	0	1,222
2055	7,586	8,542	2,210	0	1,254
2056	7,803	8,787	2,257	0	1,273
2057	7,916	8,913	2,304	0	1,306
2058	8,072	9,090	2,352	0	1,335
2059	8,289	9,334	2,402	0	1,357
2060	8,426	9,488	2,452	0	1,390
2061	8,595	9,679	2,504	0	1,420
2062	8,839	9,953	2,556	0	1,442
2063	8,966	10,096	2,610	0	1,480
2064	9,149	10,303	2,665	0	1,511
2065	9,418	10,605	2,721	0	1,533
2066	9,547	10,750	2,778	0	1,574
2067	9,747	10,975	2,836	0	1,607
2068	9,951	11,205	2,896	0	1,641
2069	10,160	11,440	2,956	0	1,676
2070	10,373	11,681	3,018	0	1,711

NOM	234,965	264,584	68,723	0	39,104
NPV	22,554	25,397	6,779	0	3,936

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	620	23,667	0	24,287	0	0	397	0	397	(23,891)	(22,219)
2023	0	643	24,560	0	25,203	0	661	753	0	1,413	(23,790)	(42,795)
2024	0	675	25,768	0	26,443	0	1,306	1,313	0	2,619	(23,824)	(61,959)
2025	0	0	0	0	0	0	1,939	1,729	0	3,669	3,669	(59,215)
2026	0	0	0	0	0	0	1,891	1,522	26	3,439	3,439	(56,822)
2027	0	0	0	0	0	0	1,843	1,675	42	3,560	3,560	(54,518)
2028	0	0	0	0	0	0	1,797	1,609	72	3,478	3,478	(52,425)
2029	0	0	0	0	0	0	1,754	1,837	99	3,690	3,690	(50,360)
2030	0	0	0	0	0	0	1,712	1,798	122	3,633	3,633	(48,469)
2031	0	0	0	0	0	2,459	1,671	1,928	84	6,142	6,142	(45,495)
2032	0	0	0	0	0	2,245	1,631	2,116	99	6,092	6,092	(42,753)
2033	0	0	0	0	0	2,196	1,591	2,347	116	6,250	6,250	(40,136)
2034	0	0	0	0	0	2,214	1,551	2,205	134	6,105	6,105	(37,759)
2035	0	0	0	0	0	2,112	1,511	2,321	171	6,114	6,114	(35,544)
2036	0	0	0	0	0	2,070	1,471	2,347	213	6,101	6,101	(33,489)
2037	0	898	34,277	0	35,175	2,080	1,432	2,563	260	6,135	(29,041)	(42,386)
2038	0	932	35,570	0	36,501	1,955	1,394	2,396	312	6,056	(30,445)	(51,456)
2039	0	978	37,319	0	38,297	1,836	1,360	2,456	369	6,021	(32,276)	(60,200)
2040	0	0	0	0	0	1,731	1,331	2,493	433	5,988	5,988	(58,692)
2041	0	0	0	0	0	1,685	1,307	2,644	493	6,130	6,130	(57,255)
2042	0	0	0	0	0	1,742	1,285	2,570	650	6,157	6,157	(55,913)
2043	0	0	0	0	0	1,640	1,263	2,576	635	6,114	6,114	(54,674)
2044	0	0	0	0	0	1,600	1,241	2,629	718	6,188	6,188	(53,507)
2045	0	0	0	0	0	1,477	1,221	2,779	808	6,284	6,284	(52,406)
2046	0	0	0	0	0	1,570	1,201	2,688	904	6,364	6,364	(51,368)
2047	0	0	0	0	0	1,429	1,182	2,771	956	6,338	6,338	(50,407)
2048	0	0	0	0	0	1,497	1,163	2,810	1,011	6,482	6,482	(49,493)
2049	0	0	0	0	0	1,460	1,145	2,846	1,069	6,518	6,518	(48,638)
2050	0	0	0	0	0	1,358	1,126	2,876	1,130	6,490	6,490	(47,846)
2051	0	0	0	0	0	1,250	1,108	2,952	1,155	6,465	6,465	(47,113)
2052	0	1,300	49,644	0	50,944	1,348	1,090	2,951	1,178	6,567	(44,377)	(51,795)
2053	0	1,349	51,515	0	52,865	1,366	1,072	2,972	1,202	6,611	(46,254)	(56,333)
2054	0	1,416	54,050	0	55,466	1,381	1,054	2,996	1,222	6,654	(48,812)	(60,788)
2055	0	0	0	0	0	1,351	1,037	3,059	1,254	6,700	6,700	(60,219)
2056	0	0	0	0	0	1,282	1,019	3,106	1,273	6,590	6,590	(59,699)
2057	0	0	0	0	0	1,418	1,002	3,100	1,306	6,827	6,827	(59,198)
2058	0	0	0	0	0	1,255	986	3,107	1,335	6,683	6,683	(58,742)
2059	0	0	0	0	0	1,280	970	3,153	1,357	6,760	6,760	(58,312)
2060	0	0	0	0	0	1,130	957	3,172	1,390	6,648	6,648	(57,920)
2061	0	0	0	0	0	1,388	945	3,212	1,420	6,965	6,965	(57,537)
2062	0	0	0	0	0	1,291	933	3,231	1,442	6,897	6,897	(57,185)
2063	0	0	0	0	0	1,284	922	3,272	1,480	6,958	6,958	(56,854)
2064	0	0	0	0	0	(32)	912	3,296	1,511	5,686	5,686	(56,603)
2065	0	0	0	0	0	1,317	901	3,295	1,533	7,046	7,046	(56,314)
2066	0	0	0	0	0	1,413	892	3,356	1,574	7,235	7,235	(56,037)
2067	0	1,883	71,899	0	73,783	1,250	807	3,332	1,607	6,996	(66,787)	(58,411)
2068	0	1,954	74,610	0	76,564	1,121	714	3,418	1,641	6,894	(69,670)	(60,713)
2069	0	2,051	78,280	0	80,330	1,142	622	3,418	1,676	6,858	(73,472)	(62,972)
2070	0	0	0	0	0	1,164	619	3,418	1,711	6,912	6,912	(62,774)

NOM	0	14,700	561,159	0	575,859	60,756,07	58,543	126,519	39,104	284,923	(290,936)	(290,936)
NPV	0	3,087	117,845	0	120,932	11,866	17,281	25,076	3,936	58,157,94	(62,774)	(62,774)

Discount Rate:  
Benefit/Cost Ratio (Col(11) / Col(6)) :

7.52 %  
0.48

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	1,229	0	4,238	0	5,466	23,667	0	0	23,667	(18,201)	(16,927)
2023	3,876	0	4,290	0	8,166	24,560	0	0	24,560	(16,394)	(31,107)
2024	6,775	0	4,391	0	11,166	25,768	0	0	25,768	(14,601)	(42,853)
2025	8,630	0	0	0	8,630	0	0	0	0	8,630	(36,396)
2026	9,045	0	0	0	9,045	0	0	0	0	9,045	(30,103)
2027	9,312	0	0	0	9,312	0	0	0	0	9,312	(24,078)
2028	9,586	0	0	0	9,586	0	0	0	0	9,586	(18,309)
2029	9,869	0	0	0	9,869	0	0	0	0	9,869	(12,785)
2030	10,115	0	0	0	10,115	0	0	0	0	10,115	(7,520)
2031	10,257	0	0	0	10,257	0	0	0	0	10,257	(2,554)
2032	10,438	0	0	0	10,438	0	0	0	0	10,438	2,145
2033	10,634	0	0	0	10,634	0	0	0	0	10,634	6,598
2034	10,817	0	0	0	10,817	0	0	0	0	10,817	10,810
2035	11,058	0	0	0	11,058	0	0	0	0	11,058	14,815
2036	11,432	0	0	0	11,432	0	0	0	0	11,432	18,665
2037	11,686	0	4,238	0	15,924	34,277	0	0	34,277	(18,533)	12,916
2038	11,961	0	4,290	0	16,251	35,570	0	0	35,570	(19,319)	7,288
2039	12,187	0	4,391	0	16,579	37,319	0	0	37,319	(20,741)	1,668
2040	12,443	0	0	0	12,443	0	0	0	0	12,443	4,804
2041	12,685	0	0	0	12,685	0	0	0	0	12,685	7,776
2042	12,846	0	0	0	12,846	0	0	0	0	12,846	10,576
2043	13,239	0	0	0	13,239	0	0	0	0	13,239	13,260
2044	13,548	0	0	0	13,548	0	0	0	0	13,548	15,814
2045	13,790	0	0	0	13,790	0	0	0	0	13,790	18,231
2046	14,110	0	0	0	14,110	0	0	0	0	14,110	20,532
2047	14,325	0	0	0	14,325	0	0	0	0	14,325	22,704
2048	14,500	0	0	0	14,500	0	0	0	0	14,500	24,749
2049	14,731	0	0	0	14,731	0	0	0	0	14,731	26,681
2050	14,998	0	0	0	14,998	0	0	0	0	14,998	28,511
2051	15,209	0	0	0	15,209	0	0	0	0	15,209	30,236
2052	15,423	0	4,238	0	19,661	49,644	0	0	49,644	(29,983)	27,073
2053	15,640	0	4,290	0	19,930	51,515	0	0	51,515	(31,585)	23,974
2054	15,860	0	4,391	0	20,251	54,050	0	0	54,050	(33,799)	20,889
2055	16,083	0	0	0	16,083	0	0	0	0	16,083	22,254
2056	16,308	0	0	0	16,308	0	0	0	0	16,308	23,541
2057	16,537	0	0	0	16,537	0	0	0	0	16,537	24,755
2058	16,769	0	0	0	16,769	0	0	0	0	16,769	25,900
2059	17,005	0	0	0	17,005	0	0	0	0	17,005	26,980
2060	17,243	0	0	0	17,243	0	0	0	0	17,243	27,998
2061	17,519	0	0	0	17,519	0	0	0	0	17,519	28,962
2062	17,857	0	0	0	17,857	0	0	0	0	17,857	29,874
2063	18,176	0	0	0	18,176	0	0	0	0	18,176	30,737
2064	18,486	0	0	0	18,486	0	0	0	0	18,486	31,554
2065	18,792	0	0	0	18,792	0	0	0	0	18,792	32,326
2066	19,102	0	0	0	19,102	0	0	0	0	19,102	33,056
2067	19,409	0	4,238	0	23,646	71,899	0	0	71,899	(48,253)	31,341
2068	19,721	0	4,290	0	24,011	74,610	0	0	74,610	(50,598)	29,669
2069	20,042	0	4,391	0	24,434	78,280	0	0	78,280	(53,846)	28,014
2070	20,369	0	0	0	20,369	0	0	0	0	20,369	28,596
NOM	671,704	0	51,675	0	723,379	561,159	0	0	561,159	162,220	
NPV	129,794	0	16,647	0	146,441	117,845	0	0	117,845	28,596	

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 1.24

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Air Conditioning

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	620	4,238	934	5,791	397	0	661	0	0	397	(5,395)	(5,017)
2023	0	4,290	2,946	7,879	7,879	753	0	1,413	0	0	1,413	(6,466)	(10,609)
2024	0	675	4,391	5,149	10,215	1,313	0	1,306	0	0	2,619	(7,596)	(16,720)
2025	0	0	0	6,559	6,559	1,729	0	1,939	0	0	3,669	(2,890)	(18,882)
2026	0	0	0	6,874	6,874	1,522	0	1,891	0	26	3,439	(3,439)	(21,272)
2027	0	0	0	7,077	7,077	1,675	0	1,843	0	42	3,560	(3,517)	(23,548)
2028	0	0	0	7,285	7,285	1,609	0	1,797	0	72	3,478	(3,807)	(25,839)
2029	0	0	0	7,501	7,501	1,837	0	1,754	0	99	3,690	(3,810)	(27,972)
2030	0	0	0	7,688	7,688	1,798	0	1,712	0	122	3,633	(4,055)	(30,082)
2031	0	0	0	7,795	7,795	4,387	0	1,671	0	84	3,633	(1,653)	(30,883)
2032	0	0	0	7,933	7,933	4,361	0	1,631	0	99	3,633	(1,841)	(31,712)
2033	0	0	0	8,082	8,082	4,543	0	1,591	0	116	3,633	(1,832)	(32,479)
2034	0	0	0	8,221	8,221	4,420	0	1,551	0	134	3,633	(2,116)	(33,303)
2035	0	0	0	8,404	8,404	4,432	0	1,511	0	171	3,633	(2,290)	(34,132)
2036	0	0	0	8,688	8,688	4,417	0	1,471	0	213	3,633	(2,587)	(35,003)
2037	0	898	4,238	8,882	14,017	4,443	0	1,432	0	260	3,633	(3,142)	(37,472)
2038	0	932	4,290	9,090	14,312	4,351	0	1,394	0	312	3,633	(3,826)	(39,878)
2039	0	978	4,391	9,262	14,631	4,293	0	1,360	0	369	3,633	(4,610)	(42,210)
2040	0	0	0	9,456	9,456	4,224	0	1,331	0	433	3,633	(5,988)	(43,084)
2041	0	0	0	9,641	9,641	4,329	0	1,307	0	493	3,633	(7,311)	(43,907)
2042	0	0	0	9,763	9,763	4,312	0	1,285	0	560	3,633	(8,611)	(44,693)
2043	0	0	0	10,062	10,062	4,216	0	1,263	0	635	3,633	(9,948)	(45,493)
2044	0	0	0	10,296	10,296	4,229	0	1,241	0	718	3,633	(11,178)	(46,268)
2045	0	0	0	10,480	10,480	4,256	0	1,221	0	808	3,633	(12,411)	(47,003)
2046	0	0	0	10,724	10,724	4,259	0	1,201	0	904	3,633	(13,614)	(47,714)
2047	0	0	0	10,887	10,887	4,200	0	1,182	0	956	3,633	(14,844)	(48,404)
2048	0	0	0	11,020	11,020	4,307	0	1,163	0	1,011	3,633	(16,069)	(49,044)
2049	0	0	0	11,196	11,196	4,305	0	1,145	0	1,069	3,633	(17,284)	(49,684)
2050	0	0	0	11,399	11,399	4,234	0	1,126	0	1,130	3,633	(18,499)	(50,256)
2051	0	0	0	11,559	11,559	4,202	0	1,108	0	1,155	3,633	(19,654)	(50,834)
2052	0	1,300	4,238	11,722	17,260	4,299	0	1,090	0	1,178	3,633	(20,796)	(51,462)
2053	0	1,349	4,290	11,886	17,526	4,337	0	1,072	0	1,202	3,633	(21,918)	(52,092)
2054	0	1,416	4,391	12,053	17,861	4,377	0	1,054	0	1,222	3,633	(23,030)	(52,720)
2055	0	0	0	12,223	12,223	4,410	0	1,037	0	1,254	3,633	(24,142)	(53,352)
2056	0	0	0	12,394	12,394	4,298	0	1,019	0	1,273	3,633	(25,254)	(54,056)
2057	0	0	0	12,568	12,568	4,518	0	1,002	0	1,273	3,633	(26,366)	(54,983)
2058	0	0	0	12,745	12,745	4,463	0	986	0	1,306	3,633	(27,478)	(55,818)
2059	0	0	0	12,924	12,924	4,433	0	970	0	1,335	3,633	(28,590)	(56,654)
2060	0	0	0	13,105	13,105	4,302	0	957	0	1,390	3,633	(29,702)	(57,489)
2061	0	0	0	13,337	13,337	4,600	0	945	0	1,420	3,633	(30,814)	(58,324)
2062	0	0	0	13,571	13,571	4,522	0	933	0	1,442	3,633	(31,926)	(59,159)
2063	0	0	0	13,814	13,814	4,556	0	922	0	1,480	3,633	(33,038)	(60,044)
2064	0	0	0	14,049	14,049	3,264	0	912	0	1,480	3,633	(34,150)	(60,929)
2065	0	0	0	14,282	14,282	4,611	0	901	0	1,533	3,633	(35,262)	(61,814)
2066	0	0	0	14,517	14,517	4,769	0	892	0	1,574	3,633	(36,374)	(62,699)
2067	0	1,883	4,238	14,751	20,872	4,581	0	871	0	1,607	3,633	(37,486)	(63,584)
2068	0	1,954	4,290	14,988	21,233	4,539	0	859	0	1,641	3,633	(38,598)	(64,469)
2069	0	2,051	4,391	15,232	21,674	4,560	0	848	0	1,676	3,633	(39,710)	(65,354)
2070	0	0	0	15,480	15,480	4,582	0	619	0	1,711	3,633	(40,822)	(66,239)
NOM	0	14,700	51,675	510,495	576,870	187,274.78	58,543.30	0.00	39,104.46	284,923	(291,947)	(60,220)	
NPV	0	3,087	16,647	98,644	118,378	36,941	17,281	0	3,936	58,158	(60,220)	(60,220)	

7.52 %  
0.49

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :



INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	0.31 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	0.3986 kW
(3) kW LINE LOSS PERCENT AGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	1,116.32 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	40 YEARS
(4) K FACTOR FOR GENERATION .....	1.42106
(5) K FACTOR FOR T & D .....	1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,740,799.7 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	362,488,238.7 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	95,786.25 \$/KW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24,027,416.97 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	3,963,343.231 \$/KW
(11) DISTRIBUTION FIXED O & M COST .....	2,733,632.729 \$/KW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	2.5 %**
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	90 ** (In-service year)
(15) GENERATOR CAPACITY FACTOR .....	3,737,763 CENTS/kWh** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	1.61 %**
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.470
(2) TRC TEST .....	0.556
(3) PARTICIPANT TEST .....	1.58

\* INPUT DATA - PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	605	10	0	615	255	0	5415	0	0	5415
2023	623	10	0	633	803	0	5581	0	0	5581
2024	642	10	0	652	1396	0	5752	0	0	5752
2025	0	0	0	0	1773	0	0	0	0	0
2026	0	0	0	0	1858	0	0	0	0	0
2027	0	0	0	0	1913	0	0	0	0	0
2028	0	0	0	0	1969	0	0	0	0	0
2029	0	0	0	0	2027	0	0	0	0	0
2030	0	0	0	0	2078	0	0	0	0	0
2031	0	0	0	0	2107	0	0	0	0	0
2032	0	0	0	0	2144	0	0	0	0	0
2033	0	0	0	0	2184	0	0	0	0	0
2034	0	0	0	0	2222	0	0	0	0	0
2035	0	0	0	0	2272	0	0	0	0	0
2036	0	0	0	0	2348	0	0	0	0	0
2037	0	0	0	0	2401	0	0	0	0	0
2038	0	0	0	0	2457	0	0	0	0	0
2039	0	0	0	0	2503	0	0	0	0	0
2040	0	0	0	0	2556	0	0	0	0	0
2041	0	0	0	0	2606	0	0	0	0	0
2042	991	10	0	1001	2639	0	8874	0	0	8874
2043	1021	10	0	1031	2720	0	9145	0	0	9145
2044	1052	10	0	1062	2783	0	9425	0	0	9425
2045	0	0	0	0	2833	0	0	0	0	0
2046	0	0	0	0	2898	0	0	0	0	0
2047	0	0	0	0	2943	0	0	0	0	0
2048	0	0	0	0	2979	0	0	0	0	0
2049	0	0	0	0	3026	0	0	0	0	0
2050	0	0	0	0	3081	0	0	0	0	0
2051	0	0	0	0	3124	0	0	0	0	0
2052	0	0	0	0	3168	0	0	0	0	0
2053	0	0	0	0	3213	0	0	0	0	0
2054	0	0	0	0	3258	0	0	0	0	0
2055	0	0	0	0	3304	0	0	0	0	0
2056	0	0	0	0	3350	0	0	0	0	0
2057	0	0	0	0	3397	0	0	0	0	0
2058	0	0	0	0	3445	0	0	0	0	0
2059	0	0	0	0	3493	0	0	0	0	0
2060	0	0	0	0	3542	0	0	0	0	0
2061	0	0	0	0	3605	0	0	0	0	0
2062	1,623	10	0	1,633	3,668	0	14,540	0	0	14,540
2063	1,673	10	0	1,683	3,734	0	14,986	0	0	14,986
2064	1,724	10	0	1,734	3,797	0	15,444	0	0	15,444
2065	0	0	0	0	3,860	0	0	0	0	0
2066	0	0	0	0	3,924	0	0	0	0	0
2067	0	0	0	0	3,987	0	0	0	0	0
2068	0	0	0	0	4,051	0	0	0	0	0
2069	0	0	0	0	4,117	0	0	0	0	0
2070	0	0	0	0	4,184	0	0	0	0	0

NOM	9,955	90	0	10,045	137,991	0	89,163	0	0	89,163
NPV	2,478	33	0	2,511	26,673	0	22,192	0	0	22,192

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Res BuildSmart

Year	(1) CPP%	(2) PP-CA P%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.51	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.00	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.45	0.00	0.00
2026	2.50	2.50	2.50	0.00	0.00	2.00	12.10	0.00	0.00
2027	2.50	2.50	2.50	0.00	0.00	2.00	12.68	0.00	0.00
2028	2.50	2.50	2.50	0.00	0.00	2.00	13.06	0.00	0.00
2029	2.50	2.50	2.50	0.00	0.00	2.00	13.44	0.00	0.00
2030	2.50	2.50	2.50	0.00	0.00	2.00	13.84	0.00	0.00
2031	2.50	2.50	2.50	3.74	90.35	2.00	14.19	0.00	0.00
2032	2.50	2.50	2.50	3.80	90.70	2.00	14.38	0.00	0.00
2033	2.50	2.50	2.50	3.89	90.65	2.00	14.64	0.00	0.00
2034	2.50	2.50	2.50	4.07	91.31	2.00	14.91	0.00	0.00
2035	2.50	2.50	2.50	4.16	91.26	2.00	15.17	0.00	0.00
2036	2.50	2.50	2.50	4.25	91.60	2.00	15.51	0.00	0.00
2037	2.50	2.50	2.50	4.31	91.74	2.00	16.03	0.00	0.00
2038	2.50	2.50	2.50	4.37	91.70	2.00	16.39	0.00	0.00
2039	2.50	2.50	2.50	4.37	91.80	2.00	16.77	0.00	0.00
2040	2.50	2.50	2.50	4.42	91.69	2.00	17.09	0.00	0.00
2041	2.50	2.50	2.50	4.42	91.92	2.00	17.45	0.00	0.00
2042	2.50	2.50	2.50	4.42	91.92	2.00	17.79	0.00	0.00
2043	2.50	2.50	2.50	4.56	92.14	2.00	18.01	0.00	0.00
2044	2.50	2.50	2.50	4.45	91.95	2.00	18.56	0.00	0.00
2045	2.50	2.50	2.50	4.62	91.83	2.00	18.99	0.00	0.00
2046	2.50	2.50	2.50	4.71	91.77	2.00	19.33	0.00	0.00
2047	2.50	2.50	2.50	4.73	92.00	2.00	19.78	0.00	0.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	20.08	0.00	0.00
2049	2.50	2.50	2.50	4.84	91.92	2.00	20.33	0.00	0.00
2050	2.50	2.50	2.50	4.86	91.95	2.00	20.65	0.00	0.00
2051	2.50	2.50	2.50	4.95	91.91	2.00	21.03	0.00	0.00
2052	2.50	2.50	2.50	4.88	91.81	2.00	21.32	0.00	0.00
2053	2.50	2.50	2.50	4.90	91.90	2.00	21.62	0.00	0.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	21.93	0.00	0.00
2055	2.50	2.50	2.50	4.88	92.48	2.00	22.23	0.00	0.00
2056	2.50	2.50	2.50	4.84	91.92	2.00	22.55	0.00	0.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	22.86	0.00	0.00
2058	2.50	2.50	2.50	4.81	92.01	2.00	23.18	0.00	0.00
2059	2.50	2.50	2.50	4.85	91.90	2.00	23.51	0.00	0.00
2060	2.50	2.50	2.50	5.04	92.43	2.00	23.84	0.00	0.00
2061	2.50	2.50	2.50	5.12	92.02	2.00	24.17	0.00	0.00
2062	2.50	2.50	2.50	5.11	91.94	2.00	24.60	0.00	0.00
2063	2.50	2.50	2.50	5.10	92.60	2.00	25.03	0.00	0.00
2064	2.50	2.50	2.50	5.13	92.00	2.00	25.48	0.00	0.00
2065	2.50	2.50	2.50	5.32	91.95	2.00	25.91	0.00	0.00
2066	2.50	2.50	2.50	5.23	92.71	2.00	26.34	0.00	0.00
2067	2.50	2.50	2.50	5.24	92.04	2.00	26.77	0.00	0.00
2068	2.50	2.50	2.50	5.26	92.04	2.00	27.20	0.00	0.00
2069	2.50	2.50	2.50	5.23	92.03	2.00	27.64	0.00	0.00
2070	2.50	2.50	2.50	5.23	92.03	2.00	28.09	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Res BuildSmart

YEAR	(2) MID-YEAR RATE BASE \$(000)	(3) DEBT \$(000)	(4) PREFERRED STOCK \$(000)	(5) COMMON EQUITY \$(000)	(6) INCOME TAXES \$(000)	(7) PROPERTY TAX \$(000)	(8) PROPERTY INSURANCE \$(000)	(9) DEPREC. \$(000)	(10) DEFERRED TAXES \$(000)	(11) ITC NORMALIZATION \$(000)	(12) TOTAL FIXED CHARGES \$(000)	(13) PRESENT WORTH FIXED CHARGES \$(000)	(14) CUMULATIVE PW FIXED CHARGES \$(000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$(000)
2031	3,477	58	0	219	58	60	1	87	19	0	502	502	502	3,497
2032	3,364	56	0	211	96	59	1	87	(23)	0	489	454	956	3,409
2033	3,237	54	0	204	130	57	1	87	(59)	0	474	410	1,366	3,322
2034	3,115	52	0	196	160	56	1	87	(92)	0	460	370	1,736	3,235
2035	2,997	50	0	188	186	54	1	87	(120)	0	447	334	2,071	3,147
2036	2,883	48	0	181	208	53	1	87	(145)	0	434	302	2,373	3,060
2037	2,773	46	0	174	227	51	1	87	(166)	0	421	273	2,645	2,972
2038	2,666	44	0	168	243	50	1	87	(184)	0	409	246	2,891	2,885
2039	2,560	42	0	161	259	48	1	87	(202)	0	397	222	3,113	2,797
2040	2,455	41	0	154	274	47	1	87	(220)	0	385	200	3,314	2,710
2041	2,350	39	0	148	289	45	1	87	(237)	0	372	180	3,494	2,623
2042	2,245	37	0	141	305	44	1	87	(255)	0	360	162	3,656	2,535
2043	2,140	35	0	135	320	42	1	87	(273)	0	348	146	3,802	2,448
2044	2,035	34	0	128	336	41	1	87	(290)	0	336	131	3,933	2,360
2045	1,930	32	0	121	351	39	1	87	(308)	0	324	117	4,050	2,273
2046	1,825	30	0	115	366	38	1	87	(326)	0	312	105	4,155	2,185
2047	1,720	28	0	108	382	36	1	87	(343)	0	300	94	4,249	2,098
2048	1,615	27	0	102	397	35	1	87	(361)	0	288	84	4,333	2,011
2049	1,510	25	0	95	413	33	1	87	(378)	0	275	75	4,407	1,923
2050	1,405	23	0	88	428	32	1	87	(396)	0	263	66	4,474	1,836
2051	1,309	22	0	82	424	30	1	87	(394)	0	252	59	4,533	1,748
2052	1,233	20	0	78	402	29	1	87	(374)	0	243	53	4,586	1,661
2053	1,167	19	0	73	380	27	1	87	(353)	0	235	48	4,633	1,574
2054	1,100	18	0	69	358	26	1	87	(332)	0	226	43	4,676	1,486
2055	1,033	17	0	65	335	24	1	87	(311)	0	218	38	4,714	1,399
2056	967	16	0	61	313	23	0	87	(291)	0	210	34	4,749	1,311
2057	900	15	0	57	291	21	0	87	(270)	0	202	31	4,779	1,224
2058	833	14	0	52	269	20	0	87	(249)	0	193	27	4,806	1,136
2059	767	13	0	48	247	18	0	87	(228)	0	185	24	4,831	1,049
2060	700	12	0	44	224	17	0	87	(208)	0	177	22	4,852	962
2061	633	10	0	40	202	15	0	87	(187)	0	169	19	4,871	874
2062	567	9	0	36	180	14	0	87	(166)	0	160	17	4,888	787
2063	500	8	0	31	158	12	0	87	(145)	0	152	15	4,903	699
2064	433	7	0	27	136	12	0	87	(125)	0	145	13	4,916	609
2065	367	6	0	23	114	12	0	87	(104)	0	139	12	4,928	519
2066	300	5	0	19	91	12	0	87	(83)	0	132	10	4,939	429
2067	233	4	0	15	69	12	0	87	(62)	0	125	9	4,948	339
2068	167	3	0	10	47	12	0	87	(42)	0	118	8	4,956	249
2069	100	2	0	6	25	12	0	87	(21)	0	112	7	4,963	159
2070	33	1	0	2	3	12	0	87	0	0	105	6	4,969	69

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	3,497
IN SERVICE YEAR	2031
BOOK LIFE (YRS)	40
EFFEC. TAX RATE	25.345%
DISCOUNT RATE	7.53%
PROPERTY TAX	1.73%
PROPERTY INSURANCE	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031	3.75%	127	127	87	87	87	87	19	220	0	0	0	19	49
2032	7.22%	245	372	87	175	87	175	(23)	220	0	0	0	(23)	26
2033	6.68%	227	599	87	262	87	262	(59)	220	0	0	0	(59)	(34)
2034	6.18%	210	809	87	350	87	350	(92)	220	0	0	0	(92)	(126)
2035	5.71%	194	1,003	87	437	87	437	(120)	220	0	0	0	(120)	(246)
2036	5.29%	179	1,182	87	525	87	525	(145)	220	0	0	0	(145)	(391)
2037	4.89%	166	1,348	87	612	87	612	(166)	220	0	0	0	(166)	(557)
2038	4.52%	154	1,502	87	699	87	699	(184)	220	0	0	0	(184)	(742)
2039	4.46%	152	1,653	87	787	87	787	(202)	220	0	0	0	(202)	(944)
2040	4.46%	151	1,805	87	874	87	874	(220)	220	0	0	0	(220)	(1,163)
2041	4.46%	152	1,956	87	962	87	962	(237)	220	0	0	0	(237)	(1,401)
2042	4.46%	151	2,108	87	1,049	87	1,049	(255)	220	0	0	0	(255)	(1,656)
2043	4.46%	152	2,259	87	1,136	87	1,136	(273)	220	0	0	0	(273)	(1,928)
2044	4.46%	151	2,411	87	1,224	87	1,224	(290)	220	0	0	0	(290)	(2,219)
2045	4.46%	152	2,562	87	1,311	87	1,311	(308)	220	0	0	0	(308)	(2,527)
2046	4.46%	151	2,714	87	1,399	87	1,399	(326)	220	0	0	0	(326)	(2,852)
2047	4.46%	152	2,865	87	1,486	87	1,486	(343)	220	0	0	0	(343)	(3,195)
2048	4.46%	151	3,017	87	1,574	87	1,574	(361)	220	0	0	0	(361)	(3,556)
2049	4.46%	152	3,168	87	1,661	87	1,661	(378)	220	0	0	0	(378)	(3,934)
2050	4.46%	151	3,320	87	1,748	87	1,748	(396)	220	0	0	0	(396)	(4,330)
2051	2.23%	76	3,395	87	1,836	87	1,836	(394)	220	0	0	0	(394)	(4,725)
2052	0.00%	0	3,395	87	1,923	87	1,923	(374)	220	0	0	0	(374)	(5,099)
2053	0.00%	0	3,395	87	2,011	87	2,011	(353)	220	0	0	0	(353)	(5,452)
2054	0.00%	0	3,395	87	2,098	87	2,098	(332)	220	0	0	0	(332)	(5,784)
2055	0.00%	0	3,395	87	2,185	87	2,185	(311)	220	0	0	0	(311)	(6,095)
2056	0.00%	0	3,395	87	2,273	87	2,273	(291)	220	0	0	0	(291)	(6,386)
2057	0.00%	0	3,395	87	2,360	87	2,360	(270)	220	0	0	0	(270)	(6,656)
2058	0.00%	0	3,395	87	2,448	87	2,448	(249)	220	0	0	0	(249)	(6,905)
2059	0.00%	0	3,395	87	2,535	87	2,535	(228)	220	0	0	0	(228)	(7,133)
2060	0.00%	0	3,395	87	2,623	87	2,623	(208)	220	0	0	0	(208)	(7,341)
2061	0.00%	0	3,395	87	2,710	87	2,710	(187)	220	0	0	0	(187)	(7,528)
2062	0.00%	0	3,395	87	2,797	87	2,797	(166)	220	0	0	0	(166)	(7,694)
2063	0.00%	0	3,395	87	2,885	87	2,885	(145)	220	0	0	0	(145)	(7,839)
2064	0.00%	0	3,395	87	2,972	87	2,972	(125)	220	0	0	0	(125)	(7,964)
2065	0.00%	0	3,395	87	3,060	87	3,060	(104)	220	0	0	0	(104)	(8,068)
2066	0.00%	0	3,395	87	3,147	87	3,147	(83)	220	0	0	0	(83)	(8,151)
2067	0.00%	0	3,395	87	3,235	87	3,235	(62)	220	0	0	0	(62)	(8,213)
2068	0.00%	0	3,395	87	3,322	87	3,322	(42)	220	0	0	0	(42)	(8,254)
2069	0.00%	0	3,395	87	3,409	87	3,409	(21)	220	0	0	0	(21)	(8,275)
2070	0.00%	0	3,395	87	3,497	87	3,497	0	220	0	0	0	0	(8,275)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	30
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	220
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031	3.75%	127	19	3,409	87	49	3,527	3,428	3,477
2032	7.22%	245	(23)	3,322	175	26	3,428	3,299	3,364
2033	6.68%	210	(59)	3,235	262	(34)	3,299	3,175	3,237
2034	6.18%	210	(92)	3,147	350	(126)	3,175	3,055	3,115
2035	5.71%	194	(120)	3,060	437	(246)	3,055	2,939	2,997
2036	5.29%	179	(145)	2,972	525	(391)	2,939	2,827	2,883
2037	4.89%	166	(166)	2,885	612	(557)	2,827	2,719	2,773
2038	4.52%	154	(184)	2,797	699	(742)	2,719	2,613	2,666
2039	4.46%	152	(202)	2,710	787	(944)	2,613	2,508	2,560
2040	4.46%	151	(220)	2,623	874	(1,163)	2,508	2,403	2,455
2041	4.46%	152	(237)	2,535	962	(1,401)	2,403	2,298	2,350
2042	4.46%	151	(255)	2,448	1,049	(1,656)	2,298	2,193	2,245
2043	4.46%	152	(273)	2,360	1,136	(1,928)	2,193	2,088	2,140
2044	4.46%	151	(290)	2,273	1,224	(2,219)	2,088	1,983	2,035
2045	4.46%	152	(308)	2,185	1,311	(2,527)	1,983	1,878	1,930
2046	4.46%	151	(326)	2,098	1,399	(2,852)	1,878	1,773	1,825
2047	4.46%	152	(343)	2,011	1,486	(3,195)	1,773	1,667	1,720
2048	4.46%	151	(361)	1,923	1,574	(3,556)	1,667	1,562	1,615
2049	4.46%	152	(378)	1,836	1,661	(3,934)	1,562	1,457	1,510
2050	4.46%	151	(396)	1,748	1,748	(4,330)	1,457	1,352	1,405
2051	2.23%	76	(394)	1,661	1,836	(4,725)	1,352	1,266	1,309
2052	0.00%	0	(374)	1,574	1,923	(5,099)	1,266	1,200	1,233
2053	0.00%	0	(353)	1,486	2,011	(5,452)	1,200	1,133	1,167
2054	0.00%	0	(332)	1,399	2,098	(5,784)	1,133	1,067	1,100
2055	0.00%	0	(311)	1,311	2,185	(6,095)	1,067	1,000	1,033
2056	0.00%	0	(291)	1,224	2,273	(6,386)	1,000	933	967
2057	0.00%	0	(270)	1,136	2,360	(6,656)	933	867	900
2058	0.00%	0	(249)	1,049	2,448	(6,905)	867	800	833
2059	0.00%	0	(228)	962	2,535	(7,133)	800	733	767
2060	0.00%	0	(208)	874	2,623	(7,341)	733	667	700
2061	0.00%	0	(187)	787	2,710	(7,528)	667	600	633
2062	0.00%	0	(166)	699	2,797	(7,694)	600	533	567
2063	0.00%	0	(145)	612	2,885	(7,839)	533	467	500
2064	0.00%	0	(125)	525	2,972	(7,964)	467	400	433
2065	0.00%	0	(104)	437	3,060	(8,068)	400	333	367
2066	0.00%	0	(83)	350	3,147	(8,151)	333	267	300
2067	0.00%	0	(62)	262	3,235	(8,213)	267	200	233
2068	0.00%	0	(42)	175	3,322	(8,254)	200	133	167
2069	0.00%	0	(21)	87	3,409	(8,275)	133	67	100
2070	0.00%	0	0	0	3,497	(8,275)	67	0	33

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	3,213	3,213
EQUITY AFUDC	220	
DEBT AFUDC	64	183
CPI		
ITC Basis Reduction (Solar)		
TOTAL	3,497	3,395

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	4,850	4,850	2.42	3.43	2.80	0.00	1.00	1.00
2023	9,125	9,125	2.09	2.46	2.26	0.00	1.00	1.00
2024	13,725	13,725	2.10	2.50	2.28	0.00	1.00	1.00
2025	13,725	13,725	2.31	2.74	2.49	0.00	1.00	1.00
2026	13,725	13,725	2.20	2.52	2.34	0.00	1.00	1.00
2027	13,725	13,725	2.34	2.74	2.52	0.00	1.00	1.00
2028	13,725	13,725	2.38	2.71	2.53	0.00	1.00	1.00
2029	13,725	13,725	2.58	3.00	2.74	0.00	1.00	1.00
2030	13,725	13,725	2.66	3.00	2.79	0.00	1.00	1.00
2031	13,725	13,725	2.84	3.21	2.98	4.16	1.00	1.00
2032	13,725	13,725	2.98	3.45	3.16	4.30	1.00	1.00
2033	13,725	13,725	3.18	3.75	3.39	4.39	1.00	1.00
2034	13,725	13,725	3.21	3.64	3.37	4.54	1.00	1.00
2035	13,725	13,725	3.33	3.80	3.50	4.65	1.00	1.00
2036	13,725	13,725	3.45	3.88	3.61	4.74	1.00	1.00
2037	13,725	13,725	3.53	3.96	3.69	4.78	1.00	1.00
2038	13,725	13,725	3.62	4.05	3.79	4.88	1.00	1.00
2039	13,725	13,725	3.65	4.11	3.83	4.92	1.00	1.00
2040	13,725	13,725	3.74	4.18	3.91	5.00	1.00	1.00
2041	13,725	13,725	3.84	4.40	4.06	5.01	1.00	1.00
2042	13,725	13,725	3.85	4.32	4.04	5.10	1.00	1.00
2043	13,725	13,725	3.90	4.34	4.09	5.03	1.00	1.00
2044	13,725	13,725	4.09	4.47	4.24	5.20	1.00	1.00
2045	13,725	13,725	4.12	4.65	4.33	5.33	1.00	1.00
2046	13,725	13,725	4.11	4.57	4.30	5.30	1.00	1.00
2047	13,725	13,725	4.21	4.66	4.40	5.43	1.00	1.00
2048	13,725	13,725	4.23	4.73	4.44	5.42	1.00	1.00
2049	13,725	13,725	4.28	4.80	4.51	5.44	1.00	1.00
2050	13,725	13,725	4.36	4.86	4.57	5.56	1.00	1.00
2051	13,725	13,725	4.54	5.00	4.72	5.54	1.00	1.00
2052	13,725	13,725	4.44	4.99	4.68	5.50	1.00	1.00
2053	13,725	13,725	4.47	5.00	4.71	5.41	1.00	1.00
2054	13,725	13,725	4.52	5.05	4.75	5.46	1.00	1.00
2055	13,725	13,725	4.57	5.14	4.82	5.43	1.00	1.00
2056	13,725	13,725	4.73	5.14	4.92	5.47	1.00	1.00
2057	13,725	13,725	4.64	5.24	4.91	5.37	1.00	1.00
2058	13,725	13,725	4.68	5.25	4.93	5.50	1.00	1.00
2059	13,725	13,725	4.75	5.31	5.00	5.66	1.00	1.00
2060	13,725	13,725	4.75	5.29	5.01	5.82	1.00	1.00
2061	13,725	13,725	4.79	5.40	5.07	5.69	1.00	1.00
2062	13,725	13,725	4.80	5.40	5.07	5.73	1.00	1.00
2063	13,725	13,725	4.89	5.54	5.19	5.77	1.00	1.00
2064	13,725	13,725	5.15	5.56	5.33	6.56	1.00	1.00
2065	13,725	13,725	4.96	5.60	5.26	5.86	1.00	1.00
2066	13,725	13,725	5.07	5.68	5.36	5.84	1.00	1.00
2067	13,725	13,725	5.09	5.68	5.38	5.94	1.00	1.00
2068	13,725	13,725	5.09	5.75	5.43	5.97	1.00	1.00
2069	13,725	13,725	5.09	5.75	5.43	5.97	1.00	1.00
2070	13,725	13,725	5.09	5.75	5.43	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.



page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Res BuildSmart

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	502	168	7	1618	1801	494
2032	489	172	7	1651	1868	451
2033	474	177	7	1691	1908	441
2034	460	181	8	1781	1985	445
2035	447	186	8	1818	2033	425
2036	434	190	8	1863	2079	416
2037	421	195	8	1894	2101	418
2038	409	200	8	1922	2146	393
2039	397	205	9	1922	2163	369
2040	385	210	9	1943	2198	348
2041	372	215	9	1948	2206	339
2042	360	221	9	2014	2254	350
2043	348	226	9	1962	2216	330
2044	336	232	10	2031	2287	322
2045	324	238	10	2071	2346	297
2046	312	244	10	2085	2335	316
2047	300	250	10	2122	2394	287
2048	288	256	11	2133	2387	301
2049	275	262	11	2140	2395	293
2050	263	269	11	2178	2448	273
2051	252	276	12	2148	2436	251
2052	243	283	12	2157	2423	271
2053	235	290	12	2122	2384	275
2054	226	297	13	2164	2422	278
2055	218	304	13	2130	2393	272
2056	210	312	13	2149	2427	258
2057	202	320	13	2119	2369	285
2058	193	328	14	2138	2420	252
2059	185	336	14	2230	2508	257
2060	177	344	14	2258	2567	227
2061	169	353	15	2249	2506	279
2062	160	362	15	2264	2541	260
2063	152	371	16	2264	2544	258
2064	145	380	16	2343	2891	-6
2065	139	390	16	2323	2603	265
2066	132	399	17	2312	2576	284
2067	125	409	17	2319	2619	251
2068	118	420	18	2304	2635	225
2069	112	430	18	2304	2635	230
2070	105	441	18	2304	2635	234

NOM	11,094	11,341	475	83,389	94,084	12,215
NPV	2,405.53	1,486.06	62	12,659	14,227	2,386

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	95	0
2023	97	11	109	19	6	25	197	0
2024	196	19	215	39	10	49	334	0
2025	294	24	318	59	13	72	441	0
2026	285	25	310	57	13	70	402	0
2027	276	25	301	56	13	69	439	0
2028	267	26	293	54	14	68	430	0
2029	259	26	285	53	14	67	481	0
2030	251	27	278	52	14	66	476	0
2031	243	28	271	50	15	65	510	0
2032	235	28	264	49	15	64	552	0
2033	227	29	257	48	15	63	602	0
2034	220	30	249	46	16	62	579	0
2035	212	31	242	45	16	61	606	0
2036	204	31	235	44	17	60	616	0
2037	196	32	228	42	17	60	627	0
2038	188	33	221	41	18	59	642	0
2039	182	34	215	40	18	58	651	0
2040	176	35	211	38	18	57	662	0
2041	171	36	207	37	19	56	701	0
2042	167	36	203	36	19	55	684	0
2043	162	37	199	35	20	54	686	0
2044	157	38	196	33	20	54	704	0
2045	153	39	192	32	21	53	739	0
2046	148	40	188	32	21	53	723	0
2047	144	41	185	31	22	53	735	0
2048	139	42	181	30	22	52	749	0
2049	134	43	178	29	23	52	761	0
2050	130	44	174	28	24	52	769	0
2051	125	46	171	28	24	52	788	0
2052	121	47	167	27	25	52	790	0
2053	116	48	164	26	25	51	792	0
2054	112	49	161	25	26	51	799	0
2055	107	50	157	24	27	51	816	0
2056	102	51	154	24	27	51	807	0
2057	98	53	151	23	28	51	831	0
2058	93	54	147	22	29	51	832	0
2059	89	55	144	21	29	51	840	0
2060	85	57	142	20	30	51	837	0
2061	81	58	139	20	31	51	857	0
2062	77	60	137	19	32	50	856	0
2063	74	61	135	18	32	50	879	0
2064	70	63	133	17	33	51	872	0
2065	66	64	131	16	34	51	889	0
2066	63	66	128	16	35	51	900	0
2067	44	68	111	15	36	51	900	0
2068	23	69	92	14	37	51	912	0
2069	3	71	74	14	38	51	912	0
2070	(0)	73	73	13	39	52	912	0
NOM	7,062	2,055.36	9,117	1,560	1,091	2,651	33,614	0
NPV	2,411	366	2,778	503	195	698	6,601	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM/METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	7	0	7
2027	0	0	11	0	11
2028	0	0	19	0	19
2029	0	0	27	0	27
2030	0	0	33	0	33
2031	99	112	40	0	27
2032	118	133	47	0	32
2033	138	155	55	0	37
2034	162	182	64	0	43
2035	205	231	81	0	55
2036	257	290	101	0	69
2037	315	354	123	0	84
2038	377	425	148	0	101
2039	448	504	176	0	119
2040	524	590	206	0	140
2041	600	676	235	0	159
2042	684	770	267	0	181
2043	773	871	303	0	205
2044	872	981	342	0	232
2045	980	1,103	384	0	261
2046	1,102	1,240	431	0	292
2047	1,164	1,310	456	0	309
2048	1,230	1,385	482	0	327
2049	1,300	1,464	509	0	345
2050	1,374	1,548	538	0	365
2051	1,402	1,578	550	0	373
2052	1,433	1,613	561	0	381
2053	1,464	1,648	573	0	389
2054	1,503	1,692	585	0	396
2055	1,525	1,717	597	0	405
2056	1,569	1,767	610	0	412
2057	1,591	1,792	623	0	422
2058	1,623	1,828	636	0	431
2059	1,666	1,876	649	0	439
2060	1,694	1,908	663	0	449
2061	1,728	1,946	677	0	459
2062	1,777	2,001	691	0	467
2063	1,803	2,030	705	0	478
2064	1,839	2,071	720	0	488
2065	1,894	2,132	735	0	497
2066	1,919	2,161	751	0	509
2067	1,960	2,207	767	0	520
2068	2,001	2,253	783	0	530
2069	2,043	2,300	799	0	542
2070	2,085	2,348	816	0	553

NOM	47,239	53,194	18,575	0	12,620
NPV	4,534	5,106	1,832	0	1,261

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	605	5,415	0	6,020	0	0	95	0	95	(5,925)	(5,510)
2023	0	623	5,581	0	6,204	0	134	197	0	331	(5,873)	(10,590)
2024	0	642	5,752	0	6,394	0	264	334	0	599	(5,795)	(15,252)
2025	0	0	0	0	0	0	390	441	0	830	830	(14,631)
2026	0	0	0	0	0	0	380	402	7	789	789	(14,082)
2027	0	0	0	0	0	0	370	439	11	821	821	(13,551)
2028	0	0	0	0	0	0	361	450	19	811	811	(13,063)
2029	0	0	0	0	0	0	352	481	27	860	860	(12,581)
2030	0	0	0	0	0	0	344	476	33	853	853	(12,137)
2031	0	0	0	0	0	494	336	510	27	1,368	1,368	(11,475)
2032	0	0	0	0	0	451	328	552	32	1,363	1,363	(10,862)
2033	0	0	0	0	0	441	320	602	37	1,400	1,400	(10,275)
2034	0	0	0	0	0	445	312	579	43	1,379	1,379	(9,738)
2035	0	0	0	0	0	425	304	606	55	1,389	1,389	(9,235)
2036	0	0	0	0	0	416	296	616	69	1,396	1,396	(8,765)
2037	0	0	0	0	0	418	288	627	84	1,416	1,416	(8,321)
2038	0	0	0	0	0	393	280	642	101	1,416	1,416	(7,909)
2039	0	0	0	0	0	369	273	651	119	1,413	1,413	(7,526)
2040	0	0	0	0	0	348	268	662	140	1,417	1,417	(7,169)
2041	0	0	0	0	0	339	263	701	159	1,462	1,462	(6,826)
2042	0	991	8,874	0	9,864	350	258	684	181	1,474	(8,391)	(8,655)
2043	0	1,021	9,145	0	10,166	330	254	686	205	1,475	(8,691)	(10,417)
2044	0	1,052	9,425	0	10,478	322	249	704	232	1,506	(8,971)	(12,108)
2045	0	0	0	0	0	297	245	739	261	1,542	1,542	(11,838)
2046	0	0	0	0	0	316	241	723	292	1,572	1,572	(11,581)
2047	0	0	0	0	0	287	238	735	309	1,569	1,569	(11,343)
2048	0	0	0	0	0	301	234	749	327	1,610	1,610	(11,116)
2049	0	0	0	0	0	293	230	761	345	1,630	1,630	(10,903)
2050	0	0	0	0	0	273	226	769	365	1,634	1,634	(10,703)
2051	0	0	0	0	0	251	223	788	373	1,635	1,635	(10,518)
2052	0	0	0	0	0	271	219	790	381	1,661	1,661	(10,343)
2053	0	0	0	0	0	275	215	792	389	1,670	1,670	(10,179)
2054	0	0	0	0	0	278	212	799	396	1,684	1,684	(10,025)
2055	0	0	0	0	0	272	208	816	405	1,701	1,701	(9,881)
2056	0	0	0	0	0	258	205	807	412	1,681	1,681	(9,748)
2057	0	0	0	0	0	285	201	831	422	1,740	1,740	(9,620)
2058	0	0	0	0	0	252	198	832	431	1,713	1,713	(9,503)
2059	0	0	0	0	0	257	195	840	439	1,732	1,732	(9,393)
2060	0	0	0	0	0	227	192	837	449	1,706	1,706	(9,293)
2061	0	0	0	0	0	279	190	857	459	1,785	1,785	(9,195)
2062	0	1,623	14,540	0	16,164	260	188	856	467	1,770	(14,393)	(9,930)
2063	0	1,673	14,986	0	16,659	258	185	879	478	1,801	(14,858)	(10,635)
2064	0	1,724	15,444	0	17,169	(6)	183	872	488	1,537	(15,631)	(11,326)
2065	0	0	0	0	0	265	181	889	497	1,832	1,832	(11,251)
2066	0	0	0	0	0	284	179	900	509	1,872	1,872	(11,179)
2067	0	0	0	0	0	251	179	900	520	1,833	1,833	(11,114)
2068	0	0	0	0	0	225	143	912	530	1,811	1,811	(11,054)
2069	0	0	0	0	0	230	125	912	542	1,809	1,809	(10,999)
2070	0	0	0	0	0	234	125	912	553	1,824	1,824	(10,946)
NOM	0	9,955	89,163	0	99,118	12,214.86	11,768	336.14	12,620	70,217	(28,901)	(28,901)
NPV	0	2,478	22,192	0	24,670	2,386	3,475	6,601	1,261	13,723.07	(10,946)	(10,946)

Discount Rate: 0.56 %  
Benefit/Cost Ratio (Col(11) / Col(6)) :

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	336	0	10	0	346	5,415	0	0	5,415	(5,070)	(4,715)
2023	1,056	0	10	0	1,066	5,581	0	0	5,581	(4,515)	(8,620)
2024	1,836	0	10	0	1,846	5,752	0	0	5,752	(3,906)	(11,762)
2025	2,333	0	0	0	2,333	0	0	0	0	2,333	(10,017)
2026	2,445	0	0	0	2,445	0	0	0	0	2,445	(8,316)
2027	2,517	0	0	0	2,517	0	0	0	0	2,517	(6,687)
2028	2,591	0	0	0	2,591	0	0	0	0	2,591	(5,128)
2029	2,668	0	0	0	2,668	0	0	0	0	2,668	(3,635)
2030	2,734	0	0	0	2,734	0	0	0	0	2,734	(2,212)
2031	2,772	0	0	0	2,772	0	0	0	0	2,772	(870)
2032	2,821	0	0	0	2,821	0	0	0	0	2,821	400
2033	2,874	0	0	0	2,874	0	0	0	0	2,874	1,604
2034	2,924	0	0	0	2,924	0	0	0	0	2,924	2,742
2035	2,989	0	0	0	2,989	0	0	0	0	2,989	3,825
2036	3,090	0	0	0	3,090	0	0	0	0	3,090	4,866
2037	3,159	0	0	0	3,159	0	0	0	0	3,159	5,855
2038	3,233	0	0	0	3,233	0	0	0	0	3,233	6,797
2039	3,294	0	0	0	3,294	0	0	0	0	3,294	7,689
2040	3,363	0	0	0	3,363	0	0	0	0	3,363	8,537
2041	3,429	0	0	0	3,429	0	0	0	0	3,429	9,340
2042	3,472	0	10	0	3,482	8,874	0	0	8,874	(5,392)	8,165
2043	3,578	0	10	0	3,588	9,145	0	0	9,145	(5,557)	7,039
2044	3,662	0	10	0	3,672	9,425	0	0	9,425	(5,753)	5,954
2045	3,727	0	0	0	3,727	0	0	0	0	3,727	6,607
2046	3,814	0	0	0	3,814	0	0	0	0	3,814	7,229
2047	3,872	0	0	0	3,872	0	0	0	0	3,872	7,816
2048	3,919	0	0	0	3,919	0	0	0	0	3,919	8,369
2049	3,982	0	0	0	3,982	0	0	0	0	3,982	8,891
2050	4,054	0	0	0	4,054	0	0	0	0	4,054	9,386
2051	4,111	0	0	0	4,111	0	0	0	0	4,111	9,852
2052	4,169	0	0	0	4,169	0	0	0	0	4,169	10,292
2053	4,227	0	0	0	4,227	0	0	0	0	4,227	10,707
2054	4,287	0	0	0	4,287	0	0	0	0	4,287	11,098
2055	4,347	0	0	0	4,347	0	0	0	0	4,347	11,467
2056	4,408	0	0	0	4,408	0	0	0	0	4,408	11,815
2057	4,470	0	0	0	4,470	0	0	0	0	4,470	12,143
2058	4,532	0	0	0	4,532	0	0	0	0	4,532	12,452
2059	4,596	0	0	0	4,596	0	0	0	0	4,596	12,744
2060	4,661	0	0	0	4,661	0	0	0	0	4,661	13,019
2061	4,743	0	0	0	4,743	0	0	0	0	4,743	13,280
2062	4,826	0	10	0	4,836	14,540	0	0	14,540	(9,704)	12,784
2063	4,913	0	10	0	4,923	14,986	0	0	14,986	(10,063)	12,306
2064	4,996	0	10	0	5,006	15,444	0	0	15,444	(10,438)	11,845
2065	5,079	0	0	0	5,079	0	0	0	0	5,079	12,054
2066	5,163	0	0	0	5,163	0	0	0	0	5,163	12,251
2067	5,246	0	0	0	5,246	0	0	0	0	5,246	12,438
2068	5,330	0	0	0	5,330	0	0	0	0	5,330	12,614
2069	5,417	0	0	0	5,417	0	0	0	0	5,417	12,780
2070	5,505	0	0	0	5,505	0	0	0	0	5,505	12,938

NOM	181,567	0	90	0	181,657	89,163	0	0	89,163	92,493
NPV	35,096	0	33	0	35,130	22,192	0	0	22,192	12,938

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): 1.58

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res BuildSmart

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	605	0	255	0	870	95	0	0	0	95	(775)	(720)
2023	0	623	10	803	0	1,436	197	134	0	0	331	(1,105)	(1,676)
2024	0	642	10	1,396	0	2,048	334	264	0	0	599	(1,449)	(2,842)
2025	0	0	0	1,773	0	1,773	441	390	0	0	830	(3,547)	(4,290)
2026	0	0	0	1,858	0	1,858	402	380	0	7	789	(1,069)	(4,290)
2027	0	0	0	1,913	0	1,913	439	370	0	11	821	(1,092)	(4,997)
2028	0	0	0	1,969	0	1,969	430	361	0	19	811	(1,158)	(5,694)
2029	0	0	0	2,027	0	2,027	481	352	0	27	860	(1,167)	(6,347)
2030	0	0	0	2,078	0	2,078	476	344	0	33	853	(1,225)	(6,985)
2031	0	0	0	2,107	0	2,107	1,005	336	0	27	1,368	(739)	(7,343)
2032	0	0	0	2,144	0	2,144	1,003	328	0	32	1,363	(781)	(7,694)
2033	0	0	0	2,184	0	2,184	1,043	320	0	37	1,400	(784)	(8,023)
2034	0	0	0	2,222	0	2,222	1,024	312	0	43	1,379	(843)	(8,351)
2035	0	0	0	2,272	0	2,272	1,030	304	0	55	1,389	(882)	(8,670)
2036	0	0	0	2,348	0	2,348	1,032	296	0	69	1,396	(890)	(8,991)
2037	0	0	0	2,401	0	2,401	1,045	288	0	84	1,416	(984)	(9,299)
2038	0	0	0	2,457	0	2,457	1,020	280	0	101	1,416	(1,041)	(9,603)
2039	0	0	0	2,503	0	2,503	1,023	273	0	119	1,413	(1,091)	(9,898)
2040	0	0	0	2,556	0	2,556	1,010	268	0	140	1,417	(1,139)	(10,185)
2041	0	0	0	2,606	0	2,606	1,040	263	0	159	1,462	(1,144)	(10,453)
2042	0	991	10	2,639	0	3,639	1,034	258	0	181	1,474	(1,166)	(10,925)
2043	0	1,021	10	2,720	0	3,751	1,016	254	0	205	1,475	(1,387)	(11,387)
2044	0	1,052	10	2,783	0	3,845	1,025	249	0	232	1,506	(2,275)	(11,828)
2045	0	0	0	2,833	0	2,833	1,036	245	0	261	1,542	(2,339)	(12,054)
2046	0	0	0	2,898	0	2,898	1,039	241	0	292	1,572	(1,291)	(12,270)
2047	0	0	0	2,943	0	2,943	1,023	238	0	309	1,572	(1,326)	(12,478)
2048	0	0	0	2,979	0	2,979	1,050	234	0	327	1,569	(1,373)	(12,671)
2049	0	0	0	3,026	0	3,026	1,054	230	0	345	1,610	(1,368)	(12,854)
2050	0	0	0	3,081	0	3,081	1,043	226	0	365	1,630	(1,396)	(13,031)
2051	0	0	0	3,124	0	3,124	1,039	223	0	373	1,634	(1,447)	(13,200)
2052	0	0	0	3,168	0	3,168	1,061	219	0	381	1,661	(1,490)	(13,359)
2053	0	0	0	3,213	0	3,213	1,066	215	0	389	1,670	(1,507)	(13,510)
2054	0	0	0	3,258	0	3,258	1,076	212	0	396	1,684	(1,542)	(13,654)
2055	0	0	0	3,304	0	3,304	1,088	208	0	405	1,701	(1,574)	(13,790)
2056	0	0	0	3,350	0	3,350	1,064	205	0	412	1,681	(1,603)	(13,922)
2057	0	0	0	3,397	0	3,397	1,116	201	0	422	1,740	(1,669)	(14,043)
2058	0	0	0	3,445	0	3,445	1,084	198	0	431	1,713	(1,657)	(14,162)
2059	0	0	0	3,493	0	3,493	1,097	195	0	439	1,732	(1,731)	(14,273)
2060	0	0	0	3,542	0	3,542	1,064	192	0	449	1,706	(1,761)	(14,382)
2061	0	0	0	3,605	0	3,605	1,137	190	0	459	1,836	(1,836)	(14,482)
2062	0	1,623	10	3,668	0	5,301	1,116	188	0	467	1,785	(1,820)	(14,662)
2063	0	1,674	10	3,734	0	5,417	1,137	185	0	478	1,770	(1,831)	(14,834)
2064	0	1,724	10	3,797	0	5,532	866	183	0	488	1,537	(3,616)	(15,010)
2065	0	0	0	3,860	0	3,860	1,154	181	0	497	1,832	(3,994)	(15,094)
2066	0	0	0	3,924	0	3,924	1,184	179	0	509	1,872	(2,052)	(15,172)
2067	0	0	0	3,987	0	3,987	1,151	162	0	520	1,833	(2,052)	(15,249)
2068	0	0	0	4,051	0	4,051	1,138	143	0	530	1,811	(2,240)	(15,249)
2069	0	0	0	4,117	0	4,117	1,142	125	0	542	1,809	(2,308)	(15,394)
2070	0	0	0	4,184	0	4,184	1,146	125	0	553	1,824	(2,360)	(15,461)
NOM	0	9,955	90	137,991	0	148,035	45,828.71	11,768.22	0.00	12,619.84	70,217	(77,818)	
NPV	0	2,478	33	26,673	0	29,184	8,987	3,475	0	1,261	13,723	(15,461)	

7.52 %  
0.47

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER ..... 0.39 kW  
 (2) GENERATOR kW REDUCTION PER CUSTOMER ..... 0.5089 kW  
 (3) kW LINE LOSS PERCENT AGE ..... 6.03 %  
 (4) GENERATOR kWh REDUCTION PER CUSTOMER ..... 1,138.75 kWh  
 (5) kWh LINE LOSS PERCENTAGE ..... 4.71 %  
 (6) GROUP LINE LOSS MULTIPLIER ..... 1.00  
 (7) CUSTOMER kWh INCREASE AT METER ..... 0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM ..... 50 YEARS  
 (2) GENERATOR ECONOMIC LIFE ..... 40 YEARS  
 (3) T&D ECONOMIC LIFE ..... 40 YEARS  
 (4) K FACTOR FOR GENERATION ..... 1.42106  
 (5) K FACTOR FOR T & D ..... 1.38286

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER ..... \*\*\* \$/CUST  
 (2) UTILITY RECURRING COST PER CUSTOMER ..... \*\*\* \$/CUST  
 (3) UTILITY COST ESCALATION RATE ..... \*\*\* %\*\*  
 (4) CUSTOMER EQUIPMENT COST ..... \*\*\* \$/CUST  
 (5) CUSTOMER EQUIPMENT ESCALATION RATE ..... \*\*\* %\*\*  
 (6) CUSTOMER O & M COST ..... \*\*\* \$/CUSTYR  
 (7) CUSTOMER O & M COST ESCALATION RATE ..... \*\*\* %\*\*  
 (8) INCREASED SUPPLY COSTS ..... \*\*\* %\*\*  
 (9) SUPPLY COSTS ESCALATION RATES ..... \*\*\* %\*\*  
 (10) UTILITY DISCOUNT RATE ..... 7.52 %  
 (11) UTILITY AFUDC RATE ..... 6.22 %  
 (12) UTILITY NON RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CUST  
 (13) UTILITY RECURRING REBATE/INCENTIVE ..... \*\*\* \$/CUST  
 (14) UTILITY REBATE/INCENTIVE ESCALATION RATE ..... \*\*\* %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
 \*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV.**

**AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR ..... 2021  
 (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT ..... 2031  
 (3) IN-SERVICE YEAR FOR AVOIDED T&D ..... 2023-2025  
 (4) BASE YEAR AVOIDED GENERATING COST ..... 480,740,799.7 \$/KW  
 (5) BASE YEAR AVOIDED TRANSMISSION COST ..... 362,488,238.7 \$/KW  
 (6) BASE YEAR DISTRIBUTION COST ..... 95,786.25 \$/KW  
 (7) GEN, TRAN & DIST COST ESCALATION RATE ..... 2.00 %\*\*  
 (8) GENERATOR FIXED O & M COST ..... 24,027,416.97 \$/KW/YR  
 (9) GENERATOR FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (10) TRANSMISSION FIXED O & M COST ..... 3,963,343.231 \$/KW  
 (11) DISTRIBUTION FIXED O & M COST ..... 2,733,632,729 \$/KW  
 (12) T&D FIXED O&M ESCALATION RATE ..... 2.5 %\*\*  
 (13) AVOIDED GEN UNIT VARIABLE O & M COSTS ..... 0.012498149 CENTS/\$kWh  
 (14) GENERATOR VARIABLE O&M COST ESCALATION RATE ..... 2.5 %\*\*  
 (15) GENERATOR CAPACITY FACTOR ..... 90 \*\* (In-service year)  
 (16) AVOIDED GENERATING UNIT FUEL COST ..... 3.737763 CENTS/\$kWh\*\* (In-service year)  
 (17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE ..... 1.61 %\*\*

**V.**

**NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON FUEL COST IN CUSTOMER BILL ..... \*\*\* CENTS/\$kWh  
 (2) NON-FUEL COST ESCALATION RATE ..... \*\*\* %  
 (3) DEMAND CHARGE IN CUSTOMER BILL ..... \*\*\* \$/KW/MO  
 (4) DEMAND CHARGE ESCALATION RATE ..... \*\*\* %

**VI.**

**COST-EFFECTIVENESS RATIOS**

(1) RIM TEST ..... 0.493  
 (2) TRC TEST ..... 1.437  
 (3) PARTICIPANT TEST ..... 3.86

\* INPUT DATA - PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	145	1,133	0	1,278	295	0	2,802	0	2,802	2,802
2023	149	1,133	0	1,282	925	0	2,872	0	2,872	2,872
2024	153	1,133	0	1,286	1,604	0	2,943	0	2,943	2,943
2025	0	0	0	0	2,036	0	0	0	0	0
2026	0	0	0	0	2,134	0	0	0	0	0
2027	0	0	0	0	2,196	0	0	0	0	0
2028	0	0	0	0	2,261	0	0	0	0	0
2029	0	0	0	0	2,328	0	0	0	0	0
2030	0	0	0	0	2,386	0	0	0	0	0
2031	0	0	0	0	2,419	0	0	0	0	0
2032	0	0	0	0	2,462	0	0	0	0	0
2033	0	0	0	0	2,508	0	0	0	0	0
2034	0	0	0	0	2,551	0	0	0	0	0
2035	0	0	0	0	2,608	0	0	0	0	0
2036	0	0	0	0	2,696	0	0	0	0	0
2037	0	0	0	0	2,757	0	0	0	0	0
2038	0	0	0	0	2,821	0	0	0	0	0
2039	0	0	0	0	2,875	0	0	0	0	0
2040	0	0	0	0	2,935	0	0	0	0	0
2041	0	0	0	0	2,992	0	0	0	0	0
2042	238	1,133	0	1,371	3,030	0	4,591	0	4,591	4,591
2043	244	1,133	0	1,377	3,123	0	4,706	0	4,706	4,706
2044	250	1,133	0	1,383	3,196	0	4,823	0	4,823	4,823
2045	0	0	0	0	3,253	0	0	0	0	0
2046	0	0	0	0	3,328	0	0	0	0	0
2047	0	0	0	0	3,379	0	0	0	0	0
2048	0	0	0	0	3,420	0	0	0	0	0
2049	0	0	0	0	3,475	0	0	0	0	0
2050	0	0	0	0	3,538	0	0	0	0	0
2051	0	0	0	0	3,588	0	0	0	0	0
2052	0	0	0	0	3,638	0	0	0	0	0
2053	0	0	0	0	3,689	0	0	0	0	0
2054	0	0	0	0	3,741	0	0	0	0	0
2055	0	0	0	0	3,794	0	0	0	0	0
2056	0	0	0	0	3,847	0	0	0	0	0
2057	0	0	0	0	3,901	0	0	0	0	0
2058	0	0	0	0	3,956	0	0	0	0	0
2059	0	0	0	0	4,011	0	0	0	0	0
2060	0	0	0	0	4,067	0	0	0	0	0
2061	0	0	0	0	4,139	0	0	0	0	0
2062	390	1,133	0	1,523	4,212	0	7,522	0	7,522	7,522
2063	400	1,133	0	1,533	4,287	0	7,711	0	7,711	7,711
2064	410	1,133	0	1,543	4,360	0	7,903	0	7,903	7,903
2065	0	0	0	0	4,433	0	0	0	0	0
2066	0	0	0	0	4,506	0	0	0	0	0
2067	0	0	0	0	4,578	0	0	0	0	0
2068	0	0	0	0	4,652	0	0	0	0	0
2069	0	0	0	0	4,728	0	0	0	0	0
2070	0	0	0	0	4,805	0	0	0	0	0

NOM	2,379	10,197	0	12,576	158,462	0	45,872	0	0	45,872
NPV	592	3,797	0	4,389	30,635	0	11,420	0	0	11,420

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS



INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Res Insulation

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.51	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.00	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.45	0.00	0.00
2026	2.50	2.50	2.50	0.00	0.00	2.00	12.10	0.00	0.00
2027	2.50	2.50	2.50	0.00	0.00	2.00	12.68	0.00	0.00
2028	2.50	2.50	2.50	0.00	0.00	2.00	13.06	0.00	0.00
2029	2.50	2.50	2.50	0.00	0.00	2.00	13.44	0.00	0.00
2030	2.50	2.50	2.50	0.00	0.00	2.00	13.84	0.00	0.00
2031	2.50	2.50	2.50	3.74	90.35	2.00	14.19	0.00	0.00
2032	2.50	2.50	2.50	3.80	90.70	2.00	14.38	0.00	0.00
2033	2.50	2.50	2.50	3.89	90.65	2.00	14.64	0.00	0.00
2034	2.50	2.50	2.50	4.07	91.31	2.00	14.91	0.00	0.00
2035	2.50	2.50	2.50	4.16	91.26	2.00	15.17	0.00	0.00
2036	2.50	2.50	2.50	4.25	91.60	2.00	15.51	0.00	0.00
2037	2.50	2.50	2.50	4.31	91.74	2.00	16.03	0.00	0.00
2038	2.50	2.50	2.50	4.37	91.70	2.00	16.39	0.00	0.00
2039	2.50	2.50	2.50	4.37	91.80	2.00	16.77	0.00	0.00
2040	2.50	2.50	2.50	4.42	91.69	2.00	17.09	0.00	0.00
2041	2.50	2.50	2.50	4.42	91.92	2.00	17.45	0.00	0.00
2042	2.50	2.50	2.50	4.42	92.14	2.00	17.79	0.00	0.00
2043	2.50	2.50	2.50	4.45	91.95	2.00	18.01	0.00	0.00
2044	2.50	2.50	2.50	4.45	91.83	2.00	18.56	0.00	0.00
2045	2.50	2.50	2.50	4.62	91.83	2.00	18.99	0.00	0.00
2046	2.50	2.50	2.50	4.71	91.77	2.00	19.33	0.00	0.00
2047	2.50	2.50	2.50	4.73	92.00	2.00	19.78	0.00	0.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	20.08	0.00	0.00
2049	2.50	2.50	2.50	4.84	91.92	2.00	20.33	0.00	0.00
2050	2.50	2.50	2.50	4.86	91.95	2.00	20.65	0.00	0.00
2051	2.50	2.50	2.50	4.95	91.91	2.00	21.03	0.00	0.00
2052	2.50	2.50	2.50	4.88	91.81	2.00	21.32	0.00	0.00
2053	2.50	2.50	2.50	4.90	91.90	2.00	21.62	0.00	0.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	21.93	0.00	0.00
2055	2.50	2.50	2.50	4.88	92.48	2.00	22.23	0.00	0.00
2056	2.50	2.50	2.50	4.84	91.92	2.00	22.55	0.00	0.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	22.86	0.00	0.00
2058	2.50	2.50	2.50	4.81	92.01	2.00	23.18	0.00	0.00
2059	2.50	2.50	2.50	4.85	91.90	2.00	23.51	0.00	0.00
2060	2.50	2.50	2.50	5.04	92.43	2.00	23.84	0.00	0.00
2061	2.50	2.50	2.50	5.12	92.02	2.00	24.17	0.00	0.00
2062	2.50	2.50	2.50	5.11	91.94	2.00	24.60	0.00	0.00
2063	2.50	2.50	2.50	5.10	92.60	2.00	25.03	0.00	0.00
2064	2.50	2.50	2.50	5.13	92.00	2.00	25.48	0.00	0.00
2065	2.50	2.50	2.50	5.32	91.95	2.00	25.91	0.00	0.00
2066	2.50	2.50	2.50	5.23	92.71	2.00	26.34	0.00	0.00
2067	2.50	2.50	2.50	5.24	92.04	2.00	26.77	0.00	0.00
2068	2.50	2.50	2.50	5.26	92.04	2.00	27.20	0.00	0.00
2069	2.50	2.50	2.50	5.23	92.03	2.00	27.64	0.00	0.00
2070	2.50	2.50	2.50	5.23	92.03	2.00	28.09	0.00	0.00

**Legend:**

- Column (1) used for: Utility Cost
- Column (1) used for: Customer Equipment
- Column (1) used for: Supply Costs
- Column (3) used for: Customer O&M Cost
- Column (3) used for: Generator Fixed O&M
- Column (3) used for: T&D Fixed O&M
- Column (6) used for: Generator Variable O&M
- Column (6) used for: Gen. Trans. & Dist Cost

PROGRAM NAME: Res Insulation  
CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2031	4,998	83	0	314	83	87	2	126	27	0	721	721	721	5,026
2032	4,835	80	0	304	139	85	2	126	(33)	0	702	653	1,374	4,900
2033	4,653	77	0	293	188	83	2	126	(86)	0	682	590	1,963	4,775
2034	4,478	74	0	282	230	80	2	126	(132)	0	662	532	2,496	4,649
2035	4,308	71	0	271	268	78	2	126	(173)	0	642	481	2,976	4,524
2036	4,144	69	0	261	300	76	2	126	(208)	0	624	434	3,410	4,398
2037	3,986	66	0	251	327	74	2	126	(239)	0	605	392	3,802	4,272
2038	3,832	63	0	241	350	72	1	126	(265)	0	588	354	4,156	4,147
2039	3,680	61	0	231	372	70	1	126	(290)	0	570	319	4,475	4,021
2040	3,529	58	0	222	394	67	1	126	(316)	0	553	288	4,763	3,895
2041	3,378	56	0	212	416	65	1	126	(341)	0	535	259	5,022	3,770
2042	3,227	53	0	203	438	63	1	126	(367)	0	518	233	5,255	3,644
2043	3,076	51	0	193	460	61	1	126	(392)	0	501	210	5,465	3,518
2044	2,925	48	0	184	482	59	1	126	(417)	0	483	188	5,653	3,393
2045	2,774	46	0	174	504	57	1	126	(443)	0	466	169	5,822	3,267
2046	2,623	43	0	165	527	54	1	126	(468)	0	448	151	5,972	3,141
2047	2,472	41	0	155	549	52	1	126	(493)	0	431	135	6,107	3,016
2048	2,321	38	0	146	571	50	1	126	(519)	0	413	120	6,228	2,890
2049	2,170	36	0	136	593	48	1	126	(544)	0	396	107	6,335	2,764
2050	2,019	33	0	127	615	46	1	126	(569)	0	378	95	6,430	2,639
2051	1,882	31	0	118	637	43	1	126	(594)	0	362	85	6,515	2,513
2052	1,773	29	0	111	658	41	1	126	(619)	0	349	76	6,591	2,387
2053	1,677	28	0	105	678	39	1	126	(644)	0	337	68	6,660	2,262
2054	1,581	26	0	99	697	37	1	126	(669)	0	325	61	6,721	2,136
2055	1,485	25	0	93	716	35	1	126	(694)	0	314	55	6,776	2,010
2056	1,389	23	0	87	734	33	1	126	(719)	0	302	49	6,825	1,885
2057	1,293	21	0	81	752	30	1	126	(744)	0	290	44	6,869	1,759
2058	1,198	20	0	75	769	28	1	126	(769)	0	278	39	6,908	1,633
2059	1,102	18	0	69	786	26	1	126	(794)	0	266	35	6,943	1,508
2060	1,006	17	0	63	803	24	0	126	(819)	0	254	31	6,974	1,382
2061	910	15	0	57	820	22	0	126	(844)	0	242	27	7,002	1,257
2062	814	13	0	51	837	20	0	126	(869)	0	230	24	7,026	1,131
2063	719	12	0	45	854	17	0	126	(894)	0	219	21	7,048	1,005
2064	623	10	0	39	871	15	0	126	(919)	0	209	19	7,067	1,005
2065	527	9	0	33	888	13	0	126	(944)	0	199	17	7,084	1,005
2066	431	7	0	27	905	11	0	126	(969)	0	190	15	7,099	1,005
2067	335	6	0	21	922	9	0	126	(994)	0	180	13	7,112	1,005
2068	240	4	0	15	939	7	0	126	(1,019)	0	170	12	7,123	1,005
2069	144	2	0	9	956	5	0	126	(1,044)	0	161	10	7,134	1,005
2070	48	1	0	3	973	4	0	126	(1,069)	0	151	9	7,142	1,005

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	5,026
IN SERVICE YEAR	2031
BOOK LIFE (YRS)	40
EFFECT. TAX RATE	25.345%
DISCOUNT RATE	7.52%
PROPERTY TAX	1.73%
PROPERTY INSURANCE	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9%*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031		183	183	126	126	126	126	27	316	0	0	0	27	70
2032	3.75%	352	535	126	251	126	251	(33)	316	0	0	0	(33)	37
2033	7.22%	326	861	126	377	126	377	(86)	316	0	0	0	(86)	37
2034	6.68%	301	1,163	126	503	126	503	(132)	316	0	0	0	(132)	(48)
2035	6.18%	279	1,441	126	628	126	628	(173)	316	0	0	0	(173)	(180)
2036	5.71%	258	1,699	126	754	126	754	(208)	316	0	0	0	(208)	(353)
2037	5.29%	239	1,938	126	880	126	880	(239)	316	0	0	0	(239)	(562)
2038	4.89%	221	2,159	126	1,005	126	1,005	(265)	316	0	0	0	(265)	(801)
2039	4.52%	218	2,376	126	1,131	126	1,131	(290)	316	0	0	0	(290)	(1,066)
2040	4.46%	218	2,594	126	1,257	126	1,257	(316)	316	0	0	0	(316)	(1,356)
2041	4.46%	218	2,812	126	1,382	126	1,382	(341)	316	0	0	0	(341)	(1,672)
2042	4.46%	218	3,030	126	1,508	126	1,508	(367)	316	0	0	0	(367)	(2,013)
2043	4.46%	218	3,247	126	1,633	126	1,633	(392)	316	0	0	0	(392)	(2,380)
2044	4.46%	218	3,465	126	1,759	126	1,759	(417)	316	0	0	0	(417)	(2,772)
2045	4.46%	218	3,683	126	1,885	126	1,885	(443)	316	0	0	0	(443)	(3,189)
2046	4.46%	218	3,901	126	2,010	126	2,010	(468)	316	0	0	0	(468)	(3,632)
2047	4.46%	218	4,118	126	2,136	126	2,136	(493)	316	0	0	0	(493)	(4,099)
2048	4.46%	218	4,336	126	2,262	126	2,262	(519)	316	0	0	0	(519)	(4,593)
2049	4.46%	218	4,554	126	2,387	126	2,387	(544)	316	0	0	0	(544)	(5,111)
2050	4.46%	218	4,772	126	2,513	126	2,513	(569)	316	0	0	0	(569)	(5,655)
2051	2.23%	109	4,880	126	2,639	126	2,639	(577)	316	0	0	0	(577)	(6,224)
2052	0.00%	0	4,880	126	2,764	126	2,764	(577)	316	0	0	0	(577)	(6,791)
2053	0.00%	0	4,880	126	2,890	126	2,890	(577)	316	0	0	0	(577)	(7,329)
2054	0.00%	0	4,880	126	3,016	126	3,016	(477)	316	0	0	0	(477)	(7,836)
2055	0.00%	0	4,880	126	3,141	126	3,141	(448)	316	0	0	0	(448)	(8,313)
2056	0.00%	0	4,880	126	3,267	126	3,267	(418)	316	0	0	0	(418)	(8,761)
2057	0.00%	0	4,880	126	3,393	126	3,393	(388)	316	0	0	0	(388)	(9,179)
2058	0.00%	0	4,880	126	3,518	126	3,518	(358)	316	0	0	0	(358)	(9,567)
2059	0.00%	0	4,880	126	3,644	126	3,644	(328)	316	0	0	0	(328)	(9,925)
2060	0.00%	0	4,880	126	3,770	126	3,770	(298)	316	0	0	0	(298)	(10,253)
2061	0.00%	0	4,880	126	3,895	126	3,895	(269)	316	0	0	0	(269)	(10,552)
2062	0.00%	0	4,880	126	4,021	126	4,021	(239)	316	0	0	0	(239)	(10,820)
2063	0.00%	0	4,880	126	4,147	126	4,147	(209)	316	0	0	0	(209)	(11,059)
2064	0.00%	0	4,880	126	4,272	126	4,272	(179)	316	0	0	0	(179)	(11,268)
2065	0.00%	0	4,880	126	4,398	126	4,398	(149)	316	0	0	0	(149)	(11,447)
2066	0.00%	0	4,880	126	4,524	126	4,524	(119)	316	0	0	0	(119)	(11,596)
2067	0.00%	0	4,880	126	4,649	126	4,649	(90)	316	0	0	0	(90)	(11,716)
2068	0.00%	0	4,880	126	4,775	126	4,775	(60)	316	0	0	0	(60)	(11,805)
2069	0.00%	0	4,880	126	4,900	126	4,900	(30)	316	0	0	0	(30)	(11,865)
2070	0.00%	0	4,880	126	5,026	126	5,026	0	316	0	0	0	0	(11,895)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	43
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	316
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031	3.75%	183	27	4,900	126	70	5,069	4,927	4,998
2032	7.22%	352	(33)	4,775	251	37	4,927	4,742	4,835
2033	6.68%	326	(86)	4,649	377	(48)	4,742	4,564	4,653
2034	6.18%	301	(132)	4,524	503	(180)	4,564	4,391	4,478
2035	5.71%	279	(173)	4,398	628	(353)	4,391	4,225	4,308
2036	5.29%	258	(208)	4,272	754	(562)	4,225	4,064	4,144
2037	4.89%	239	(239)	4,147	880	(801)	4,064	3,908	3,986
2038	4.52%	221	(265)	4,021	1,005	(1,066)	3,908	3,756	3,832
2039	4.46%	218	(290)	3,895	1,131	(1,356)	3,756	3,605	3,680
2040	4.46%	218	(316)	3,770	1,257	(1,672)	3,605	3,454	3,529
2041	4.46%	218	(341)	3,644	1,382	(2,013)	3,454	3,303	3,378
2042	4.46%	218	(367)	3,518	1,508	(2,380)	3,303	3,152	3,227
2043	4.46%	218	(392)	3,393	1,633	(2,772)	3,152	3,001	3,076
2044	4.46%	218	(417)	3,267	1,759	(3,189)	3,001	2,850	2,925
2045	4.46%	218	(443)	3,141	1,885	(3,632)	2,850	2,699	2,774
2046	4.46%	218	(468)	3,016	2,010	(4,099)	2,699	2,548	2,623
2047	4.46%	218	(493)	2,890	2,136	(4,593)	2,548	2,397	2,472
2048	4.46%	218	(519)	2,764	2,262	(5,111)	2,397	2,246	2,321
2049	4.46%	218	(544)	2,639	2,387	(5,655)	2,246	2,095	2,170
2050	4.46%	218	(569)	2,513	2,513	(6,224)	2,095	1,944	2,019
2051	2.23%	109	(567)	2,387	2,639	(6,791)	1,944	1,820	1,882
2052	0.00%	0	(537)	2,262	2,764	(7,329)	1,820	1,725	1,773
2053	0.00%	0	(507)	2,136	2,890	(7,836)	1,725	1,629	1,677
2054	0.00%	0	(477)	2,010	3,016	(8,313)	1,629	1,533	1,581
2055	0.00%	0	(448)	1,885	3,141	(8,761)	1,533	1,437	1,485
2056	0.00%	0	(418)	1,759	3,267	(9,179)	1,437	1,341	1,389
2057	0.00%	0	(388)	1,633	3,393	(9,567)	1,341	1,246	1,293
2058	0.00%	0	(358)	1,508	3,518	(9,925)	1,246	1,150	1,198
2059	0.00%	0	(328)	1,382	3,644	(10,253)	1,150	1,054	1,102
2060	0.00%	0	(298)	1,257	3,770	(10,552)	1,054	958	1,006
2061	0.00%	0	(269)	1,131	3,895	(10,820)	958	862	910
2062	0.00%	0	(239)	1,005	4,021	(11,059)	862	766	814
2063	0.00%	0	(209)	880	4,147	(11,268)	766	671	719
2064	0.00%	0	(179)	754	4,272	(11,447)	671	575	623
2065	0.00%	0	(149)	628	4,398	(11,596)	575	479	527
2066	0.00%	0	(119)	503	4,524	(11,716)	479	383	431
2067	0.00%	0	(90)	377	4,649	(11,805)	383	287	335
2068	0.00%	0	(60)	251	4,775	(11,865)	287	192	240
2069	0.00%	0	(30)	126	4,900	(11,895)	192	96	144
2070	0.00%	0	0	(0)	5,026	(11,895)	96	(0)	48

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	4,618	4,618
EQUITY AFUDC	316	
DEBT AFUDC	92	262
CPI		
ITC Basis Reduction (Solar)		
TOTAL	5,026	4,880

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWH)	(5) AVOIDED MARGINAL FUEL COST (C/KWH)	(6)* INCREASED MARGINAL FUEL COST (C/KWH)	(7) REPLACEMENT FUEL COST (C/KWH)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	5,150	5,150	2.42	3.39	2.82	0.00	1.00	1.00
2023	10,300	10,300	2.09	2.45	2.27	0.00	1.00	1.00
2024	15,450	15,450	2.10	2.49	2.29	0.00	1.00	1.00
2025	15,450	15,450	2.31	2.73	2.50	0.00	1.00	1.00
2026	15,450	15,450	2.20	2.52	2.35	0.00	1.00	1.00
2027	15,450	15,450	2.34	2.73	2.52	0.00	1.00	1.00
2028	15,450	15,450	2.38	2.70	2.53	0.00	1.00	1.00
2029	15,450	15,450	2.58	2.99	2.75	0.00	1.00	1.00
2030	15,450	15,450	2.66	2.99	2.80	0.00	1.00	1.00
2031	15,450	15,450	2.84	3.20	2.98	4.16	1.00	1.00
2032	15,450	15,450	2.98	3.45	3.16	4.30	1.00	1.00
2033	15,450	15,450	3.18	3.75	3.40	4.39	1.00	1.00
2034	15,450	15,450	3.21	3.64	3.38	4.54	1.00	1.00
2035	15,450	15,450	3.33	3.80	3.51	4.65	1.00	1.00
2036	15,450	15,450	3.45	3.87	3.62	4.74	1.00	1.00
2037	15,450	15,450	3.53	3.94	3.69	4.78	1.00	1.00
2038	15,450	15,450	3.62	4.05	3.80	4.88	1.00	1.00
2039	15,450	15,450	3.65	4.10	3.84	4.92	1.00	1.00
2040	15,450	15,450	3.74	4.17	3.92	5.00	1.00	1.00
2041	15,450	15,450	3.84	4.38	4.07	5.01	1.00	1.00
2042	15,450	15,450	3.85	4.30	4.04	5.10	1.00	1.00
2043	15,450	15,450	3.90	4.33	4.09	5.03	1.00	1.00
2044	15,450	15,450	4.09	4.47	4.25	5.20	1.00	1.00
2045	15,450	15,450	4.12	4.63	4.34	5.33	1.00	1.00
2046	15,450	15,450	4.11	4.57	4.31	5.30	1.00	1.00
2047	15,450	15,450	4.21	4.65	4.41	5.43	1.00	1.00
2048	15,450	15,450	4.23	4.72	4.45	5.42	1.00	1.00
2049	15,450	15,450	4.28	4.80	4.52	5.44	1.00	1.00
2050	15,450	15,450	4.36	4.85	4.58	5.56	1.00	1.00
2051	15,450	15,450	4.54	4.98	4.73	5.54	1.00	1.00
2052	15,450	15,450	4.44	4.97	4.68	5.50	1.00	1.00
2053	15,450	15,450	4.47	4.99	4.71	5.41	1.00	1.00
2054	15,450	15,450	4.52	5.03	4.76	5.46	1.00	1.00
2055	15,450	15,450	4.57	5.13	4.83	5.43	1.00	1.00
2056	15,450	15,450	4.73	5.12	4.93	5.47	1.00	1.00
2057	15,450	15,450	4.64	5.23	4.92	5.37	1.00	1.00
2058	15,450	15,450	4.68	5.24	4.94	5.50	1.00	1.00
2059	15,450	15,450	4.75	5.30	5.01	5.66	1.00	1.00
2060	15,450	15,450	4.75	5.28	5.02	5.82	1.00	1.00
2061	15,450	15,450	4.79	5.39	5.08	5.69	1.00	1.00
2062	15,450	15,450	4.80	5.39	5.08	5.73	1.00	1.00
2063	15,450	15,450	4.89	5.52	5.20	5.77	1.00	1.00
2064	15,450	15,450	5.15	5.55	5.34	6.56	1.00	1.00
2065	15,450	15,450	4.96	5.59	5.27	5.86	1.00	1.00
2066	15,450	15,450	5.07	5.67	5.37	5.84	1.00	1.00
2067	15,450	15,450	5.09	5.67	5.39	5.94	1.00	1.00
2068	15,450	15,450	5.09	5.73	5.44	5.97	1.00	1.00
2069	15,450	15,450	5.09	5.73	5.44	5.97	1.00	1.00
2070	15,450	15,450	5.09	5.73	5.44	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Res Insulation

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	721	242	10	2326	2588	711
2032	702	248	10	2373	2684	649
2033	682	254	10	2431	2743	634
2034	662	260	11	2560	2853	640
2035	642	267	11	2613	2923	610
2036	624	274	11	2678	2989	598
2037	605	280	12	2723	3019	601
2038	588	287	12	2763	3085	565
2039	570	295	12	2762	3109	551
2040	553	302	13	2792	3160	500
2041	535	310	13	2800	3171	487
2042	518	317	13	2895	3240	503
2043	501	325	14	2820	3185	474
2044	483	333	14	2919	3288	462
2045	466	342	14	2977	3372	427
2046	448	350	15	2997	3356	454
2047	431	359	15	3050	3442	413
2048	413	368	15	3067	3431	433
2049	396	377	16	3076	3443	422
2050	378	387	16	3131	3519	393
2051	362	396	17	3088	3502	361
2052	349	406	17	3100	3483	390
2053	337	416	17	3050	3426	395
2054	325	427	18	3110	3481	399
2055	314	437	18	3061	3440	390
2056	302	448	19	3089	3488	370
2057	290	460	19	3046	3405	410
2058	278	471	20	3073	3479	363
2059	266	483	20	3206	3605	370
2060	254	495	21	3246	3689	327
2061	242	507	21	3233	3603	401
2062	230	520	22	3254	3653	373
2063	219	533	22	3254	3657	371
2064	209	546	23	3368	4155	-9
2065	199	560	24	3340	3742	380
2066	190	574	24	3323	3702	408
2067	180	588	25	3333	3764	361
2068	170	603	25	3312	3787	324
2069	161	618	26	3312	3787	330
2070	151	634	27	3312	3787	336

NOM	15,946	16,301	683	119,861	135,234	17,557
NPV	3,457.63	2,136.01	89	18,196	20,450	3,429

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL.SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	108	0
2023	141	16	157	9	9	37	225	0
2024	282	28	310	56	15	15	383	0
2025	423	34	457	85	18	103	503	0
2026	410	35	445	83	19	101	461	0
2027	396	36	433	80	19	100	503	0
2028	384	37	421	78	20	98	493	0
2029	372	38	410	76	20	96	550	0
2030	361	39	400	74	21	95	545	0
2031	349	40	389	72	21	93	584	0
2032	338	41	379	70	22	92	633	0
2033	327	42	369	68	22	91	691	0
2034	316	43	358	67	23	89	664	0
2035	304	44	348	65	23	88	694	0
2036	293	45	338	63	24	87	704	0
2037	282	46	328	61	25	86	716	0
2038	271	47	318	59	25	84	735	0
2039	261	49	310	57	26	83	745	0
2040	253	50	303	55	26	82	757	0
2041	246	51	297	53	27	81	800	0
2042	239	52	292	52	28	79	783	0
2043	233	54	286	50	29	78	785	0
2044	226	55	281	48	29	77	806	0
2045	220	56	276	47	30	77	844	0
2046	213	58	271	45	31	76	829	0
2047	206	59	266	44	31	76	842	0
2048	200	61	261	43	32	75	858	0
2049	193	62	256	42	33	75	872	0
2050	187	64	250	41	34	75	881	0
2051	180	65	246	40	35	74	902	0
2052	174	67	241	39	36	74	904	0
2053	167	69	236	37	36	74	906	0
2054	160	70	231	36	37	74	914	0
2055	154	72	226	35	38	73	934	0
2056	147	74	221	34	39	73	923	0
2057	141	76	216	33	40	73	952	0
2058	134	78	212	32	41	73	953	0
2059	128	80	207	30	42	73	963	0
2060	122	82	204	29	43	73	959	0
2061	117	84	200	28	44	73	981	0
2062	111	86	197	27	46	73	981	0
2063	106	88	194	26	47	73	1,006	0
2064	101	90	191	25	48	73	998	0
2065	95	92	188	24	49	73	1,019	0
2066	90	95	185	23	50	73	1,031	0
2067	63	97	160	22	52	73	1,029	0
2068	33	100	132	21	53	74	1,043	0
2069	4	102	106	20	54	74	1,043	0
2070	(0)	105	105	19	56	74	1,043	0

NOM	10,149	2,954.41	13,103	2,242	1,569	3,811	38,478	0
NPV	3,467	527	3,993	723	280	1,003	7,557	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.



AVOIDED GENERATING EMISSION IMPACT  
PROGRAM/METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	8	0	8
2027	0	0	13	0	13
2028	0	0	22	0	22
2029	0	0	31	0	31
2030	0	0	38	0	38
2031	143	161	45	0	27
2032	169	191	54	0	32
2033	198	223	63	0	38
2034	232	261	73	0	44
2035	295	332	93	0	56
2036	370	416	116	0	69
2037	452	509	142	0	85
2038	543	611	170	0	102
2039	643	725	202	0	120
2040	753	848	236	0	141
2041	863	971	270	0	161
2042	983	1,107	307	0	183
2043	1,111	1,252	348	0	208
2044	1,253	1,411	392	0	234
2045	1,408	1,586	441	0	264
2046	1,583	1,783	495	0	295
2047	1,673	1,884	523	0	312
2048	1,767	1,990	553	0	330
2049	1,869	2,105	585	0	349
2050	1,976	2,225	618	0	369
2051	2,015	2,269	631	0	377
2052	2,059	2,319	644	0	385
2053	2,104	2,369	658	0	393
2054	2,160	2,433	672	0	400
2055	2,192	2,469	686	0	410
2056	2,255	2,539	700	0	416
2057	2,287	2,576	715	0	427
2058	2,333	2,627	730	0	436
2059	2,395	2,697	745	0	443
2060	2,435	2,742	761	0	454
2061	2,484	2,797	777	0	464
2062	2,554	2,876	793	0	471
2063	2,591	2,918	810	0	483
2064	2,644	2,977	827	0	494
2065	2,722	3,065	844	0	501
2066	2,759	3,107	862	0	514
2067	2,817	3,172	880	0	525
2068	2,876	3,238	899	0	536
2069	2,936	3,306	918	0	547
2070	2,998	3,375	937	0	559

NOM	67,900	76,459	21,329	0	12,770
NPV	6,518	7,339	2,104	0	1,282

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	145	2,802	0	2,947	0	0	108	0	108	108	(2,640)
2023	0	149	2,872	0	3,021	0	194	225	0	419	419	(4,890)
2024	0	153	2,943	0	3,096	0	381	503	0	884	884	(6,765)
2025	0	0	0	0	0	0	560	503	0	1,063	1,063	(5,970)
2026	0	0	0	0	0	0	546	461	8	1,015	1,015	(5,264)
2027	0	0	0	0	0	0	532	503	13	1,048	1,048	(4,586)
2028	0	0	0	0	0	0	519	493	22	1,034	1,034	(3,964)
2029	0	0	0	0	0	0	506	550	31	1,087	1,087	(3,355)
2030	0	0	0	0	0	0	494	545	38	1,077	1,077	(2,794)
2031	0	0	0	0	0	711	483	584	37	1,804	1,804	(1,921)
2032	0	0	0	0	0	649	633	633	32	1,785	1,785	(1,117)
2033	0	0	0	0	0	634	691	691	38	1,822	1,822	(354)
2034	0	0	0	0	0	640	448	664	44	1,795	1,795	345
2035	0	0	0	0	0	610	436	694	56	1,796	1,796	995
2036	0	0	0	0	0	598	425	704	69	1,797	1,797	1,601
2037	0	0	0	0	0	601	414	716	85	1,816	1,816	2,169
2038	0	0	0	0	0	565	403	735	102	1,805	1,805	2,695
2039	0	0	0	0	0	531	393	745	120	1,789	1,789	3,180
2040	0	0	0	0	0	500	384	757	141	1,783	1,783	3,629
2041	0	0	0	0	0	487	378	800	161	1,826	1,826	4,057
2042	0	238	4,591	0	4,829	503	371	783	183	1,840	1,840	(2,989)
2043	0	244	4,706	0	4,950	474	365	785	208	1,831	1,831	2,774
2044	0	250	4,823	0	5,073	462	358	806	234	1,861	1,861	(3,212)
2045	0	0	0	0	0	427	355	844	264	1,887	1,887	2,499
2046	0	0	0	0	0	454	347	829	295	1,925	1,925	2,813
2047	0	0	0	0	0	413	341	842	312	1,909	1,909	3,102
2048	0	0	0	0	0	433	336	858	330	1,957	1,957	3,378
2049	0	0	0	0	0	422	331	872	349	1,974	1,974	3,637
2050	0	0	0	0	0	393	325	881	369	1,968	1,968	3,877
2051	0	0	0	0	0	361	320	902	377	1,960	1,960	4,100
2052	0	0	0	0	0	380	315	904	385	1,993	1,993	4,310
2053	0	0	0	0	0	395	310	906	393	2,003	2,003	4,507
2054	0	0	0	0	0	399	304	914	400	2,017	2,017	4,691
2055	0	0	0	0	0	390	299	934	410	2,034	2,034	4,863
2056	0	0	0	0	0	370	294	923	416	2,004	2,004	5,021
2057	0	0	0	0	0	410	290	952	427	2,078	2,078	5,174
2058	0	0	0	0	0	363	285	953	436	2,036	2,036	5,313
2059	0	0	0	0	0	370	280	963	443	2,056	2,056	5,444
2060	0	0	0	0	0	327	276	959	454	2,016	2,016	5,563
2061	0	0	0	0	0	401	273	981	464	2,119	2,119	5,679
2062	0	390	7,522	0	7,913	373	270	981	471	2,095	2,095	(5,817)
2063	0	400	7,711	0	8,110	371	266	1,006	483	2,127	2,127	(5,098)
2064	0	410	7,903	0	8,313	(9)	263	998	494	1,746	1,746	(6,567)
2065	0	0	0	0	0	380	260	1,019	501	2,161	2,161	4,896
2066	0	0	0	0	0	408	258	1,031	514	2,212	2,212	4,981
2067	0	0	0	0	0	361	233	1,029	525	2,148	2,148	5,057
2068	0	0	0	0	0	324	206	1,043	536	2,109	2,109	5,127
2069	0	0	0	0	0	330	180	1,043	547	2,101	2,101	5,191
2070	0	0	0	0	0	336	179	1,043	559	2,118	2,118	5,252

NOM	0	2,379	45,872	0	48,251	17,557.25	16,914	38,478	12,770	85,720	37,469	(2,640)
NPV	0	592	11,420	0	12,012	3,429	4,996	7,557	1,282	17,264.32	5,252	(4,890)

Discount Rate: 7.52 %  
Benefit/Cost Ratio (Col(11) / Col(6)) : 1.44

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Insulation

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	388	0	1,133	0	1,521	2,802	0	0	2,802	(1,281)	(1,191)
2023	1,217	0	1,133	0	2,350	2,872	0	0	2,872	(521)	(1,642)
2024	2,111	0	1,133	0	3,244	2,943	0	0	2,943	301	(1,400)
2025	2,678	0	0	0	2,678	0	0	0	0	2,678	603
2026	2,807	0	0	0	2,807	0	0	0	0	2,807	2,557
2027	2,890	0	0	0	2,890	0	0	0	0	2,890	4,427
2028	2,975	0	0	0	2,975	0	0	0	0	2,975	6,217
2029	3,063	0	0	0	3,063	0	0	0	0	3,063	7,932
2030	3,139	0	0	0	3,139	0	0	0	0	3,139	9,566
2031	3,183	0	0	0	3,183	0	0	0	0	3,183	11,107
2032	3,240	0	0	0	3,240	0	0	0	0	3,240	12,565
2033	3,300	0	0	0	3,300	0	0	0	0	3,300	13,947
2034	3,357	0	0	0	3,357	0	0	0	0	3,357	15,255
2035	3,432	0	0	0	3,432	0	0	0	0	3,432	16,498
2036	3,548	0	0	0	3,548	0	0	0	0	3,548	17,693
2037	3,627	0	0	0	3,627	0	0	0	0	3,627	18,829
2038	3,712	0	0	0	3,712	0	0	0	0	3,712	19,910
2039	3,783	0	0	0	3,783	0	0	0	0	3,783	20,935
2040	3,862	0	0	0	3,862	0	0	0	0	3,862	21,908
2041	3,937	0	0	0	3,937	0	0	0	0	3,937	22,831
2042	3,987	0	1,133	0	5,120	4,591	0	0	4,591	529	22,946
2043	4,109	0	1,133	0	5,242	4,706	0	0	4,706	537	23,055
2044	4,205	0	1,133	0	5,338	4,823	0	0	4,823	515	23,152
2045	4,280	0	0	0	4,280	0	0	0	0	4,280	23,902
2046	4,379	0	0	0	4,379	0	0	0	0	4,379	24,616
2047	4,446	0	0	0	4,446	0	0	0	0	4,446	25,291
2048	4,500	0	0	0	4,500	0	0	0	0	4,500	25,925
2049	4,572	0	0	0	4,572	0	0	0	0	4,572	26,525
2050	4,655	0	0	0	4,655	0	0	0	0	4,655	27,093
2051	4,720	0	0	0	4,720	0	0	0	0	4,720	27,628
2052	4,787	0	0	0	4,787	0	0	0	0	4,787	28,133
2053	4,854	0	0	0	4,854	0	0	0	0	4,854	28,610
2054	4,922	0	0	0	4,922	0	0	0	0	4,922	29,059
2055	4,991	0	0	0	4,991	0	0	0	0	4,991	29,482
2056	5,062	0	0	0	5,062	0	0	0	0	5,062	29,882
2057	5,133	0	0	0	5,133	0	0	0	0	5,133	30,259
2058	5,205	0	0	0	5,205	0	0	0	0	5,205	30,614
2059	5,278	0	0	0	5,278	0	0	0	0	5,278	30,949
2060	5,352	0	0	0	5,352	0	0	0	0	5,352	31,265
2061	5,447	0	0	0	5,447	0	0	0	0	5,447	31,564
2062	5,542	0	1,133	0	6,675	7,522	0	0	7,522	(847)	31,521
2063	5,641	0	1,133	0	6,774	7,711	0	0	7,711	(936)	31,477
2064	5,737	0	1,133	0	6,870	7,903	0	0	7,903	(1,033)	31,431
2065	5,833	0	0	0	5,833	0	0	0	0	5,833	31,671
2066	5,929	0	0	0	5,929	0	0	0	0	5,929	31,897
2067	6,024	0	0	0	6,024	0	0	0	0	6,024	32,111
2068	6,121	0	0	0	6,121	0	0	0	0	6,121	32,313
2069	6,220	0	0	0	6,220	0	0	0	0	6,220	32,505
2070	6,322	0	0	0	6,322	0	0	0	0	6,322	32,685

NOM	208,503	0	10,197	0	218,700	45,872	0	0	45,872	172,827
NPV	40,309	0	3,797	0	44,106	11,420	0	0	11,420	32,685

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ) 3.86

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	145	1,133	295	0	1,573	108	194	0	0	108	(1,465)	(1,362)
2023	0	149	1,133	925	0	2,207	225	419	0	0	225	(1,788)	(2,908)
2024	0	153	1,133	1,604	0	2,890	383	0	0	0	383	(2,126)	(4,618)
2025	0	0	0	2,036	0	2,036	503	560	0	0	1,063	(973)	(5,346)
2026	0	0	0	2,134	0	2,134	461	546	0	8	1,015	(1,119)	(6,124)
2027	0	0	0	2,196	0	2,196	503	532	0	13	1,048	(1,149)	(6,868)
2028	0	0	0	2,261	0	2,261	493	519	0	22	1,034	(1,227)	(7,666)
2029	0	0	0	2,328	0	2,328	550	506	0	31	1,087	(1,241)	(8,300)
2030	0	0	0	2,386	0	2,386	545	494	0	38	1,077	(1,309)	(8,982)
2031	0	0	0	2,419	0	2,419	1,294	483	0	27	1,804	(615)	(9,279)
2032	0	0	0	2,462	0	2,462	1,281	471	0	32	1,785	(677)	(9,584)
2033	0	0	0	2,508	0	2,508	1,325	459	0	38	1,822	(686)	(9,871)
2034	0	0	0	2,551	0	2,551	1,304	448	0	44	1,795	(756)	(10,166)
2035	0	0	0	2,608	0	2,608	1,304	436	0	56	1,796	(812)	(10,460)
2036	0	0	0	2,696	0	2,696	1,302	425	0	69	1,797	(900)	(10,763)
2037	0	0	0	2,757	0	2,757	1,317	414	0	85	1,816	(941)	(11,058)
2038	0	0	0	2,821	0	2,821	1,300	403	0	102	1,805	(1,017)	(11,354)
2039	0	0	0	2,875	0	2,875	1,276	393	0	120	1,789	(1,085)	(11,648)
2040	0	0	0	2,935	0	2,935	1,258	384	0	141	1,841	(1,152)	(11,938)
2041	0	0	0	2,992	0	2,992	1,287	378	0	161	1,826	(1,166)	(12,211)
2042	0	238	1,133	3,030	0	4,401	1,286	371	0	183	1,840	(2,561)	(12,770)
2043	0	244	1,133	3,123	0	4,500	1,259	365	0	208	1,831	(2,561)	(13,310)
2044	0	250	1,133	3,196	0	4,579	1,269	358	0	234	1,861	(2,717)	(13,823)
2045	0	0	0	3,253	0	3,253	1,270	353	0	264	1,887	(1,366)	(14,062)
2046	0	0	0	3,328	0	3,328	1,283	347	0	295	1,925	(1,403)	(14,291)
2047	0	0	0	3,379	0	3,379	1,255	341	0	312	1,909	(1,470)	(14,514)
2048	0	0	0	3,420	0	3,420	1,291	336	0	330	1,957	(1,463)	(14,720)
2049	0	0	0	3,475	0	3,475	1,294	331	0	349	1,974	(1,501)	(14,917)
2050	0	0	0	3,538	0	3,538	1,274	325	0	369	1,968	(1,569)	(15,109)
2051	0	0	0	3,588	0	3,588	1,263	320	0	377	1,960	(1,627)	(15,293)
2052	0	0	0	3,638	0	3,638	1,293	315	0	385	1,993	(1,645)	(15,467)
2053	0	0	0	3,689	0	3,689	1,301	310	0	393	2,003	(1,686)	(15,632)
2054	0	0	0	3,741	0	3,741	1,313	304	0	400	2,017	(1,724)	(15,790)
2055	0	0	0	3,794	0	3,794	1,325	299	0	410	2,034	(1,760)	(15,939)
2056	0	0	0	3,847	0	3,847	1,293	294	0	416	2,004	(1,843)	(16,084)
2057	0	0	0	3,901	0	3,901	1,362	290	0	427	2,078	(1,823)	(16,218)
2058	0	0	0	3,956	0	3,956	1,316	285	0	436	2,036	(1,919)	(16,349)
2059	0	0	0	4,011	0	4,011	1,333	280	0	443	2,056	(1,955)	(16,473)
2060	0	0	0	4,067	0	4,067	1,285	276	0	454	2,016	(2,052)	(16,594)
2061	0	0	0	4,139	0	4,139	1,382	273	0	464	2,119	(2,021)	(16,705)
2062	0	390	1,133	4,212	0	5,735	1,354	270	0	471	2,095	(3,640)	(16,891)
2063	0	400	1,133	4,287	0	5,820	1,377	266	0	483	2,127	(3,694)	(17,067)
2064	0	410	1,133	4,360	0	5,903	989	263	0	494	2,176	(4,157)	(17,250)
2065	0	0	0	4,433	0	4,433	1,399	260	0	501	2,161	(2,272)	(17,344)
2066	0	0	0	4,506	0	4,506	1,440	258	0	514	2,212	(2,294)	(17,431)
2067	0	0	0	4,578	0	4,578	1,390	253	0	525	2,148	(2,430)	(17,518)
2068	0	0	0	4,652	0	4,652	1,367	206	0	536	2,109	(2,543)	(17,602)
2069	0	0	0	4,728	0	4,728	1,373	180	0	547	2,101	(2,627)	(17,683)
2070	0	0	0	4,805	0	4,805	1,380	179	0	559	2,118	(2,687)	(17,759)

NOM	0	2,379	10,197	158,462	0	171,038	56,035.53	16,914.12	0.00	12,770.10	85,720	(85,318)
NPV	0	592	3,797	30,635	0	35,024	10,986	4,996	0	1,282	17,264	(17,759)

Discount Rate: %  
Benefit/Cost Ratio (Col(12) / Col(7)) : 0.49

Discount Rate: %  
Benefit/Cost Ratio (Col(12) / Col(7)) :

INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res/low Income

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

- (1) CUSTOMER kW REDUCTION AT METER .....
- (2) GENERATOR kW REDUCTION PER CUSTOMER .....
- (3) kW LINE LOSS PERCENTAGE .....
- (4) GENERATOR kWh REDUCTION PER CUSTOMER .....
- (5) kWh LINE LOSS PERCENTAGE .....
- (6) GROUP LINE LOSS MULTIPLIER .....
- (7) CUSTOMER kWh INCREASE AT METER .....

0.27 kW  
0.3495 kW  
6.03 %  
805.96 kWh  
4.71 %  
1.00  
0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

- (1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....
- (2) GENERATOR ECONOMIC LIFE .....
- (3) T&D ECONOMIC LIFE .....
- (4) K FACTOR FOR GENERATION .....
- (5) K FACTOR FOR T & D .....

50 YEARS  
40 YEARS  
1.42106  
1.38286

**III. UTILITY & CUSTOMER COSTS**

- (1) UTILITY NON RECURRING COST PER CUSTOMER .....
- (2) UTILITY RECURRING COST PER CUSTOMER .....
- (3) UTILITY COST ESCALATION RATE .....
- (4) CUSTOMER EQUIPMENT COST .....
- (5) CUSTOMER EQUIPMENT ESCALATION RATE .....
- (6) CUSTOMER O & M COST .....
- (7) CUSTOMER O & M COST ESCALATION RATE .....
- (8) INCREASED SUPPLY COSTS .....
- (9) SUPPLY COSTS ESCALATION RATES .....
- (10) UTILITY DISCOUNT RATE .....
- (11) UTILITY AFUDC RATE .....
- (12) UTILITY NON RECURRING REBATE/INCENTIVE .....
- (13) UTILITY RECURRING REBATE/INCENTIVE .....
- (14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....

\*\*\* \$/CUST  
\*\*\* \$/CUST  
\*\*\* %\*\*  
\*\*\* \$/CUST  
\*\*\* %\*\*  
\*\*\* \$/CUSTYR  
\*\*\* %\*\*  
\*\*\* %\*\*  
7.52 %  
6.22 %  
\*\*\* \$/CUST  
\*\*\* \$/CUST  
\*\*\* %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV. AVOIDED GENERATOR AND T&D COSTS**

- (1) BASE YEAR .....
- (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....
- (3) IN-SERVICE YEAR FOR AVOIDED T&D .....
- (4) BASE YEAR AVOIDED GENERATING COST .....
- (5) BASE YEAR AVOIDED TRANSMISSION COST .....
- (6) BASE YEAR DISTRIBUTION COST .....
- (7) GEN, TRAN & DIST COST ESCALATION RATE .....
- (8) GENERATOR FIXED O & M COST .....
- (9) GENERATOR FIXED O&M ESCALATION RATE .....
- (10) TRANSMISSION FIXED O & M COST .....
- (11) DISTRIBUTION FIXED O & M COST .....
- (12) T&D FIXED O&M ESCALATION RATE .....
- (13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....
- (14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....
- (15) GENERATOR CAPACITY FACTOR .....
- (16) AVOIDED GENERATING UNIT FUEL COST .....
- (17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....

2021  
2031  
2023-2025  
480,740,799.7 \$/KW  
362,488,238.7 \$/KW  
95,786.25 \$/KW  
2.00 %\*\*  
24,027,416.97 \$/KW/YR  
2.5 %\*\*  
3,963,343.231 \$/KW  
2,733,632,729 \$/KW  
2.5 %\*\*  
0.012498149 CENTS/\$KW  
2.5 %\*\*  
90 \*\* (In-service year)  
3,737,763 CENTS/\$KW\*\* (In-service year)  
1.61 %\*\*

**V. NON-FUEL ENERGY AND DEMAND CHARGES**

- (1) NON-FUEL COST IN CUSTOMER BILL .....
- (2) NON-FUEL COST ESCALATION RATE .....
- (3) DEMAND CHARGE IN CUSTOMER BILL .....
- (4) DEMAND CHARGE ESCALATION RATE .....

\*\*\* CENTS/\$KW  
\*\*\* %  
\*\*\* \$/KW/MO  
\*\*\* %

**VI. COST-EFFECTIVENESS RATIOS**

- (1) RIM TEST .....
- (2) TRC TEST .....
- (3) PARTICIPANT TEST .....

0.389  
2.698  
Infinite

\* INPUT DATA - PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	1,192	431	0	1,623	387	0	0	0	0	0
2023	1,369	483	0	1,852	1,263	0	0	0	0	0
2024	1,613	555	0	2,168	2,328	0	0	0	0	0
2025	0	0	0	0	3,035	0	0	0	0	0
2026	0	0	0	0	3,181	0	0	0	0	0
2027	0	0	0	0	3,275	0	0	0	0	0
2028	0	0	0	0	3,372	0	0	0	0	0
2029	0	0	0	0	3,471	0	0	0	0	0
2030	0	0	0	0	3,538	0	0	0	0	0
2031	1,489	431	0	1,920	3,608	0	0	0	0	0
2032	1,710	483	0	2,192	4,748	0	0	0	0	0
2033	2,014	555	0	2,569	4,837	0	0	0	0	0
2034	0	0	0	0	4,921	0	0	0	0	0
2035	0	0	0	0	5,031	0	0	0	0	0
2036	0	0	0	0	5,200	0	0	0	0	0
2037	0	0	0	0	5,316	0	0	0	0	0
2038	0	0	0	0	5,441	0	0	0	0	0
2039	0	0	0	0	5,544	0	0	0	0	0
2040	1,859	431	0	2,290	5,660	0	0	0	0	0
2041	2,135	483	0	2,618	5,771	0	0	0	0	0
2042	2,516	555	0	3,071	5,844	0	0	0	0	0
2043	0	0	0	0	6,023	0	0	0	0	0
2044	0	0	0	0	6,163	0	0	0	0	0
2045	0	0	0	0	6,273	0	0	0	0	0
2046	0	0	0	0	6,419	0	0	0	0	0
2047	0	0	0	0	6,517	0	0	0	0	0
2048	0	0	0	0	6,596	0	0	0	0	0
2049	2,322	431	0	2,753	6,701	0	0	0	0	0
2050	2,666	483	0	3,149	6,823	0	0	0	0	0
2051	3,142	555	0	3,697	6,919	0	0	0	0	0
2052	0	0	0	0	7,016	0	0	0	0	0
2053	0	0	0	0	7,115	0	0	0	0	0
2054	0	0	0	0	7,215	0	0	0	0	0
2055	0	0	0	0	7,316	0	0	0	0	0
2056	0	0	0	0	7,419	0	0	0	0	0
2057	0	0	0	0	7,523	0	0	0	0	0
2058	2,900	431	0	3,330	7,629	0	0	0	0	0
2059	3,330	483	0	3,813	7,736	0	0	0	0	0
2060	3,924	555	0	4,479	7,844	0	0	0	0	0
2061	0	0	0	0	7,983	0	0	0	0	0
2062	0	0	0	0	8,123	0	0	0	0	0
2063	0	0	0	0	8,268	0	0	0	0	0
2064	0	0	0	0	8,409	0	0	0	0	0
2065	0	0	0	0	8,549	0	0	0	0	0
2066	0	0	0	0	8,690	0	0	0	0	0
2067	3,621	431	0	4,052	8,829	0	0	0	0	0
2068	4,159	483	0	4,641	8,971	0	0	0	0	0
2069	4,900	555	0	5,455	9,117	0	0	0	0	0
2070	0	0	0	0	9,266	0	0	0	0	0

NOM	46,858	8,814	0	55,672	297,244	0	0	0	0	0
NPV	9,485	2,586	0	12,071	53,687	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

\*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED

PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Res Low Income

ESCALATION RATES

Year	(1) CPP%	(2) PPI-CAPI%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.93	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.51	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.00	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.45	0.00	0.00
2026	2.50	2.50	2.50	0.00	0.00	2.00	12.10	0.00	0.00
2027	2.50	2.50	2.50	0.00	0.00	2.00	12.68	0.00	0.00
2028	2.50	2.50	2.50	0.00	0.00	2.00	13.06	0.00	0.00
2029	2.50	2.50	2.50	0.00	0.00	2.00	13.44	0.00	0.00
2030	2.50	2.50	2.50	0.00	0.00	2.00	13.84	0.00	0.00
2031	2.50	2.50	2.50	3.74	90.35	2.00	14.19	0.00	0.00
2032	2.50	2.50	2.50	3.80	90.70	2.00	14.38	0.00	0.00
2033	2.50	2.50	2.50	3.89	90.65	2.00	14.64	0.00	0.00
2034	2.50	2.50	2.50	4.07	91.31	2.00	14.91	0.00	0.00
2035	2.50	2.50	2.50	4.16	91.26	2.00	15.17	0.00	0.00
2036	2.50	2.50	2.50	4.25	91.60	2.00	15.51	0.00	0.00
2037	2.50	2.50	2.50	4.31	91.74	2.00	16.03	0.00	0.00
2038	2.50	2.50	2.50	4.37	91.70	2.00	16.39	0.00	0.00
2039	2.50	2.50	2.50	4.37	91.80	2.00	16.77	0.00	0.00
2040	2.50	2.50	2.50	4.42	91.69	2.00	17.09	0.00	0.00
2041	2.50	2.50	2.50	4.42	91.92	2.00	17.45	0.00	0.00
2042	2.50	2.50	2.50	4.42	91.92	2.00	17.79	0.00	0.00
2043	2.50	2.50	2.50	4.56	92.14	2.00	18.01	0.00	0.00
2044	2.50	2.50	2.50	4.45	91.95	2.00	18.56	0.00	0.00
2045	2.50	2.50	2.50	4.62	91.83	2.00	18.99	0.00	0.00
2046	2.50	2.50	2.50	4.71	91.77	2.00	19.33	0.00	0.00
2047	2.50	2.50	2.50	4.73	92.00	2.00	19.78	0.00	0.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	20.08	0.00	0.00
2049	2.50	2.50	2.50	4.84	91.92	2.00	20.33	0.00	0.00
2050	2.50	2.50	2.50	4.86	91.95	2.00	20.65	0.00	0.00
2051	2.50	2.50	2.50	4.95	91.91	2.00	21.03	0.00	0.00
2052	2.50	2.50	2.50	4.88	91.81	2.00	21.32	0.00	0.00
2053	2.50	2.50	2.50	4.90	91.90	2.00	21.62	0.00	0.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	21.93	0.00	0.00
2055	2.50	2.50	2.50	4.88	92.48	2.00	22.23	0.00	0.00
2056	2.50	2.50	2.50	4.84	91.92	2.00	22.55	0.00	0.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	22.86	0.00	0.00
2058	2.50	2.50	2.50	4.81	92.01	2.00	23.18	0.00	0.00
2059	2.50	2.50	2.50	4.85	91.90	2.00	23.51	0.00	0.00
2060	2.50	2.50	2.50	5.04	92.43	2.00	23.84	0.00	0.00
2061	2.50	2.50	2.50	5.12	92.02	2.00	24.17	0.00	0.00
2062	2.50	2.50	2.50	5.11	91.94	2.00	24.60	0.00	0.00
2063	2.50	2.50	2.50	5.10	92.60	2.00	25.03	0.00	0.00
2064	2.50	2.50	2.50	5.13	92.00	2.00	25.48	0.00	0.00
2065	2.50	2.50	2.50	5.32	91.95	2.00	25.91	0.00	0.00
2066	2.50	2.50	2.50	5.23	92.71	2.00	26.34	0.00	0.00
2067	2.50	2.50	2.50	5.24	92.04	2.00	26.77	0.00	0.00
2068	2.50	2.50	2.50	5.26	92.04	2.00	27.20	0.00	0.00
2069	2.50	2.50	2.50	5.23	92.03	2.00	27.64	0.00	0.00
2070	2.50	2.50	2.50	5.23	92.03	2.00	28.09	0.00	0.00

**Legend:**

<b>Column (1) used for:</b>	Utility Cost
	Customer Equipment
	Supply Costs
<b>Column (3) used for:</b>	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
<b>Column (6) used for:</b>	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Res Low Income

YEAR	(2) MID-YEAR RATE BASE \$ (000)	(3) DEBT \$ (000)	(4) PREFERRED STOCK \$ (000)	(5) COMMON EQUITY \$ (000)	(6) INCOME TAXES \$ (000)	(7) PROPERTY TAX \$ (000)	(8) PROPERTY INSURANCE \$ (000)	(9) DEPREC. \$ (000)	(10) DEFERRED TAXES \$ (000)	(11) ITC NORMALIZATION \$ (000)	(12) TOTAL FIXED CHARGES \$ (000)	(13) PRESENT WORTH FIXED CHARGES \$ (000)	(14) CUMULATIVE PW FIXED CHARGES \$ (000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$ (000)
2031	7231	120	0	455	120	126	3	182	39	0	1,043	1,043	1,043	7,272
2032	6995	116	0	440	201	123	3	182	(47)	0	1,016	945	1,988	7,090
2033	6732	112	0	423	271	120	2	182	(124)	0	986	853	2,841	6,908
2034	6478	107	0	407	333	116	2	182	(191)	0	957	770	3,611	6,726
2035	6233	103	0	392	387	113	2	182	(250)	0	929	695	4,306	6,545
2036	5996	99	0	377	433	110	2	182	(302)	0	902	628	4,934	6,363
2037	5766	96	0	363	473	107	2	182	(346)	0	876	567	5,501	6,181
2038	5544	92	0	349	506	104	2	182	(384)	0	850	512	6,013	5,999
2039	5325	88	0	335	538	101	2	182	(420)	0	825	462	6,474	5,817
2040	5106	85	0	321	570	97	2	182	(457)	0	800	416	6,891	5,656
2041	4888	81	0	307	602	94	2	182	(494)	0	775	375	7,266	5,454
2042	4669	77	0	294	634	91	2	182	(530)	0	749	337	7,603	5,272
2043	4451	74	0	280	666	88	2	182	(567)	0	724	303	7,906	5,090
2044	4232	70	0	266	698	85	2	182	(604)	0	699	272	8,179	4,908
2045	4014	66	0	252	730	82	2	182	(640)	0	674	244	8,423	4,727
2046	3795	63	0	239	762	79	2	182	(677)	0	648	218	8,641	4,545
2047	3577	59	0	225	794	75	2	182	(714)	0	623	195	8,836	4,363
2048	3358	56	0	211	826	72	2	182	(750)	0	598	174	9,010	4,181
2049	3140	52	0	197	858	69	1	182	(787)	0	573	155	9,166	3,999
2050	2922	48	0	184	890	66	1	182	(824)	0	548	138	9,304	3,818
2051	2723	45	0	171	922	63	1	182	(861)	0	524	123	9,426	3,636
2052	2564	42	0	161	954	60	1	182	(898)	0	505	110	9,537	3,454
2053	2426	40	0	153	990	57	1	182	(934)	0	488	99	9,635	3,272
2054	2287	38	0	144	1026	53	1	182	(969)	0	471	89	9,724	3,091
2055	2149	36	0	135	1067	50	1	182	(1004)	0	454	80	9,804	2,909
2056	2010	33	0	126	1112	47	1	182	(1038)	0	436	71	9,875	2,727
2057	1871	31	0	118	1161	44	1	182	(1071)	0	419	64	9,938	2,545
2058	1733	29	0	109	1214	41	1	182	(1104)	0	402	57	9,995	2,363
2059	1594	26	0	100	1272	38	1	182	(1136)	0	385	50	10,046	2,182
2060	1455	24	0	92	1334	35	1	182	(1167)	0	368	45	10,091	2,000
2061	1317	22	0	83	1401	31	1	182	(1197)	0	351	40	10,130	1,818
2062	1178	20	0	74	1474	28	1	182	(1226)	0	333	35	10,165	1,636
2063	1040	17	0	65	1552	25	1	182	(1254)	0	316	31	10,196	1,454
2064	901	15	0	57	1635	22	1	182	(1281)	0	302	28	10,224	1,272
2065	762	13	0	48	1724	20	1	182	(1307)	0	288	24	10,248	1,090
2066	624	10	0	39	1818	18	1	182	(1332)	0	274	22	10,270	1,000
2067	485	8	0	31	1918	16	1	182	(1356)	0	260	19	10,289	1,000
2068	347	6	0	22	2024	14	1	182	(1379)	0	246	17	10,306	1,000
2069	208	3	0	13	2136	12	1	182	(1401)	0	232	15	10,321	1,000
2070	69	1	0	4	2254	10	1	182	(1422)	0	218	13	10,334	1,000

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST (\$000)	7,272
BOOK LIFE (YRS)	2031
EFFECTIVE TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.52%
PROPERTY INSURANCE	1.73%
	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106



DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	BOOK DEPRECIATION FOR DEFERRED TAX \$(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX \$(000)	DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9)*(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2031	3.75%	265	265	182	182	182	182	39	458	0	0	0	39	101
2032	7.22%	510	775	182	364	182	364	(47)	458	0	0	0	(47)	54
2033	6.68%	471	1,246	182	545	182	545	(124)	458	0	0	0	(124)	(70)
2034	6.18%	436	1,682	182	727	182	727	(191)	458	0	0	0	(191)	(261)
2035	5.71%	403	2,086	182	909	182	909	(250)	458	0	0	0	(250)	(511)
2036	5.29%	373	2,459	182	1,091	182	1,091	(302)	458	0	0	0	(302)	(813)
2037	4.89%	345	2,804	182	1,273	182	1,273	(346)	458	0	0	0	(346)	(1,159)
2038	4.52%	319	3,123	182	1,454	182	1,454	(384)	458	0	0	0	(384)	(1,542)
2039	4.46%	315	3,438	182	1,636	182	1,636	(420)	458	0	0	0	(420)	(1,963)
2040	4.46%	315	3,753	182	1,818	182	1,818	(457)	458	0	0	0	(457)	(2,419)
2041	4.46%	315	4,068	182	2,000	182	2,000	(494)	458	0	0	0	(494)	(2,913)
2042	4.46%	315	4,383	182	2,182	182	2,182	(530)	458	0	0	0	(530)	(3,443)
2043	4.46%	315	4,698	182	2,363	182	2,363	(567)	458	0	0	0	(567)	(4,010)
2044	4.46%	315	5,013	182	2,545	182	2,545	(604)	458	0	0	0	(604)	(4,614)
2045	4.46%	315	5,328	182	2,727	182	2,727	(640)	458	0	0	0	(640)	(5,254)
2046	4.46%	315	5,643	182	2,909	182	2,909	(677)	458	0	0	0	(677)	(5,931)
2047	4.46%	315	5,958	182	3,091	182	3,091	(714)	458	0	0	0	(714)	(6,645)
2048	4.46%	315	6,273	182	3,272	182	3,272	(750)	458	0	0	0	(750)	(7,395)
2049	4.46%	315	6,588	182	3,454	182	3,454	(787)	458	0	0	0	(787)	(8,182)
2050	4.46%	315	6,903	182	3,636	182	3,636	(824)	458	0	0	0	(824)	(9,006)
2051	2.23%	158	7,061	182	3,818	182	3,818	(820)	458	0	0	0	(820)	(9,826)
2052	0.00%	0	7,061	182	3,999	182	3,999	(777)	458	0	0	0	(777)	(10,603)
2053	0.00%	0	7,061	182	4,181	182	4,181	(734)	458	0	0	0	(734)	(11,337)
2054	0.00%	0	7,061	182	4,363	182	4,363	(691)	458	0	0	0	(691)	(12,028)
2055	0.00%	0	7,061	182	4,545	182	4,545	(648)	458	0	0	0	(648)	(12,676)
2056	0.00%	0	7,061	182	4,727	182	4,727	(604)	458	0	0	0	(604)	(13,280)
2057	0.00%	0	7,061	182	4,908	182	4,908	(561)	458	0	0	0	(561)	(13,841)
2058	0.00%	0	7,061	182	5,090	182	5,090	(518)	458	0	0	0	(518)	(14,359)
2059	0.00%	0	7,061	182	5,272	182	5,272	(475)	458	0	0	0	(475)	(14,834)
2060	0.00%	0	7,061	182	5,454	182	5,454	(432)	458	0	0	0	(432)	(15,266)
2061	0.00%	0	7,061	182	5,636	182	5,636	(389)	458	0	0	0	(389)	(15,655)
2062	0.00%	0	7,061	182	5,817	182	5,817	(345)	458	0	0	0	(345)	(16,000)
2063	0.00%	0	7,061	182	5,999	182	5,999	(302)	458	0	0	0	(302)	(16,302)
2064	0.00%	0	7,061	182	6,181	182	6,181	(259)	458	0	0	0	(259)	(16,561)
2065	0.00%	0	7,061	182	6,363	182	6,363	(216)	458	0	0	0	(216)	(16,777)
2066	0.00%	0	7,061	182	6,545	182	6,545	(173)	458	0	0	0	(173)	(16,950)
2067	0.00%	0	7,061	182	6,726	182	6,726	(130)	458	0	0	0	(130)	(17,079)
2068	0.00%	0	7,061	182	6,908	182	6,908	(86)	458	0	0	0	(86)	(17,166)
2069	0.00%	0	7,061	182	7,090	182	7,090	(43)	458	0	0	0	(43)	(17,209)
2070	0.00%	0	7,061	182	7,272	182	7,272	(0)	458	0	0	0	(0)	(17,209)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	63
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	458
BOOK DEPRECIATION RATE - 1/USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION (\$000)	(4) DEFERRED TAX (\$000)	(5) END OF YEAR NET PLANT IN SERVICE (\$000)	(5a)* ACCUMULATED DEPRECIATION (\$000)	(5b)* ACCUMULATED DEF TAXES (\$000)	(6) BEGINNING YEAR RATE BASE (\$000)	(7) ENDING OF YEAR RATE BASE (\$000)	(8) MID-YEAR RATE BASE (\$000)
2031	3.75%	265	39	7090	182	101	7,334	7,129	7,231
2032	7.22%	510	(47)	6,908	364	54	7,129	6,861	6,995
2033	6.68%	471	(124)	6,726	545	(70)	6,861	6,603	6,732
2034	6.18%	436	(191)	6,545	727	(261)	6,603	6,354	6,478
2035	5.71%	403	(250)	6,363	909	(511)	6,354	6,113	6,233
2036	5.29%	373	(302)	6,181	1,091	(813)	6,113	5,879	5,996
2037	4.89%	345	(346)	5,999	1,273	(1,159)	5,879	5,653	5,766
2038	4.52%	319	(384)	5,817	1,454	(1,542)	5,653	5,434	5,544
2039	4.46%	315	(420)	5,636	1,636	(1,963)	5,434	5,215	5,325
2040	4.46%	315	(457)	5,454	1,818	(2,419)	5,215	4,997	5,106
2041	4.46%	315	(494)	5,272	2,000	(2,913)	4,997	4,778	4,888
2042	4.46%	315	(530)	5,090	2,182	(3,443)	4,778	4,560	4,669
2043	4.46%	315	(567)	4,908	2,363	(4,010)	4,560	4,342	4,451
2044	4.46%	315	(604)	4,727	2,545	(4,614)	4,342	4,123	4,232
2045	4.46%	315	(640)	4,545	2,727	(5,254)	4,123	3,905	4,014
2046	4.46%	315	(677)	4,363	2,909	(5,931)	3,905	3,686	3,795
2047	4.46%	315	(714)	4,181	3,091	(6,645)	3,686	3,468	3,577
2048	4.46%	315	(750)	3,999	3,272	(7,395)	3,468	3,249	3,358
2049	4.46%	315	(787)	3,818	3,454	(8,182)	3,249	3,031	3,140
2050	4.46%	315	(824)	3,636	3,636	(9,006)	3,031	2,812	2,922
2051	2.23%	158	(820)	3,454	3,818	(9,826)	2,812	2,634	2,723
2052	0.00%	0	(777)	3,272	3,999	(10,603)	2,634	2,495	2,564
2053	0.00%	0	(734)	3,091	4,181	(11,337)	2,495	2,357	2,426
2054	0.00%	0	(691)	2,909	4,363	(12,028)	2,357	2,218	2,287
2055	0.00%	0	(648)	2,727	4,545	(12,676)	2,218	2,079	2,149
2056	0.00%	0	(604)	2,545	4,727	(13,280)	2,079	1,941	2,010
2057	0.00%	0	(561)	2,363	4,908	(13,841)	1,941	1,802	1,871
2058	0.00%	0	(518)	2,182	5,090	(14,359)	1,802	1,663	1,733
2059	0.00%	0	(475)	2,000	5,272	(14,834)	1,663	1,525	1,594
2060	0.00%	0	(432)	1,818	5,454	(15,266)	1,525	1,386	1,455
2061	0.00%	0	(389)	1,636	5,636	(15,655)	1,386	1,248	1,317
2062	0.00%	0	(345)	1,454	5,817	(16,000)	1,248	1,109	1,178
2063	0.00%	0	(302)	1,273	5,999	(16,302)	1,109	970	1,040
2064	0.00%	0	(259)	1,091	6,181	(16,561)	970	832	901
2065	0.00%	0	(216)	909	6,363	(16,777)	832	693	762
2066	0.00%	0	(173)	727	6,545	(16,950)	693	554	624
2067	0.00%	0	(130)	545	6,726	(17,079)	554	416	485
2068	0.00%	0	(86)	364	6,908	(17,166)	416	277	347
2069	0.00%	0	(43)	182	7,090	(17,209)	277	139	208
2070	0.00%	0	(0)	0	7,272	(17,209)	139	69	69

\* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	6,681	6,681
EQUITY AFUDC	458	
DEBT AFUDC	133	
CPI		380
ITC Basis Reduction (Solar)		
TOTAL	7,272	7,061

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

INPUT DATA -- PART 2  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	9,850	9,850	2.42	3.71	2.70	0.00	1.00	1.00
2023	20,250	20,250	2.52	2.52	2.20	0.00	1.00	1.00
2024	32,550	32,550	2.10	2.59	2.24	0.00	1.00	1.00
2025	32,550	32,550	2.31	2.84	2.45	0.00	1.00	1.00
2026	32,550	32,550	2.20	2.56	2.31	0.00	1.00	1.00
2027	32,550	32,550	2.34	2.79	2.47	0.00	1.00	1.00
2028	32,550	32,550	2.38	2.73	2.49	0.00	1.00	1.00
2029	32,550	32,550	2.58	3.06	2.71	0.00	1.00	1.00
2030	32,550	32,550	2.66	3.03	2.76	0.00	1.00	1.00
2031	32,550	32,550	2.84	3.25	2.94	4.16	1.00	1.00
2032	32,550	32,550	2.98	3.54	3.11	4.30	1.00	1.00
2033	32,550	32,550	3.18	3.86	3.34	4.39	1.00	1.00
2034	32,550	32,550	3.21	3.70	3.34	4.54	1.00	1.00
2035	32,550	32,550	3.33	3.89	3.46	4.65	1.00	1.00
2036	32,550	32,550	3.45	3.95	3.58	4.74	1.00	1.00
2037	32,550	32,550	3.53	4.00	3.66	4.78	1.00	1.00
2038	32,550	32,550	3.62	4.08	3.76	4.88	1.00	1.00
2039	32,550	32,550	3.65	4.14	3.80	4.92	1.00	1.00
2040	32,550	32,550	3.74	4.21	3.88	5.00	1.00	1.00
2041	32,550	32,550	3.84	4.45	4.01	5.01	1.00	1.00
2042	32,550	32,550	3.85	4.36	4.00	5.10	1.00	1.00
2043	32,550	32,550	3.90	4.40	4.05	5.03	1.00	1.00
2044	32,550	32,550	4.09	4.49	4.22	5.20	1.00	1.00
2045	32,550	32,550	4.12	4.69	4.30	5.33	1.00	1.00
2046	32,550	32,550	4.11	4.59	4.27	5.30	1.00	1.00
2047	32,550	32,550	4.21	4.71	4.38	5.43	1.00	1.00
2048	32,550	32,550	4.23	4.78	4.40	5.42	1.00	1.00
2049	32,550	32,550	4.28	4.83	4.47	5.44	1.00	1.00
2050	32,550	32,550	4.36	4.91	4.53	5.56	1.00	1.00
2051	32,550	32,550	4.54	5.04	4.70	5.54	1.00	1.00
2052	32,550	32,550	4.44	5.01	4.63	5.50	1.00	1.00
2053	32,550	32,550	4.47	5.04	4.67	5.41	1.00	1.00
2054	32,550	32,550	4.52	5.10	4.72	5.46	1.00	1.00
2055	32,550	32,550	4.57	5.19	4.77	5.43	1.00	1.00
2056	32,550	32,550	4.73	5.17	4.89	5.47	1.00	1.00
2057	32,550	32,550	4.64	5.26	4.87	5.37	1.00	1.00
2058	32,550	32,550	4.68	5.27	4.90	5.50	1.00	1.00
2059	32,550	32,550	4.75	5.34	4.96	5.66	1.00	1.00
2060	32,550	32,550	4.75	5.37	4.96	5.82	1.00	1.00
2061	32,550	32,550	4.79	5.44	5.02	5.69	1.00	1.00
2062	32,550	32,550	4.80	5.45	5.03	5.73	1.00	1.00
2063	32,550	32,550	4.89	5.56	5.14	5.77	1.00	1.00
2064	32,550	32,550	5.15	5.62	5.30	6.56	1.00	1.00
2065	32,550	32,550	4.96	5.59	5.21	5.86	1.00	1.00
2066	32,550	32,550	5.07	5.73	5.31	5.84	1.00	1.00
2067	32,550	32,550	5.09	5.70	5.35	5.94	1.00	1.00
2068	32,550	32,550	5.09	5.78	5.37	5.97	1.00	1.00
2069	32,550	32,550	5.09	5.78	5.37	5.97	1.00	1.00
2070	32,550	32,550	5.09	5.78	5.37	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Res Low Income

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	1,043	350	14	3365	3744	1028
2032	1,016	359	15	3433	3884	939
2033	986	368	15	3518	3969	918
2034	957	377	16	3704	4128	926
2035	929	386	16	3780	4229	883
2036	902	396	17	3875	4324	865
2037	876	406	17	3939	4368	870
2038	850	416	17	3998	4464	817
2039	825	426	18	3997	4498	768
2040	800	437	18	4040	4571	724
2041	775	448	19	4051	4588	705
2042	749	459	19	4188	4687	728
2043	724	471	20	4079	4608	686
2044	699	482	20	4224	4756	669
2045	674	494	21	4307	4878	617
2046	648	507	21	4336	4856	657
2047	623	519	22	4412	4979	598
2048	598	532	22	4437	4963	626
2049	573	546	23	4450	4981	610
2050	548	559	23	4529	5092	568
2051	524	573	24	4467	5066	523
2052	505	588	25	4485	5039	564
2053	488	602	25	4413	4957	571
2054	471	617	26	4499	5036	578
2055	454	633	27	4429	4977	565
2056	436	649	27	4470	5046	536
2057	419	665	28	4407	4926	593
2058	402	682	29	4446	5034	525
2059	385	699	29	4638	5215	535
2060	368	716	30	4696	5337	472
2061	351	734	31	4677	5212	580
2062	333	752	32	4707	5285	540
2063	316	771	32	4708	5290	537
2064	302	790	33	4873	6012	-13
2065	288	810	34	4832	5414	550
2066	274	830	35	4808	5356	591
2067	260	851	36	4822	5446	522
2068	246	872	37	4792	5479	469
2069	232	894	37	4792	5479	477
2070	218	917	38	4792	5479	487

NOM	23,070	23,584	988	173,415	195,656	25,402
NPV	5,002.49	3,090.38	129	26,325	29,586	4,961

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	158	0
2023	179	22	201	36	12	47	319	0
2024	381	39	421	76	21	97	583	0
2025	615	50	664	123	26	150	789	0
2026	596	51	647	120	27	147	702	0
2027	577	52	629	117	28	145	771	0
2028	559	54	612	114	28	142	744	0
2029	541	55	596	111	29	140	844	0
2030	525	56	581	108	30	138	827	0
2031	508	58	566	105	31	136	888	0
2032	492	59	551	102	31	134	975	0
2033	475	61	536	100	32	132	1,071	0
2034	459	62	521	97	33	130	1,012	0
2035	443	64	506	94	34	128	1,066	0
2036	426	65	492	91	35	126	1,077	0
2037	410	67	477	89	36	124	1,088	0
2038	394	69	463	86	36	122	1,110	0
2039	380	70	450	83	37	121	1,126	0
2040	368	72	440	80	38	119	1,144	0
2041	357	74	431	78	39	117	1,219	0
2042	348	76	424	75	40	115	1,185	0
2043	338	78	416	72	41	114	1,194	0
2044	329	80	408	70	42	112	1,212	0
2045	319	82	401	68	43	111	1,279	0
2046	310	84	393	66	44	111	1,242	0
2047	300	86	386	64	46	110	1,275	0
2048	291	88	379	63	47	109	1,299	0
2049	281	90	371	61	48	109	1,313	0
2050	272	92	364	59	49	108	1,334	0
2051	262	95	357	58	50	108	1,364	0
2052	252	97	349	56	51	108	1,362	0
2053	243	99	342	54	53	107	1,368	0
2054	233	102	335	53	54	107	1,387	0
2055	224	104	328	51	55	106	1,414	0
2056	214	107	321	49	57	106	1,393	0
2057	205	110	315	48	58	106	1,431	0
2058	195	112	308	46	60	106	1,431	0
2059	186	115	301	44	61	106	1,449	0
2060	178	118	296	43	63	105	1,460	0
2061	170	121	291	41	64	105	1,480	0
2062	162	124	286	39	66	105	1,485	0
2063	154	127	281	38	68	105	1,514	0
2064	147	130	277	36	69	105	1,513	0
2065	139	134	272	34	71	105	1,518	0
2066	131	137	268	33	73	106	1,558	0
2067	95	140	236	32	75	106	1,546	0
2068	53	144	197	30	76	107	1,572	0
2069	6	148	154	29	78	107	1,572	0
2070	(0)	151	151	28	80	108	1,572	0

NOM	14,720	4,271.34	18,992	3,250	2,268	5,518	58,233	0
NPV	4,997	759	5,757	1,042	403	1,446	11,478	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	12	0	12
2027	0	0	19	0	19
2028	0	0	33	0	33
2029	0	0	46	0	46
2030	0	0	57	0	57
2031	206	232	68	0	42
2032	245	276	80	0	49
2033	287	323	94	0	58
2034	336	378	109	0	67
2035	427	481	139	0	85
2036	535	602	173	0	106
2037	654	737	211	0	129
2038	785	884	254	0	155
2039	931	1,048	301	0	183
2040	1,090	1,227	352	0	215
2041	1,248	1,405	403	0	245
2042	1,423	1,602	458	0	278
2043	1,608	1,811	518	0	316
2044	1,812	2,041	585	0	357
2045	2,037	2,294	658	0	401
2046	2,291	2,579	738	0	449
2047	2,420	2,725	780	0	475
2048	2,557	2,879	825	0	502
2049	2,704	3,045	872	0	531
2050	2,858	3,218	922	0	562
2051	2,915	3,282	941	0	574
2052	2,979	3,355	961	0	585
2053	3,044	3,428	981	0	597
2054	3,125	3,519	1,002	0	608
2055	3,172	3,572	1,023	0	623
2056	3,263	3,674	1,044	0	633
2057	3,309	3,727	1,066	0	649
2058	3,375	3,800	1,089	0	663
2059	3,465	3,902	1,111	0	675
2060	3,523	3,967	1,135	0	691
2061	3,594	4,047	1,159	0	706
2062	3,696	4,161	1,183	0	717
2063	3,749	4,221	1,208	0	735
2064	3,825	4,307	1,233	0	751
2065	3,938	4,434	1,259	0	763
2066	3,991	4,495	1,285	0	782
2067	4,075	4,589	1,312	0	799
2068	4,160	4,685	1,340	0	816
2069	4,248	4,783	1,368	0	833
2070	4,337	4,884	1,397	0	850
NOM	98,237	110,621	31,804	0	19,421
NPV	9,429	10,618	3,137	0	1,949

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	1,192	0	0	1,192	0	0	158	0	158	(1,034)	(961)
2023	0	1,369	0	0	1,369	0	248	319	0	568	(1,654)	(1,654)
2024	0	1,613	0	0	1,613	0	518	583	0	1,101	(512)	(2,066)
2025	0	0	0	0	0	0	814	789	0	1,603	1,603	(867)
2026	0	0	0	0	0	0	794	702	12	1,508	1,508	182
2027	0	0	0	0	0	0	773	771	19	1,564	1,564	1,194
2028	0	0	0	0	0	0	754	744	33	1,531	1,531	2,115
2029	0	0	0	0	0	0	736	844	46	1,626	1,626	3,026
2030	0	0	0	0	0	0	719	827	57	1,602	1,602	3,859
2031	0	1,489	0	0	1,489	1,028	701	888	42	2,659	1,170	4,426
2032	0	1,710	0	0	1,710	939	685	975	49	2,648	938	4,848
2033	0	2,014	0	0	2,014	918	668	1,071	58	2,714	700	5,141
2034	0	0	0	0	0	926	651	1,012	67	2,655	2,655	6,175
2035	0	0	0	0	0	883	634	1,066	85	2,668	2,668	7,142
2036	0	0	0	0	0	865	618	1,077	106	2,666	2,666	8,039
2037	0	0	0	0	0	870	601	1,088	129	2,687	2,687	8,881
2038	0	0	0	0	0	817	585	1,110	155	2,667	2,667	9,658
2039	0	0	0	0	0	768	571	1,126	183	2,648	2,648	10,375
2040	0	1,859	0	0	1,859	724	559	1,144	215	2,641	782	10,572
2041	0	2,135	0	0	2,135	705	548	1,219	245	2,717	582	10,709
2042	0	2,516	0	0	2,516	728	539	1,185	278	2,731	215	10,756
2043	0	0	0	0	0	686	530	1,194	316	2,726	2,726	11,308
2044	0	0	0	0	0	669	521	1,212	357	2,758	2,758	11,828
2045	0	0	0	0	0	617	512	1,279	401	2,810	2,810	12,321
2046	0	0	0	0	0	657	504	1,242	449	2,852	2,852	12,786
2047	0	0	0	0	0	598	496	1,275	475	2,844	2,844	13,217
2048	0	0	0	0	0	626	488	1,299	502	2,915	2,915	13,628
2049	0	2,322	0	0	2,322	610	480	1,313	531	2,934	613	13,709
2050	0	2,666	0	0	2,666	568	472	1,334	562	2,936	269	13,741
2051	0	3,142	0	0	3,142	523	465	1,364	574	2,925	(216)	13,717
2052	0	0	0	0	0	564	457	1,362	585	2,968	2,968	14,030
2053	0	0	0	0	0	571	450	1,368	597	2,986	2,986	14,323
2054	0	0	0	0	0	578	442	1,387	608	3,014	3,014	14,598
2055	0	0	0	0	0	565	435	1,414	623	3,036	3,036	14,856
2056	0	0	0	0	0	536	428	1,393	633	2,989	2,989	15,092
2057	0	0	0	0	0	593	420	1,431	649	3,093	3,093	15,319
2058	0	2,900	0	0	2,900	525	413	1,431	663	3,032	132	15,328
2059	0	3,330	0	0	3,330	535	407	1,449	675	3,066	(264)	15,311
2060	0	3,924	0	0	3,924	472	401	1,460	691	3,024	(899)	15,258
2061	0	0	0	0	0	580	396	1,480	706	3,162	3,162	15,432
2062	0	0	0	0	0	540	391	1,485	717	3,133	3,133	15,592
2063	0	0	0	0	0	537	387	1,514	735	3,172	3,172	15,742
2064	0	0	0	0	0	(13)	382	1,513	751	2,633	2,633	15,859
2065	0	0	0	0	0	550	378	1,518	763	3,209	3,209	15,990
2066	0	0	0	0	0	591	374	1,558	782	3,305	3,305	16,117
2067	0	3,621	0	0	3,621	522	342	1,546	799	3,209	(412)	16,102
2068	0	4,159	0	0	4,159	469	303	1,572	816	3,160	(999)	16,069
2069	0	4,900	0	0	4,900	477	261	1,572	833	3,143	(1,757)	16,015
2070	0	0	0	0	0	487	259	1,572	850	3,168	3,168	16,106

NOM	0	46,858	0	0	46,858	25,401.76	24,509	58,233	19,421	127,564	80,706	80,706
NPV	0	9,485	0	0	9,485	4,961	7,203	11,478	1,949	25,990.51	16,106	16,106

Discount Rate: 2.70 %  
Benefit/Cost Ratio (Col(11) / Col(6)):



PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	509	0	431	0	940	0	0	0	0	940	874
2023	1,662	0	483	0	2,145	0	0	0	0	2,145	2,729
2024	3,064	0	555	0	3,619	0	0	0	0	3,619	5,640
2025	3,994	0	0	0	3,994	0	0	0	0	3,994	8,628
2026	4,186	0	0	0	4,186	0	0	0	0	4,186	11,540
2027	4,309	0	0	0	4,309	0	0	0	0	4,309	14,329
2028	4,436	0	0	0	4,436	0	0	0	0	4,436	16,999
2029	4,567	0	0	0	4,567	0	0	0	0	4,567	19,555
2030	4,681	0	0	0	4,681	0	0	0	0	4,681	21,992
2031	4,747	0	431	0	5,178	0	0	0	0	5,178	24,498
2032	6,248	0	483	0	6,731	0	0	0	0	6,731	27,528
2033	6,365	0	555	0	6,920	0	0	0	0	6,920	30,426
2034	6,475	0	0	0	6,475	0	0	0	0	6,475	32,947
2035	6,619	0	0	0	6,619	0	0	0	0	6,619	35,345
2036	6,843	0	0	0	6,843	0	0	0	0	6,843	37,649
2037	6,995	0	0	0	6,995	0	0	0	0	6,995	39,840
2038	7,159	0	0	0	7,159	0	0	0	0	7,159	41,926
2039	7,295	0	0	0	7,295	0	0	0	0	7,295	43,903
2040	7,448	0	431	0	7,879	0	0	0	0	7,879	45,888
2041	7,593	0	483	0	8,076	0	0	0	0	8,076	47,780
2042	7,689	0	555	0	8,244	0	0	0	0	8,244	49,577
2043	7,925	0	0	0	7,925	0	0	0	0	7,925	51,184
2044	8,109	0	0	0	8,109	0	0	0	0	8,109	52,712
2045	8,254	0	0	0	8,254	0	0	0	0	8,254	54,159
2046	8,446	0	0	0	8,446	0	0	0	0	8,446	55,536
2047	8,574	0	0	0	8,574	0	0	0	0	8,574	56,837
2048	8,679	0	0	0	8,679	0	0	0	0	8,679	58,061
2049	8,817	0	431	0	9,248	0	0	0	0	9,248	59,274
2050	8,977	0	483	0	9,460	0	0	0	0	9,460	60,428
2051	9,104	0	555	0	9,659	0	0	0	0	9,659	61,523
2052	9,232	0	0	0	9,232	0	0	0	0	9,232	62,498
2053	9,362	0	0	0	9,362	0	0	0	0	9,362	63,416
2054	9,493	0	0	0	9,493	0	0	0	0	9,493	64,282
2055	9,626	0	0	0	9,626	0	0	0	0	9,626	65,099
2056	9,762	0	0	0	9,762	0	0	0	0	9,762	65,870
2057	9,899	0	0	0	9,899	0	0	0	0	9,899	66,597
2058	10,038	0	431	0	10,469	0	0	0	0	10,469	67,311
2059	10,178	0	483	0	10,661	0	0	0	0	10,661	67,988
2060	10,321	0	555	0	10,876	0	0	0	0	10,876	68,631
2061	10,504	0	0	0	10,504	0	0	0	0	10,504	69,207
2062	10,689	0	0	0	10,689	0	0	0	0	10,689	69,753
2063	10,879	0	0	0	10,879	0	0	0	0	10,879	70,270
2064	11,065	0	0	0	11,065	0	0	0	0	11,065	70,759
2065	11,249	0	0	0	11,249	0	0	0	0	11,249	71,221
2066	11,434	0	0	0	11,434	0	0	0	0	11,434	71,658
2067	11,617	0	431	0	12,048	0	0	0	0	12,048	72,086
2068	11,804	0	483	0	12,287	0	0	0	0	12,287	72,492
2069	11,997	0	555	0	12,552	0	0	0	0	12,552	72,878
2070	12,192	0	0	0	12,192	0	0	0	0	12,192	73,227

NOM	39,110	0	8,814	0	399,924	0	0	0	0	0	399,924
NPV	70,641	0	2,586	0	73,227	0	0	0	0	0	73,227

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ): Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Res Low Income

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	SELLBACK/ OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	1,192	431	387	0	2,010	158	0	0	0	158	(1,851)	(1,722)
2023	0	1,369	483	1,263	0	3,115	319	248	0	0	568	(2,547)	(3,925)
2024	0	1,613	555	2,328	0	4,496	583	518	0	0	1,101	(3,395)	(6,656)
2025	0	0	0	3,035	0	789	814	814	0	0	1,603	(1,433)	(7,728)
2026	0	0	0	3,181	0	3,181	702	794	0	12	1,508	(1,673)	(8,892)
2027	0	0	0	3,275	0	3,275	771	773	0	19	1,564	(1,711)	(9,999)
2028	0	0	0	3,372	0	3,372	744	754	0	33	1,531	(1,840)	(11,107)
2029	0	0	0	3,471	0	3,471	844	736	0	46	1,626	(1,845)	(12,140)
2030	0	0	0	3,558	0	3,558	827	719	0	57	1,602	(1,956)	(13,158)
2031	0	1,489	431	3,608	0	5,527	701	685	0	42	2,659	(2,868)	(14,546)
2032	0	1,710	483	4,748	0	6,941	1,914	685	0	49	2,648	(4,293)	(16,479)
2033	0	2,014	555	4,837	0	7,407	1,938	668	0	58	2,714	(4,693)	(18,444)
2034	0	0	0	4,921	0	4,921	1,988	651	0	67	2,655	(2,265)	(19,326)
2035	0	0	0	5,031	0	5,031	1,949	634	0	85	2,668	(2,182)	(20,182)
2036	0	0	0	5,200	0	5,200	1,942	618	0	106	2,666	(2,355)	(21,036)
2037	0	0	0	5,316	0	5,316	1,957	601	0	129	2,687	(2,629)	(21,859)
2038	0	0	0	5,441	0	5,441	1,927	585	0	155	2,667	(2,774)	(22,667)
2039	0	0	0	5,544	0	5,544	1,894	571	0	183	2,648	(2,847)	(23,452)
2040	0	1,859	431	5,660	0	7,950	1,867	559	0	215	2,641	(3,009)	(24,790)
2041	0	2,135	483	5,771	0	8,389	1,924	548	0	245	2,717	(2,611)	(26,119)
2042	0	2,516	555	5,844	0	8,914	1,914	530	0	278	2,731	(6,183)	(27,467)
2043	0	0	0	6,023	0	6,023	1,880	519	0	316	2,726	(8,135)	(28,135)
2044	0	0	0	6,163	0	6,163	1,881	521	0	357	2,758	(8,777)	(28,777)
2045	0	0	0	6,273	0	6,273	1,896	512	0	401	2,810	(9,463)	(29,384)
2046	0	0	0	6,419	0	6,419	1,899	504	0	449	2,852	(9,667)	(29,966)
2047	0	0	0	6,517	0	6,517	1,873	496	0	475	2,844	(9,852)	(30,523)
2048	0	0	0	6,596	0	6,596	1,925	488	0	502	2,915	(10,042)	(31,042)
2049	0	2,322	431	6,701	0	9,454	1,923	480	0	531	2,934	(10,571)	(31,897)
2050	0	2,666	483	6,823	0	9,972	1,902	472	0	562	2,936	(11,106)	(32,755)
2051	0	3,142	555	6,919	0	10,616	1,887	465	0	574	2,925	(11,690)	(33,628)
2052	0	0	0	7,016	0	7,016	1,925	457	0	585	2,968	(12,283)	(34,055)
2053	0	0	0	7,115	0	7,115	1,939	450	0	597	2,986	(12,881)	(34,460)
2054	0	0	0	7,215	0	7,215	1,964	442	0	608	3,014	(13,481)	(34,843)
2055	0	0	0	7,316	0	7,316	1,979	435	0	623	3,036	(14,081)	(35,207)
2056	0	0	0	7,419	0	7,419	1,929	428	0	633	2,989	(14,681)	(35,556)
2057	0	0	0	7,523	0	7,523	2,024	420	0	649	3,093	(15,281)	(35,881)
2058	0	2,900	431	7,629	0	10,959	1,955	413	0	663	3,032	(15,877)	(36,423)
2059	0	3,330	483	7,736	0	11,548	1,984	407	0	675	3,066	(16,471)	(36,961)
2060	0	3,924	555	7,844	0	12,323	1,932	401	0	691	3,024	(17,111)	(37,510)
2061	0	0	0	7,983	0	7,983	2,061	396	0	706	3,162	(17,755)	(38,050)
2062	0	0	0	8,123	0	8,123	2,024	391	0	717	3,133	(18,396)	(38,527)
2063	0	0	0	8,268	0	8,268	2,050	387	0	735	3,172	(19,031)	(39,042)
2064	0	0	0	8,409	0	8,409	1,499	382	0	751	2,633	(19,656)	(39,527)
2065	0	0	0	8,549	0	8,549	2,069	378	0	763	3,209	(20,281)	(40,012)
2066	0	0	0	8,690	0	8,690	2,149	374	0	782	3,305	(20,906)	(40,497)
2067	0	3,621	431	8,829	0	12,881	2,068	342	0	799	3,209	(21,531)	(40,982)
2068	0	4,159	483	8,971	0	13,613	2,041	303	0	816	3,160	(22,156)	(41,467)
2069	0	4,900	555	9,117	0	14,572	2,050	261	0	833	3,143	(22,781)	(41,952)
2070	0	0	0	9,266	0	9,266	2,059	259	0	850	3,168	(23,406)	(42,437)
NOM	0	46,858	8,814	297,244	0	352,916	83,634.38	24,509.11	0.00	19,420.74	127,564	(22,351)	(22,351)
NPV	0	9,485	2,586	53,687	0	65,758	16,439	7,203	0	1,949	25,591	(40,167)	(40,167)

7.52 %  
0.39

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) :

INPUT DATA --PART I CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

**I. PROGRAM DEMAND SAVINGS & LINE LOSSES**

(1) CUSTOMER kW REDUCTION AT METER .....	2.42 kW
(2) GENERATOR kW REDUCTION PER CUSTOMER .....	3,1406 kW
(3) kW LINE LOSS PERCENT AGE .....	6.03 %
(4) GENERATOR kWh REDUCTION PER CUSTOMER .....	1.05 kWh
(5) kWh LINE LOSS PERCENTAGE .....	4.71 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.00
(7) CUSTOMER kWh INCREASE AT METER .....	0.00 kWh

**II. ECONOMIC LIFE & K FACTORS**

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM .....	50 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T&D ECONOMIC LIFE .....	1.42106
(4) K FACTOR FOR GENERATION .....	1.38286
(5) K FACTOR FOR T & D .....	

**III. UTILITY & CUSTOMER COSTS**

(1) UTILITY NON RECURRING COST PER CUSTOMER .....	*** \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	*** \$/CUST
(3) UTILITY COST ESCALATION RATE .....	*** %**
(4) CUSTOMER EQUIPMENT COST .....	*** \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	*** %**
(6) CUSTOMER O & M COST .....	*** \$/CUSTYR
(7) CUSTOMER O & M COST ESCALATION RATE .....	*** %**
(8) INCREASED SUPPLY COSTS .....	*** %**
(9) SUPPLY COSTS ESCALATION RATES .....	*** %**
(10) UTILITY DISCOUNT RATE .....	7.52 %
(11) UTILITY AFUDC RATE .....	6.22 %
(12) UTILITY NON RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE .....	*** \$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE .....	*** %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
\*\* VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)  
\*\*\* PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

**IV. AVOIDED GENERATOR AND T&D COSTS**

(1) BASE YEAR .....	2021
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	2031
(3) IN-SERVICE YEAR FOR AVOIDED T&D .....	2023-2025
(4) BASE YEAR AVOIDED GENERATING COST .....	480,7407997 \$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	0 \$/kW
(6) BASE YEAR DISTRIBUTION COST .....	0 \$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE .....	2.00 %**
(8) GENERATOR FIXED O & M COST .....	24.02741697 \$/kW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.5 %**
(10) TRANSMISSION FIXED O & M COST .....	0 \$/kW
(11) DISTRIBUTION FIXED O & M COST .....	0 \$/kW
(12) T&D FIXED O&M ESCALATION RATE .....	2.5 %**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	0.012498149 CENTS/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE .....	2.5 %**
(15) GENERATOR CAPACITY FACTOR .....	90 ** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST .....	3.737763 CENTS/kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE .....	1.61 %**

**V. NON-FUEL ENERGY AND DEMAND CHARGES**

(1) NON-FUEL COST IN CUSTOMER BILL .....	*** CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE .....	*** %
(3) DEMAND CHARGE IN CUSTOMER BILL .....	*** \$/kW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	*** %

**VI. COST-EFFECTIVENESS RATIOS**

(1) RIM TEST .....	0.692
(2) TRC TEST .....	1.354
(3) PARTICIPANT TEST .....	Infinite

\* INPUT DATA - PART 1 CONTINUED  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential On-Call (ROC)

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
2021	0	0	0	0	0	0	0	0	0	0
2022	1,896	258	0	2,154	0	0	0	0	0	0
2023	2,616	782	0	3,398	1	0	0	0	0	0
2024	3,303	1,318	0	4,621	2	0	0	0	0	0
2025	1,824	1,588	0	3,413	3	0	0	0	0	0
2026	1,728	1,588	0	3,316	3	0	0	0	0	0
2027	1,273	1,588	0	2,862	3	0	0	0	0	0
2028	816	1,588	0	2,404	3	0	0	0	0	0
2029	374	1,588	0	1,962	3	0	0	0	0	0
2030	380	1,588	0	1,969	4	0	0	0	0	0
2031	392	1,588	0	1,981	4	0	0	0	0	0
2032	400	1,588	0	1,989	4	0	0	0	0	0
2033	409	1,588	0	1,997	4	0	0	0	0	0
2034	415	1,588	0	2,003	4	0	0	0	0	0
2035	416	1,588	0	2,005	4	0	0	0	0	0
2036	414	1,588	0	2,002	4	0	0	0	0	0
2037	421	1,588	0	2,009	4	0	0	0	0	0
2038	425	1,588	0	2,013	4	0	0	0	0	0
2039	444	1,588	0	2,032	4	0	0	0	0	0
2040	453	1,588	0	2,041	4	0	0	0	0	0
2041	463	1,588	0	2,051	4	0	0	0	0	0
2042	3,467	1,588	0	5,055	5	0	0	0	0	0
2043	4,535	1,588	0	6,123	5	0	0	0	0	0
2044	5,525	1,588	0	7,114	5	0	0	0	0	0
2045	3,058	1,588	0	4,646	5	0	0	0	0	0
2046	2,859	1,588	0	4,447	5	0	0	0	0	0
2047	2,095	1,588	0	3,684	5	0	0	0	0	0
2048	1,337	1,588	0	2,925	5	0	0	0	0	0
2049	613	1,588	0	2,201	5	0	0	0	0	0
2050	623	1,588	0	2,212	5	0	0	0	0	0
2051	643	1,588	0	2,231	5	0	0	0	0	0
2052	656	1,588	0	2,244	5	0	0	0	0	0
2053	670	1,588	0	2,259	6	0	0	0	0	0
2054	680	1,588	0	2,268	6	0	0	0	0	0
2055	682	1,588	0	2,271	6	0	0	0	0	0
2056	678	1,588	0	2,266	6	0	0	0	0	0
2057	690	1,588	0	2,278	6	0	0	0	0	0
2058	697	1,588	0	2,285	6	0	0	0	0	0
2059	727	1,588	0	2,315	6	0	0	0	0	0
2060	742	1,588	0	2,331	6	0	0	0	0	0
2061	759	1,588	0	2,347	6	0	0	0	0	0
2062	5,681	1,588	0	7,269	6	0	0	0	0	0
2063	7,430	1,588	0	9,019	6	0	0	0	0	0
2064	9,054	1,588	0	10,642	7	0	0	0	0	0
2065	5,011	1,588	0	6,599	7	0	0	0	0	0
2066	4,684	1,588	0	6,273	7	0	0	0	0	0
2067	3,434	1,588	0	5,022	7	0	0	0	0	0
2068	2,191	1,588	0	3,779	7	0	0	0	0	0
2069	1,004	1,588	0	2,592	7	0	0	0	0	0
2070	1,021	1,588	0	2,609	7	0	0	0	0	0

NOM	90,105	75,427	165,532	236	0	0	0	0	0	0
NPV	19,238	18,355	37,593	46	0	0	0	0	0	0

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK  
 \*\* NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

INPUT DATA - PART 1 CONTINUED  
PROGRAM METHOD SELECTED: REV\_REQ

PROGRAM NAME: Residential On-Call (ROC)

ESCALATION RATES

Year	(1) CPP%	(2) PP-CA P%	(3) O&M%	(4) Fuel (cents/kwh)	(5) Capacity Factor	(6) Blended Cap. Rate	(7a) Onpeak Energy Charge (cents/kwh)	(7b) Offpeak Energy Charge (cents/kwh)	(8) Demand Charge (\$/kw)
2021	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2022	2.50	2.50	2.50	0.00	0.00	2.00	9.48	0.00	0.00
2023	2.50	2.50	2.50	0.00	0.00	2.00	10.51	0.00	0.00
2024	2.50	2.50	2.50	0.00	0.00	2.00	11.00	0.00	0.00
2025	2.50	2.50	2.50	0.00	0.00	2.00	11.45	0.00	0.00
2026	2.50	2.50	2.50	0.00	0.00	2.00	12.10	0.00	0.00
2027	2.50	2.50	2.50	0.00	0.00	2.00	12.68	0.00	0.00
2028	2.50	2.50	2.50	0.00	0.00	2.00	13.06	0.00	0.00
2029	2.50	2.50	2.50	0.00	0.00	2.00	13.44	0.00	0.00
2030	2.50	2.50	2.50	0.00	0.00	2.00	13.84	0.00	0.00
2031	2.50	2.50	2.50	3.74	90.35	2.00	14.19	0.00	0.00
2032	2.50	2.50	2.50	3.80	90.70	2.00	14.38	0.00	0.00
2033	2.50	2.50	2.50	3.89	90.65	2.00	14.64	0.00	0.00
2034	2.50	2.50	2.50	4.07	91.31	2.00	14.91	0.00	0.00
2035	2.50	2.50	2.50	4.16	91.26	2.00	15.17	0.00	0.00
2036	2.50	2.50	2.50	4.25	91.60	2.00	15.51	0.00	0.00
2037	2.50	2.50	2.50	4.31	91.74	2.00	16.03	0.00	0.00
2038	2.50	2.50	2.50	4.37	91.70	2.00	16.39	0.00	0.00
2039	2.50	2.50	2.50	4.37	91.80	2.00	16.77	0.00	0.00
2040	2.50	2.50	2.50	4.42	91.69	2.00	17.09	0.00	0.00
2041	2.50	2.50	2.50	4.42	91.92	2.00	17.45	0.00	0.00
2042	2.50	2.50	2.50	4.42	91.92	2.00	17.79	0.00	0.00
2043	2.50	2.50	2.50	4.56	92.14	2.00	18.01	0.00	0.00
2044	2.50	2.50	2.50	4.45	91.95	2.00	18.56	0.00	0.00
2045	2.50	2.50	2.50	4.62	91.83	2.00	18.99	0.00	0.00
2046	2.50	2.50	2.50	4.71	91.77	2.00	19.33	0.00	0.00
2047	2.50	2.50	2.50	4.73	92.00	2.00	19.78	0.00	0.00
2048	2.50	2.50	2.50	4.81	91.97	2.00	20.08	0.00	0.00
2049	2.50	2.50	2.50	4.84	91.92	2.00	20.33	0.00	0.00
2050	2.50	2.50	2.50	4.86	91.95	2.00	20.65	0.00	0.00
2051	2.50	2.50	2.50	4.95	91.91	2.00	21.03	0.00	0.00
2052	2.50	2.50	2.50	4.88	91.81	2.00	21.32	0.00	0.00
2053	2.50	2.50	2.50	4.90	91.90	2.00	21.62	0.00	0.00
2054	2.50	2.50	2.50	4.81	91.97	2.00	21.93	0.00	0.00
2055	2.50	2.50	2.50	4.88	92.48	2.00	22.23	0.00	0.00
2056	2.50	2.50	2.50	4.84	91.92	2.00	22.55	0.00	0.00
2057	2.50	2.50	2.50	4.84	92.61	2.00	22.86	0.00	0.00
2058	2.50	2.50	2.50	4.81	92.01	2.00	23.18	0.00	0.00
2059	2.50	2.50	2.50	4.85	91.90	2.00	23.51	0.00	0.00
2060	2.50	2.50	2.50	5.04	92.43	2.00	23.84	0.00	0.00
2061	2.50	2.50	2.50	5.12	92.02	2.00	24.17	0.00	0.00
2062	2.50	2.50	2.50	5.11	91.94	2.00	24.60	0.00	0.00
2063	2.50	2.50	2.50	5.10	92.60	2.00	25.03	0.00	0.00
2064	2.50	2.50	2.50	5.13	92.00	2.00	25.48	0.00	0.00
2065	2.50	2.50	2.50	5.32	91.95	2.00	25.91	0.00	0.00
2066	2.50	2.50	2.50	5.23	92.71	2.00	26.34	0.00	0.00
2067	2.50	2.50	2.50	5.24	92.04	2.00	26.77	0.00	0.00
2068	2.50	2.50	2.50	5.26	92.04	2.00	27.20	0.00	0.00
2069	2.50	2.50	2.50	5.23	92.03	2.00	27.64	0.00	0.00
2070	2.50	2.50	2.50	5.23	92.03	2.00	28.09	0.00	0.00

**Legend:**

Column (1) used for:	Utility Cost
	Customer Equipment
	Supply Costs
Column (3) used for:	Customer O&M Cost
	Generator Fixed O&M
	T&D Fixed O&M
Column (6) used for:	Generator Variable O&M
	Gen. Trans. & Dist Cost

CALCULATION OF GEN K-FACTOR  
PROGRAM METHOD SELECTED REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) MID-YEAR RATE BASE \$(000)	(3) DEBT \$(000)	(4) PREFERRED STOCK \$(000)	(5) COMMON EQUITY \$(000)	(6) INCOME TAXES \$(000)	(7) PROPERTY TAX \$(000)	(8) PROPERTY INSURANCE \$(000)	(9) DEPREC. \$(000)	(10) DEFERRED TAXES \$(000)	(11) ITC NORMALIZATION \$(000)	(12) TOTAL FIXED CHARGES \$(000)	(13) PRESENT WORTH FIXED CHARGES \$(000)	(14) CUMULATIVE PW FIXED CHARGES \$(000)	(15) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE \$(000)
2031	49,909	827	0	3,138	826	868	18	1,255	266	0	7,198	7,198	7,198	50,187
2032	48,275	800	0	3,035	1,384	847	18	1,255	(327)	0	7,011	6,521	13,719	48,932
2033	46,460	770	0	2,921	1,872	825	17	1,255	(854)	0	6,806	5,887	19,605	47,678
2034	44,709	741	0	2,811	2,300	803	17	1,255	(1,319)	0	6,608	5,315	24,921	46,423
2035	43,018	713	0	2,705	2,672	781	16	1,255	(1,716)	0	6,415	4,799	29,720	45,168
2036	41,383	685	0	2,602	2,991	760	16	1,255	(2,081)	0	6,228	4,333	34,053	43,914
2037	39,798	659	0	2,502	3,263	738	15	1,255	(2,387)	0	6,046	3,912	37,965	42,659
2038	38,260	634	0	2,406	3,491	716	15	1,255	(2,647)	0	5,869	3,532	41,497	41,404
2039	36,748	609	0	2,311	3,712	695	14	1,255	(2,901)	0	5,694	3,187	44,684	40,150
2040	35,241	584	0	2,216	3,933	673	14	1,255	(3,154)	0	5,520	2,873	47,558	38,895
2041	33,733	559	0	2,121	4,154	651	14	1,255	(3,407)	0	5,346	2,588	50,146	37,640
2042	32,225	534	0	2,026	4,374	629	13	1,255	(3,660)	0	5,172	2,329	52,474	36,386
2043	30,717	509	0	1,931	4,595	608	13	1,255	(3,913)	0	4,998	2,093	54,567	35,131
2044	29,210	484	0	1,837	4,816	586	12	1,255	(4,166)	0	4,824	1,878	56,445	33,876
2045	27,702	459	0	1,742	5,037	564	12	1,255	(4,419)	0	4,650	1,684	58,129	32,622
2046	26,194	434	0	1,647	5,258	543	11	1,255	(4,672)	0	4,476	1,507	59,637	31,367
2047	24,686	409	0	1,552	5,479	521	11	1,255	(4,925)	0	4,301	1,347	60,984	30,112
2048	23,179	384	0	1,457	5,700	499	10	1,255	(5,178)	0	4,127	1,202	62,186	28,858
2049	21,671	359	0	1,363	5,921	478	10	1,255	(5,431)	0	3,953	1,071	63,257	27,603
2050	20,163	334	0	1,268	6,141	456	9	1,255	(5,684)	0	3,779	952	64,210	26,348
2051	18,793	311	0	1,182	6,090	434	9	1,255	(5,662)	0	3,619	848	65,058	25,094
2052	17,699	293	0	1,113	5,768	412	9	1,255	(5,364)	0	3,486	760	65,817	23,839
2053	16,742	277	0	1,053	5,450	391	8	1,255	(5,066)	0	3,368	683	66,500	22,584
2054	15,785	261	0	993	5,132	369	8	1,255	(4,768)	0	3,249	613	67,113	21,330
2055	14,829	246	0	932	4,813	347	7	1,255	(4,470)	0	3,131	549	67,661	20,075
2056	13,872	230	0	872	4,495	326	7	1,255	(4,172)	0	3,012	491	68,153	18,820
2057	12,915	214	0	812	4,176	304	6	1,255	(3,874)	0	2,893	439	68,591	17,565
2058	11,959	198	0	752	3,858	282	6	1,255	(3,576)	0	2,775	391	68,983	16,311
2059	11,002	182	0	692	3,540	260	5	1,255	(3,278)	0	2,656	348	69,331	15,056
2060	10,045	166	0	632	3,221	239	5	1,255	(2,980)	0	2,538	310	69,641	13,801
2061	9,089	151	0	571	2,903	217	5	1,255	(2,682)	0	2,419	274	69,915	12,547
2062	8,132	135	0	511	2,584	195	4	1,255	(2,384)	0	2,301	243	70,158	11,292
2063	7,175	119	0	451	2,266	174	4	1,255	(2,086)	0	2,182	214	70,372	10,037
2064	6,218	103	0	391	1,947	174	4	1,255	(1,788)	0	2,065	190	70,562	10,037
2065	5,262	87	0	331	1,629	174	4	1,255	(1,490)	0	1,949	169	70,731	10,037
2066	4,305	71	0	271	1,311	174	4	1,255	(1,192)	0	1,833	149	70,880	10,037
2067	3,348	55	0	211	992	174	4	1,255	(894)	0	1,796	132	71,012	10,037
2068	2,392	40	0	150	674	174	4	1,255	(596)	0	1,700	116	71,128	10,037
2069	1,435	24	0	90	355	174	4	1,255	(298)	0	1,603	102	71,230	10,037
2070	478	8	0	30	37	174	4	1,255	0	0	1,507	89	71,319	10,037

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	40.4%	4.1%
P/S	0.0%	0.0%
C/S	59.6%	10.55%

IN SERVICE COST \$(000)

IN SERVICE YEAR	50,187
BOOK LIFE (YRS)	2031
EFFEC. TAX RATE	40
DISCOUNT RATE	25.345%
PROPERTY TAX	7.52%
PROPERTY INSURANCE	1.73%
	0.036%

K-FACTOR = CPWFC / IN-SVCC COST = 1.42106

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
 PROGRAM METHOD SELECTED: REV\_REQ  
 Residential On-Call (ROC)

YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION (\$000)	ACCUMULATED TAX DEPRECIATION (\$000)	BOOK DEPRECIATION (\$000)	ACCUMULATED BOOK DEPRECIATION (\$000)	BOOK DEPRECIATION FOR DEFERRED TAX (\$000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX (\$000)	DEFERRED TAX DUE TO DEPRECIATION (\$000)	TOTAL EQUITY AFUDC (\$000)	BOOK DEPR RATE MINUS LIFE	(10)*(11) TAX RATE (\$000)	SALVAGE TAX RATE (\$000)	ANNUAL DEFERRED TAX (9%*(12)+(13)) (\$000)	ACCUMULATED DEFERRED TAX (\$000)
2031	3.75%		1,827	1,827	1,255	1,255	1,255	1,255	266	3,158	0	0	0	266	698
2032	7.22%		3,518	5,345	1,255	2,509	1,255	2,509	(372)	3,158	0	0	0	(372)	371
2033	6.68%		3,254	8,599	1,255	3,764	1,255	3,764	(854)	3,158	0	0	0	(854)	318
2034	6.18%		3,010	11,609	1,255	5,019	1,255	5,019	(1,319)	3,158	0	0	0	(1,319)	(1,802)
2035	5.71%		2,784	14,393	1,255	6,273	1,255	6,273	(1,726)	3,158	0	0	0	(1,726)	(3,528)
2036	5.29%		2,575	16,969	1,255	7,528	1,255	7,528	(2,081)	3,158	0	0	0	(2,081)	(5,609)
2037	4.89%		2,382	19,351	1,255	8,783	1,255	8,783	(2,387)	3,158	0	0	0	(2,387)	(7,996)
2038	4.52%		2,204	21,555	1,255	10,037	1,255	10,037	(2,647)	3,158	0	0	0	(2,647)	(10,644)
2039	4.46%		2,174	23,729	1,255	11,292	1,255	11,292	(2,901)	3,158	0	0	0	(2,901)	(13,544)
2040	4.46%		2,174	25,903	1,255	12,547	1,255	12,547	(3,154)	3,158	0	0	0	(3,154)	(16,698)
2041	4.46%		2,174	28,077	1,255	13,801	1,255	13,801	(3,407)	3,158	0	0	0	(3,407)	(20,105)
2042	4.46%		2,174	30,251	1,255	15,056	1,255	15,056	(3,660)	3,158	0	0	0	(3,660)	(23,764)
2043	4.46%		2,174	32,426	1,255	16,311	1,255	16,311	(3,913)	3,158	0	0	0	(3,913)	(27,677)
2044	4.46%		2,174	34,600	1,255	17,565	1,255	17,565	(4,166)	3,158	0	0	0	(4,166)	(31,843)
2045	4.46%		2,174	36,774	1,255	18,820	1,255	18,820	(4,419)	3,158	0	0	0	(4,419)	(36,262)
2046	4.46%		2,174	38,948	1,255	20,075	1,255	20,075	(4,672)	3,158	0	0	0	(4,672)	(40,934)
2047	4.46%		2,174	41,122	1,255	21,330	1,255	21,330	(4,925)	3,158	0	0	0	(4,925)	(45,859)
2048	4.46%		2,174	43,296	1,255	22,584	1,255	22,584	(5,178)	3,158	0	0	0	(5,178)	(51,037)
2049	4.46%		2,174	45,471	1,255	23,839	1,255	23,839	(5,431)	3,158	0	0	0	(5,431)	(56,468)
2050	4.46%		2,174	47,645	1,255	25,094	1,255	25,094	(5,684)	3,158	0	0	0	(5,684)	(62,152)
2051	2.23%		1,087	48,732	1,255	26,348	1,255	26,348	(5,662)	3,158	0	0	0	(5,662)	(67,814)
2052	0.00%		0	48,732	1,255	27,603	1,255	27,603	(5,364)	3,158	0	0	0	(5,364)	(73,178)
2053	0.00%		0	48,732	1,255	28,858	1,255	28,858	(5,066)	3,158	0	0	0	(5,066)	(78,244)
2054	0.00%		0	48,732	1,255	30,112	1,255	30,112	(4,768)	3,158	0	0	0	(4,768)	(83,011)
2055	0.00%		0	48,732	1,255	31,367	1,255	31,367	(4,470)	3,158	0	0	0	(4,470)	(87,481)
2056	0.00%		0	48,732	1,255	32,622	1,255	32,622	(4,172)	3,158	0	0	0	(4,172)	(91,653)
2057	0.00%		0	48,732	1,255	33,876	1,255	33,876	(3,874)	3,158	0	0	0	(3,874)	(95,527)
2058	0.00%		0	48,732	1,255	35,131	1,255	35,131	(3,576)	3,158	0	0	0	(3,576)	(99,103)
2059	0.00%		0	48,732	1,255	36,386	1,255	36,386	(3,278)	3,158	0	0	0	(3,278)	(102,381)
2060	0.00%		0	48,732	1,255	37,640	1,255	37,640	(2,980)	3,158	0	0	0	(2,980)	(105,360)
2061	0.00%		0	48,732	1,255	38,895	1,255	38,895	(2,682)	3,158	0	0	0	(2,682)	(108,042)
2062	0.00%		0	48,732	1,255	40,150	1,255	40,150	(2,384)	3,158	0	0	0	(2,384)	(110,426)
2063	0.00%		0	48,732	1,255	41,404	1,255	41,404	(2,086)	3,158	0	0	0	(2,086)	(112,512)
2064	0.00%		0	48,732	1,255	42,659	1,255	42,659	(1,788)	3,158	0	0	0	(1,788)	(114,300)
2065	0.00%		0	48,732	1,255	43,914	1,255	43,914	(1,490)	3,158	0	0	0	(1,490)	(115,790)
2066	0.00%		0	48,732	1,255	45,168	1,255	45,168	(1,192)	3,158	0	0	0	(1,192)	(116,982)
2067	0.00%		0	48,732	1,255	46,423	1,255	46,423	(894)	3,158	0	0	0	(894)	(117,876)
2068	0.00%		0	48,732	1,255	47,678	1,255	47,678	(596)	3,158	0	0	0	(596)	(118,472)
2069	0.00%		0	48,732	1,255	48,932	1,255	48,932	(298)	3,158	0	0	0	(298)	(118,770)
2070	0.00%		0	48,732	1,255	50,187	1,255	50,187	0	3,158	0	0	0	0	(118,770)

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2070
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	432
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	3,158
BOOK DEPRECIATION RATE - USEFUL LIFE	2.50%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) TAX DEPRECIATION SCHEDULE	(3) TAX DEPRECIATION \$ (000)	(4) DEFERRED TAX \$ (000)	(5) END OF YEAR NET PLANT IN SERVICE \$ (000)	(5a)* ACCUMULATED DEPRECIATION \$ (000)	(5b)* ACCUMULATED DEF. TAXES \$ (000)	(6) BEGINNING YEAR RATE BASE \$ (000)	(7) ENDING OF YEAR RATE BASE \$ (000)	(8) MID-YEAR RATE BASE \$ (000)
2031	3.75%	1,827	266	48,932	1,255	698	50,619	49,199	49,909
2032	7.22%	3,518	(327)	47,678	2,509	371	49,199	47,351	48,275
2033	6.68%	3,254	(854)	46,423	3,764	(483)	47,351	45,569	46,460
2034	6.18%	3,010	(1,319)	45,168	5,019	(1,802)	45,569	43,850	44,709
2035	5.71%	2,784	(1,726)	43,914	6,273	(3,528)	43,850	42,187	43,018
2036	5.29%	2,575	(2,081)	42,659	7,528	(5,609)	42,187	40,578	41,383
2037	4.89%	2,382	(2,387)	41,404	8,783	(7,996)	40,578	39,017	39,798
2038	4.52%	2,204	(2,647)	40,150	10,037	(10,644)	39,017	37,502	38,260
2039	4.46%	2,174	(2,901)	38,895	11,292	(13,544)	37,502	35,994	36,748
2040	4.46%	2,174	(3,154)	37,640	12,547	(16,698)	35,994	34,487	35,241
2041	4.46%	2,174	(3,407)	36,386	13,801	(20,105)	34,487	32,979	33,733
2042	4.46%	2,174	(3,660)	35,131	15,056	(23,764)	32,979	31,471	32,225
2043	4.46%	2,174	(3,913)	33,876	16,311	(27,677)	31,471	29,963	30,717
2044	4.46%	2,174	(4,166)	32,622	17,565	(31,843)	29,963	28,456	29,210
2045	4.46%	2,174	(4,419)	31,367	18,820	(36,262)	28,456	26,948	27,702
2046	4.46%	2,174	(4,672)	30,112	20,075	(40,934)	26,948	25,440	26,194
2047	4.46%	2,174	(4,925)	28,858	21,330	(45,859)	25,440	23,933	24,686
2048	4.46%	2,174	(5,178)	27,603	22,584	(51,037)	23,933	22,425	23,179
2049	4.46%	2,174	(5,431)	26,348	23,839	(56,468)	22,425	20,917	21,671
2050	4.46%	2,174	(5,684)	25,094	25,094	(62,152)	20,917	19,409	20,163
2051	2.23%	1,087	(5,662)	23,839	26,348	(67,814)	19,409	18,177	18,793
2052	0.00%	0	(5,364)	22,584	27,603	(73,178)	18,177	17,220	17,699
2053	0.00%	0	(5,066)	21,330	28,858	(78,244)	17,220	16,264	16,742
2054	0.00%	0	(4,768)	20,075	30,112	(83,011)	16,264	15,307	15,785
2055	0.00%	0	(4,470)	18,820	31,367	(87,481)	15,307	14,350	14,829
2056	0.00%	0	(4,172)	17,565	32,622	(91,653)	14,350	13,394	13,872
2057	0.00%	0	(3,874)	16,311	33,876	(95,527)	13,394	12,437	12,915
2058	0.00%	0	(3,576)	15,056	35,131	(99,103)	12,437	11,480	11,959
2059	0.00%	0	(3,278)	13,801	36,386	(102,381)	11,480	10,524	11,002
2060	0.00%	0	(2,980)	12,547	37,640	(105,360)	10,524	9,567	10,045
2061	0.00%	0	(2,682)	11,292	38,895	(108,042)	9,567	8,610	9,089
2062	0.00%	0	(2,384)	10,037	40,150	(110,426)	8,610	7,654	8,132
2063	0.00%	0	(2,086)	8,783	41,404	(112,512)	7,654	6,697	7,175
2064	0.00%	0	(1,788)	7,528	42,659	(114,300)	6,697	5,740	6,218
2065	0.00%	0	(1,490)	6,273	43,914	(115,790)	5,740	4,783	5,262
2066	0.00%	0	(1,192)	5,019	45,168	(116,982)	4,783	3,827	4,305
2067	0.00%	0	(894)	3,764	46,423	(117,876)	3,827	2,870	3,348
2068	0.00%	0	(596)	2,509	47,678	(118,472)	2,870	1,913	2,392
2069	0.00%	0	(298)	1,255	48,932	(118,770)	1,913	957	1,435
2070	0.00%	0	0	0	50,187	(118,770)	957	0	478

\* Column not specified in workbook



(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/KW)	(7) CUMULATIVE AVERAGE SPENDING (\$/KW)
2021	-10	0.0%	1.000	0.00	0.00	0.00
2022	-9	2.5%	1.025	0.00	0.00	0.00
2023	-8	2.5%	1.051	0.00	0.00	0.00
2024	-7	2.5%	1.077	0.00	0.00	0.00
2025	-6	2.5%	1.104	0.00	0.00	0.00
2026	-5	2.5%	1.131	0.00	0.00	0.00
2027	-4	2.5%	1.160	0.00	0.00	0.00
2028	-3	2.5%	1.189	18.80	107.43	53.71
2029	-2	2.5%	1.218	52.16	305.52	260.19
2030	-1	2.5%	1.249	29.04	174.35	500.13

100.00 587.30

YEAR	(8) CUMULATIVE SPENDING WITH AFUDC (\$/KW)	(8a)* DEBT AFUDC (\$/KW)	(8b)* CUMULATIVE DEBT AFUDC (\$/KW)	(9) YEARLY TOTAL AFUDC (\$/KW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/KW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/KW)	(9c)* CUMULATIVE CPI (\$/KW)	(9d)* DEFERRED TAXES (\$/KW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/KW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/KW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
2021	-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	-3	53.71	0.75	3.34	3.34	2.20	0.37	0.37	0.37	110.77	110.77
2029	-2	263.53	3.68	16.37	19.71	10.67	12.87	1.77	2.14	321.89	432.66
2030	-1	519.84	7.25	32.20	51.91	20.51	33.38	3.36	5.50	206.55	639.21

639.21

5.50

33.38

51.91

11.68

	BOOK BASIS FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	46,111	46,111
EQUITY AFUDC	3,158	
DEBT AFUDC	917	2,620
CPI		
ITC Basis Reduction (Solar)		
TOTAL	50,187	48,732

IN SERVICE YEAR	2031
PLANT COSTS	481
AFUDC RATE	6.22%

\* Column not specified in workbook

(1) YEAR	(2) CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	(3) ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	(4) UTILITY AVERAGE SYSTEM FUEL COST (C/KWh)	(5) AVOIDED MARGINAL FUEL COST (C/KWh)	(6)* INCREASED MARGINAL FUEL COST (C/KWh)	(7) REPLACEMENT FUEL COST (C/KWh)	(8) PROGRAM KW EFFECTIVENESS FACTOR	(9) PROGRAM KWH EFFECTIVENESS FACTOR
2021	0	0	2.20	3.85	2.20	0.00	1.00	1.00
2022	8,125	8,125	2.42	8.87	2.42	0.00	1.00	1.00
2023	16,500	16,500	2.09	3.04	2.09	0.00	1.00	1.00
2024	25,000	25,000	2.10	4.85	2.10	0.00	1.00	1.00
2025	25,000	25,000	2.31	6.23	2.31	0.00	1.00	1.00
2026	25,000	25,000	2.20	2.73	2.20	0.00	1.00	1.00
2027	25,000	25,000	2.34	5.09	2.34	0.00	1.00	1.00
2028	25,000	25,000	2.38	2.95	2.38	0.00	1.00	1.00
2029	25,000	25,000	2.58	3.01	2.58	0.00	1.00	1.00
2030	25,000	25,000	2.66	3.44	2.66	0.00	1.00	1.00
2031	25,000	25,000	2.84	4.87	2.84	4.16	1.00	1.00
2032	25,000	25,000	2.98	6.66	2.98	4.30	1.00	1.00
2033	25,000	25,000	3.18	6.70	3.18	4.39	1.00	1.00
2034	25,000	25,000	3.21	4.55	3.21	4.54	1.00	1.00
2035	25,000	25,000	3.33	4.80	3.33	4.65	1.00	1.00
2036	25,000	25,000	3.45	5.93	3.45	4.74	1.00	1.00
2037	25,000	25,000	3.53	4.61	3.53	4.78	1.00	1.00
2038	25,000	25,000	3.62	5.36	3.62	4.88	1.00	1.00
2039	25,000	25,000	3.65	4.62	3.65	4.92	1.00	1.00
2040	25,000	25,000	3.74	5.61	3.74	5.00	1.00	1.00
2041	25,000	25,000	3.84	5.55	3.84	5.01	1.00	1.00
2042	25,000	25,000	3.85	5.35	3.85	5.10	1.00	1.00
2043	25,000	25,000	3.90	5.15	3.90	5.03	1.00	1.00
2044	25,000	25,000	4.09	5.73	4.09	5.20	1.00	1.00
2045	25,000	25,000	4.12	5.71	4.12	5.33	1.00	1.00
2046	25,000	25,000	4.11	5.45	4.11	5.30	1.00	1.00
2047	25,000	25,000	4.21	5.31	4.21	5.43	1.00	1.00
2048	25,000	25,000	4.23	5.67	4.23	5.42	1.00	1.00
2049	25,000	25,000	4.28	5.85	4.28	5.44	1.00	1.00
2050	25,000	25,000	4.36	5.93	4.36	5.56	1.00	1.00
2051	25,000	25,000	4.54	5.75	4.54	5.54	1.00	1.00
2052	25,000	25,000	4.44	5.71	4.44	5.50	1.00	1.00
2053	25,000	25,000	4.47	6.35	4.47	5.41	1.00	1.00
2054	25,000	25,000	4.52	5.99	4.52	5.46	1.00	1.00
2055	25,000	25,000	4.57	5.92	4.57	5.43	1.00	1.00
2056	25,000	25,000	4.73	6.50	4.73	5.47	1.00	1.00
2057	25,000	25,000	4.64	7.11	4.64	5.37	1.00	1.00
2058	25,000	25,000	4.68	4.68	4.68	5.50	1.00	1.00
2059	25,000	25,000	4.75	7.09	4.75	5.66	1.00	1.00
2060	25,000	25,000	4.75	6.71	4.75	5.82	1.00	1.00
2061	25,000	25,000	4.79	6.52	4.79	5.69	1.00	1.00
2062	25,000	25,000	4.80	6.26	4.80	5.73	1.00	1.00
2063	25,000	25,000	4.89	6.59	4.89	5.77	1.00	1.00
2064	25,000	25,000	5.15	6.32	5.15	6.56	1.00	1.00
2065	25,000	25,000	4.96	6.75	4.96	5.86	1.00	1.00
2066	25,000	25,000	5.07	7.07	5.07	5.84	1.00	1.00
2067	25,000	25,000	5.09	6.21	5.09	5.94	1.00	1.00
2068	25,000	25,000	5.09	6.63	5.09	5.97	1.00	1.00
2069	25,000	25,000	5.09	6.63	5.09	5.97	1.00	1.00
2070	25,000	25,000	5.09	6.63	5.09	5.97	1.00	1.00

\* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.  
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

page 7  
 AVOIDED GENERATING BENEFITS  
 PROGRAM METHOD SELECTED: REV\_REQ  
 PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0
2025	0	0	0	0	0	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	0
2028	0	0	0	0	0	0
2029	0	0	0	0	0	0
2030	0	0	0	0	0	0
2031	7,198	2,415	99	23226	25843	7095
2032	7,011	2,475	102	23694	26804	6478
2033	6,806	2,537	105	24277	27389	6335
2034	6,608	2,601	108	25566	28492	6390
2035	6,415	2,666	111	26087	29186	6093
2036	6,228	2,732	114	26744	29845	5973
2037	6,046	2,800	117	27186	30147	6002
2038	5,869	2,871	120	27589	30807	5641
2039	5,694	2,942	123	27584	31044	5299
2040	5,520	3,016	126	27882	31550	4994
2041	5,346	3,091	129	27958	31662	4863
2042	5,172	3,169	133	28903	32350	5026
2043	4,998	3,248	136	28153	31802	4733
2044	4,824	3,329	139	29151	32827	4616
2045	4,650	3,412	143	29725	33667	4562
2046	4,476	3,497	147	29924	33512	4531
2047	4,301	3,585	150	30452	34364	4124
2048	4,127	3,674	154	30620	34255	4321
2049	3,953	3,766	158	30711	34376	4212
2050	3,779	3,861	162	31260	35142	3920
2051	3,619	3,957	166	30832	34966	3607
2052	3,486	4,056	170	30952	34775	3889
2053	3,368	4,157	174	30455	34213	3941
2054	3,249	4,261	180	31053	34758	3986
2055	3,131	4,368	183	30568	34351	3899
2056	3,012	4,477	189	30848	34827	3699
2057	2,893	4,589	192	30418	34000	4093
2058	2,775	4,704	197	30686	34739	3622
2059	2,656	4,821	203	32009	35995	3694
2060	2,538	4,942	207	32410	36837	3260
2061	2,419	5,065	212	32282	35973	4006
2062	2,301	5,192	219	32487	36473	3726
2063	2,182	5,322	223	32490	36512	3704
2064	2,085	5,455	229	33629	41491	-93
2065	1,989	5,591	236	33348	37365	3799
2066	1,893	5,731	240	33180	36968	4076
2067	1,796	5,874	246	33277	37588	3606
2068	1,700	6,021	252	33075	37814	3235
2069	1,603	6,172	259	33075	37814	3295
2070	1,507	6,326	265	33075	37814	3359

NOM	159,223	162,768	6,820	1,196,840	1,350,337	175,313
NPV	34,525.21	21,328.54	891	181,687	204,193	34,239

AVOIDED T&D AND PROGRAM FUEL SAVINGS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) AVOIDED TRANSMISSION CAP.COST \$(000)	(3) AVOIDED TRANSMISSION O&M.COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAP.COST \$(000)	(6) AVOIDED DISTRIBUTION O&M.COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)	(8a)* PROGRAM OFF-PEAK PAYBACK \$(000)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	1	0
2025	0	0	0	0	0	0	2	0
2026	0	0	0	0	0	0	1	0
2027	0	0	0	0	0	0	2	0
2028	0	0	0	0	0	0	1	0
2029	0	0	0	0	0	0	1	0
2030	0	0	0	0	0	0	1	0
2031	0	0	0	0	0	0	1	0
2032	0	0	0	0	0	0	2	0
2033	0	0	0	0	0	0	2	0
2034	0	0	0	0	0	0	1	0
2035	0	0	0	0	0	0	2	0
2036	0	0	0	0	0	0	2	0
2037	0	0	0	0	0	0	1	0
2038	0	0	0	0	0	0	2	0
2039	0	0	0	0	0	0	2	0
2040	0	0	0	0	0	0	1	0
2041	0	0	0	0	0	0	2	0
2042	0	0	0	0	0	0	2	0
2043	0	0	0	0	0	0	1	0
2044	0	0	0	0	0	0	2	0
2045	0	0	0	0	0	0	2	0
2046	0	0	0	0	0	0	2	0
2047	0	0	0	0	0	0	2	0
2048	0	0	0	0	0	0	1	0
2049	0	0	0	0	0	0	2	0
2050	0	0	0	0	0	0	2	0
2051	0	0	0	0	0	0	2	0
2052	0	0	0	0	0	0	2	0
2053	0	0	0	0	0	0	2	0
2054	0	0	0	0	0	0	2	0
2055	0	0	0	0	0	0	2	0
2056	0	0	0	0	0	0	2	0
2057	0	0	0	0	0	0	2	0
2058	0	0	0	0	0	0	2	0
2059	0	0	0	0	0	0	2	0
2060	0	0	0	0	0	0	2	0
2061	0	0	0	0	0	0	2	0
2062	0	0	0	0	0	0	2	0
2063	0	0	0	0	0	0	2	0
2064	0	0	0	0	0	0	2	0
2065	0	0	0	0	0	0	2	0
2066	0	0	0	0	0	0	2	0
2067	0	0	0	0	0	0	2	0
2068	0	0	0	0	0	0	2	0
2069	0	0	0	0	0	0	2	0
2070	0	0	0	0	0	0	2	0

NOM	0	0.00	0	0	0	0	0	77	0
NPV	0	0	0	0	0	0	0	17	0

\* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

AVOIDED GENERATING EMISSION IMPACT  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

YEAR	(2) AVOIDED GEN UNIT EMISSION BENEFIT \$(000)	(3) REPLACEMENT EMISSION COST \$(000)	(4) PROGRAM EMISSION BENEFIT \$(000)	(5) OFF-PEAK EMISSION PAYBACK COST \$(000)	(6) NET EMISSION BENEFIT \$(000)
2021	0	0	0	0	0
2022	0	0	0	0	0
2023	0	0	0	0	0
2024	0	0	0	0	0
2025	0	0	0	0	0
2026	0	0	0	0	0
2027	0	0	0	0	0
2028	0	0	0	0	0
2029	0	0	0	0	0
2030	0	0	0	0	0
2031	1,424	1,603	0	0	(179)
2032	1,691	1,904	0	0	(213)
2033	1,980	2,230	0	0	(249)
2034	2,318	2,611	0	0	(292)
2035	2,946	3,318	0	0	(371)
2036	3,692	4,158	0	0	(465)
2037	4,515	5,084	0	0	(569)
2038	5,417	6,100	0	0	(683)
2039	6,424	7,234	0	0	(810)
2040	7,521	8,469	0	0	(948)
2041	8,614	9,700	0	0	(1,085)
2042	9,820	11,058	0	0	(1,237)
2043	11,098	12,497	0	0	(1,398)
2044	12,508	14,085	1	0	(1,576)
2045	14,060	15,833	1	0	(1,772)
2046	15,810	17,802	1	0	(1,992)
2047	16,703	18,809	1	0	(2,105)
2048	17,647	19,872	1	0	(2,224)
2049	18,663	21,015	1	0	(2,352)
2050	19,726	22,213	1	0	(2,486)
2051	20,118	22,654	1	0	(2,535)
2052	20,562	23,154	1	0	(2,591)
2053	21,011	23,659	1	0	(2,648)
2054	21,571	24,290	1	0	(2,718)
2055	21,890	24,649	1	0	(2,758)
2056	22,517	25,356	1	0	(2,837)
2057	22,841	25,720	1	0	(2,878)
2058	23,293	26,230	1	0	(2,935)
2059	23,917	26,932	1	0	(3,014)
2060	24,314	27,378	1	0	(3,064)
2061	24,802	27,928	1	0	(3,125)
2062	25,505	28,720	1	0	(3,214)
2063	25,871	29,132	1	0	(3,260)
2064	26,400	29,728	1	0	(3,327)
2065	27,176	30,602	1	0	(3,425)
2066	27,547	31,019	1	0	(3,471)
2067	28,124	31,669	1	0	(3,544)
2068	28,713	32,332	1	0	(3,618)
2069	29,316	33,011	1	0	(3,694)
2070	29,931	33,704	1	0	(3,772)

NOM	677,996	763,462	32	0	(85,434)
NPV	65,079	73,382	3	0	(8,200)

TOTAL RESOURCE COST TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) PARTICIPANT PROGRAM COSTS \$(000)	(5) OTHER COSTS \$(000)	(6) TOTAL COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)	(8) AVOIDED T&D BENEFITS \$(000)	(9) PROGRAM FUEL SAVINGS \$(000)	(10) OTHER BENEFITS \$(000)	(11) TOTAL BENEFITS \$(000)	(12) NET BENEFITS \$(000)	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	1,896	0	0	1,896	0	0	0	0	0	(1,895)	(1,763)
2023	0	2,616	0	0	2,616	0	0	0	0	0	(2,616)	(4,025)
2024	0	3,303	0	0	3,303	0	0	0	0	0	(3,301)	(6,681)
2025	0	1,824	0	0	1,824	0	0	2	0	2	(1,822)	(8,044)
2026	0	1,728	0	0	1,728	0	0	2	0	2	(1,727)	(9,246)
2027	0	1,273	0	0	1,273	0	0	2	0	2	(1,272)	(10,069)
2028	0	816	0	0	816	0	0	1	0	1	(815)	(10,559)
2029	0	374	0	0	374	0	0	1	0	1	(373)	(10,768)
2030	0	380	0	0	380	0	0	1	0	1	(379)	(10,965)
2031	0	392	0	0	392	7,095	0	1	(179)	6,918	(6,918)	(7,806)
2032	0	400	0	0	400	6,478	0	2	(213)	6,267	(6,267)	(5,165)
2033	0	409	0	0	409	6,335	(249)	2	(249)	6,088	(6,088)	(2,787)
2034	0	415	0	0	415	6,390	(292)	1	(292)	6,099	(6,099)	(5,684)
2035	0	416	0	0	416	6,093	(371)	1	(371)	5,723	(5,723)	(1,349)
2036	0	414	0	0	414	5,973	(465)	2	(465)	5,509	(5,509)	3,065
2037	0	421	0	0	421	6,002	(609)	1	(609)	5,434	(5,434)	4,635
2038	0	425	0	0	425	5,641	(683)	1	(683)	4,960	(4,960)	5,957
2039	0	444	0	0	444	5,299	(810)	1	(810)	4,491	(4,491)	7,053
2040	0	453	0	0	453	4,994	(948)	2	(948)	4,048	(4,048)	7,959
2041	0	463	0	0	463	4,863	(1,085)	2	(1,085)	3,779	(3,779)	8,736
2042	0	3,467	0	0	3,467	5,026	(1,237)	2	(1,237)	3,790	(3,790)	8,807
2043	0	4,535	0	0	4,535	4,733	(1,398)	1	(1,398)	3,336	(3,336)	8,564
2044	0	5,525	0	0	5,525	4,616	(1,576)	2	(1,576)	3,041	(3,041)	8,095
2045	0	3,058	0	0	3,058	4,262	(1,772)	2	(1,772)	2,492	(2,492)	7,996
2046	0	2,859	0	0	2,859	4,531	(1,992)	2	(1,992)	2,541	(2,541)	7,944
2047	0	2,095	0	0	2,095	4,124	(2,105)	1	(2,105)	2,021	(2,021)	7,933
2048	0	1,337	0	0	1,337	4,321	(2,224)	2	(2,224)	2,099	(2,099)	7,62
2049	0	613	0	0	613	4,212	(2,352)	2	(2,352)	1,862	(1,862)	8,040
2050	0	623	0	0	623	3,920	(2,486)	2	(2,486)	1,249	(1,249)	8,204
2051	0	643	0	0	643	3,607	(2,535)	2	(2,535)	1,073	(1,073)	8,352
2052	0	656	0	0	656	3,889	(2,591)	2	(2,591)	1,300	(1,300)	8,420
2053	0	670	0	0	670	3,941	(2,648)	2	(2,648)	1,295	(1,295)	8,482
2054	0	680	0	0	680	3,986	(2,718)	2	(2,718)	1,269	(1,269)	8,535
2055	0	682	0	0	682	3,899	(2,758)	2	(2,758)	1,142	(1,142)	8,574
2056	0	678	0	0	678	3,699	(2,837)	2	(2,837)	863	(863)	8,589
2057	0	690	0	0	690	4,093	(2,878)	2	(2,878)	863	(863)	8,628
2058	0	697	0	0	697	3,622	(2,935)	2	(2,935)	689	(689)	8,627
2059	0	727	0	0	727	3,694	(3,014)	2	(3,014)	682	(682)	8,624
2060	0	742	0	0	742	3,260	(3,064)	2	(3,064)	198	(198)	8,592
2061	0	759	0	0	759	4,006	(3,125)	2	(3,125)	882	(882)	8,590
2062	0	5,681	0	0	5,681	3,726	(3,214)	2	(3,214)	514	(514)	8,335
2063	0	7,430	0	0	7,430	3,704	(3,260)	2	(3,260)	446	(446)	8,003
2064	0	9,054	0	0	9,054	(93)	(3,327)	2	(3,327)	(3,418)	(3,418)	7,452
2065	0	5,011	0	0	5,011	3,799	(3,425)	2	(3,425)	376	(376)	7,262
2066	0	4,684	0	0	4,684	4,076	(3,471)	2	(3,471)	607	(607)	7,106
2067	0	3,434	0	0	3,434	3,606	(3,544)	2	(3,544)	64	(64)	6,986
2068	0	2,191	0	0	2,191	3,235	(3,618)	2	(3,618)	(382)	(382)	6,901
2069	0	1,004	0	0	1,004	3,295	(3,694)	2	(3,694)	(397)	(397)	6,858
2070	0	1,021	0	0	1,021	3,559	(3,772)	2	(3,772)	(410)	(410)	6,817

NOM	0	90,105	0	0	90,105	175,312.82	0	77	(85,434)	89,956	(1,50)	
NPV	0	19,238	0	0	19,238	34,239	0	17	(8,200)	26,055.22	6,817	

Discount Rate:  
Benefit/Cost Ratio (Col(11) / Col(6)) :

7.52  
1.35 %

PARTICIPANT COSTS AND BENEFITS  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) SAVINGS IN PARTICIPANTS BILLS \$(000)	(3) TAX CREDITS \$(000)	(4) UTILITY REBATES \$(000)	(5) OTHER BENEFITS \$(000)	(6) TOTAL BENEFITS \$(000)	(7) CUSTOMER EQUIPMENT COSTS \$(000)	(8) CUSTOMER O&M COSTS \$(000)	(9) OTHER COSTS \$(000)	(10) TOTAL COSTS \$(000)	(11) NET BENEFITS \$(000)	(12) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0
2022	1	0	258	0	259	0	0	0	0	259	241
2023	2	0	782	0	784	0	0	0	0	784	919
2024	3	0	1,318	0	1,322	0	0	0	0	1,322	1,982
2025	4	0	1,588	0	1,592	0	0	0	0	1,592	3,173
2026	4	0	1,588	0	1,593	0	0	0	0	1,593	4,281
2027	4	0	1,588	0	1,593	0	0	0	0	1,593	5,312
2028	4	0	1,588	0	1,593	0	0	0	0	1,593	6,270
2029	5	0	1,588	0	1,593	0	0	0	0	1,593	7,162
2030	5	0	1,588	0	1,593	0	0	0	0	1,593	7,991
2031	5	0	1,588	0	1,593	0	0	0	0	1,593	8,763
2032	5	0	1,588	0	1,593	0	0	0	0	1,593	9,480
2033	5	0	1,588	0	1,593	0	0	0	0	1,593	10,147
2034	5	0	1,588	0	1,593	0	0	0	0	1,593	10,768
2035	5	0	1,588	0	1,594	0	0	0	0	1,594	11,345
2036	5	0	1,588	0	1,594	0	0	0	0	1,594	11,881
2037	5	0	1,588	0	1,594	0	0	0	0	1,594	12,381
2038	6	0	1,588	0	1,594	0	0	0	0	1,594	12,845
2039	6	0	1,588	0	1,594	0	0	0	0	1,594	13,277
2040	6	0	1,588	0	1,594	0	0	0	0	1,594	13,679
2041	6	0	1,588	0	1,594	0	0	0	0	1,594	14,052
2042	6	0	1,588	0	1,594	0	0	0	0	1,594	14,400
2043	6	0	1,588	0	1,595	0	0	0	0	1,595	14,723
2044	6	0	1,588	0	1,595	0	0	0	0	1,595	15,024
2045	6	0	1,588	0	1,595	0	0	0	0	1,595	15,303
2046	7	0	1,588	0	1,595	0	0	0	0	1,595	15,563
2047	7	0	1,588	0	1,595	0	0	0	0	1,595	15,805
2048	7	0	1,588	0	1,595	0	0	0	0	1,595	16,030
2049	7	0	1,588	0	1,595	0	0	0	0	1,595	16,239
2050	7	0	1,588	0	1,595	0	0	0	0	1,595	16,434
2051	7	0	1,588	0	1,595	0	0	0	0	1,595	16,615
2052	7	0	1,588	0	1,596	0	0	0	0	1,596	16,783
2053	7	0	1,588	0	1,596	0	0	0	0	1,596	16,940
2054	7	0	1,588	0	1,596	0	0	0	0	1,596	17,086
2055	7	0	1,588	0	1,596	0	0	0	0	1,596	17,221
2056	8	0	1,588	0	1,596	0	0	0	0	1,596	17,347
2057	8	0	1,588	0	1,596	0	0	0	0	1,596	17,464
2058	8	0	1,588	0	1,596	0	0	0	0	1,596	17,573
2059	8	0	1,588	0	1,596	0	0	0	0	1,596	17,675
2060	8	0	1,588	0	1,596	0	0	0	0	1,596	17,769
2061	8	0	1,588	0	1,597	0	0	0	0	1,597	17,856
2062	8	0	1,588	0	1,597	0	0	0	0	1,597	17,938
2063	8	0	1,588	0	1,597	0	0	0	0	1,597	18,014
2064	9	0	1,588	0	1,597	0	0	0	0	1,597	18,084
2065	9	0	1,588	0	1,597	0	0	0	0	1,597	18,150
2066	9	0	1,588	0	1,597	0	0	0	0	1,597	18,211
2067	9	0	1,588	0	1,597	0	0	0	0	1,597	18,268
2068	9	0	1,588	0	1,598	0	0	0	0	1,598	18,321
2069	9	0	1,588	0	1,598	0	0	0	0	1,598	18,370
2070	9	0	1,588	0	1,598	0	0	0	0	1,598	18,415

NOM	311	0	75,427	0	75,738	0	0	0	0	0	75,738
NPV	60	0	18,355	0	18,415	0	0	0	0	0	18,415

In Service of Gen Unit:  
Discount Rate: 7.52 %  
Benefit/Cost Ratio ( Col(6) / Col(10) ) Infinite

RATE IMPACT TEST  
PROGRAM METHOD SELECTED: REV\_REQ  
PROGRAM NAME: Residential On-Call (ROC)

(1) YEAR	(2) INCREASED SUPPLY COSTS \$(000)	(3) UTILITY PROGRAM COSTS \$(000)	(4) INCENTIVES \$(000)	(5) REVENUE LOSSES \$(000)	(6) SELLBACK/ OTHER COSTS \$(000)	(7) TOTAL COSTS \$(000)	(8) AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	(9) AVOIDED T&D BENEFITS \$(000)	(10) REVENUE GAINS \$(000)	(11) OTHER BENEFITS \$(000)	(12) TOTAL BENEFITS \$(000)	(13) NET BENEFITS \$(000)	(14) CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2021	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	1,896	258	0	0	2,154	0	0	0	0	0	(2,154)	(2,003)
2023	0	2,616	782	1	0	3,400	0	0	0	0	0	(3,399)	(4,943)
2024	0	3,303	1,318	2	0	4,623	1	0	0	0	0	(4,622)	(8,661)
2025	0	1,824	1,588	3	0	3,416	2	0	0	0	2	(3,414)	(11,215)
2026	0	1,728	1,588	3	0	3,320	1	0	0	0	0	(3,319)	(13,524)
2027	0	1,273	1,588	3	0	2,865	2	0	0	0	0	(2,863)	(15,377)
2028	0	816	1,588	3	0	2,408	2	0	0	0	0	(2,407)	(16,826)
2029	0	374	1,588	3	0	1,966	1	0	0	0	0	(1,965)	(17,925)
2030	0	380	1,588	4	0	1,972	1	0	0	0	0	(1,971)	(18,951)
2031	0	392	1,588	4	0	1,984	7,097	0	0	(179)	6,918	4,933	(16,563)
2032	0	400	1,588	4	0	1,992	6,480	0	0	(213)	6,267	4,275	(14,639)
2033	0	409	1,588	4	0	2,001	6,337	0	0	(249)	6,088	4,087	(12,927)
2034	0	415	1,588	4	0	2,007	6,391	0	0	(292)	6,099	4,092	(11,334)
2035	0	416	1,588	4	0	2,009	6,094	0	0	(371)	5,723	3,715	(9,989)
2036	0	414	1,588	4	0	2,006	5,975	0	0	(465)	5,509	3,503	(8,809)
2037	0	421	1,588	4	0	2,013	6,003	0	0	(509)	5,434	3,421	(7,737)
2038	0	425	1,588	4	0	2,018	5,643	0	0	(683)	4,960	2,942	(6,880)
2039	0	444	1,588	4	0	2,036	5,301	0	0	(810)	4,491	2,455	(6,215)
2040	0	453	1,588	4	0	2,046	4,996	0	0	(948)	4,048	2,002	(5,710)
2041	0	463	1,588	4	0	2,056	4,864	0	0	(1,085)	3,779	1,723	(5,306)
2042	0	3,467	1,588	5	0	5,060	5,028	0	0	(1,237)	3,790	1,723	(5,306)
2043	0	4,535	1,588	5	0	6,128	4,735	0	0	(1,398)	3,336	(2,791)	(6,149)
2044	0	5,525	1,588	5	0	7,119	4,617	0	0	(1,576)	3,041	(4,077)	(6,918)
2045	0	3,058	1,588	5	0	4,651	4,263	0	0	(1,772)	2,492	(2,160)	(7,296)
2046	0	2,859	1,588	5	0	4,452	4,533	0	0	(1,992)	2,541	(1,911)	(7,608)
2047	0	2,095	1,588	5	0	3,689	4,126	0	0	(2,105)	2,021	(1,668)	(7,861)
2048	0	1,337	1,588	5	0	2,930	4,322	0	0	(2,224)	2,099	(832)	(7,978)
2049	0	613	1,588	5	0	2,206	4,213	0	0	(2,352)	1,862	(345)	(8,023)
2050	0	623	1,588	5	0	2,217	3,922	0	0	(2,486)	1,436	(781)	(8,119)
2051	0	643	1,588	5	0	2,237	3,608	0	0	(2,535)	1,073	(1,163)	(8,251)
2052	0	656	1,588	5	0	2,250	3,891	0	0	(2,591)	1,300	(950)	(8,351)
2053	0	670	1,588	6	0	2,264	3,943	0	0	(2,648)	1,295	(969)	(8,446)
2054	0	680	1,588	6	0	2,274	3,988	0	0	(2,718)	1,269	(1,004)	(8,537)
2055	0	682	1,588	6	0	2,276	3,901	0	0	(2,758)	1,142	(1,134)	(8,634)
2056	0	678	1,588	6	0	2,272	3,700	0	0	(2,837)	863	(1,409)	(8,745)
2057	0	690	1,588	6	0	2,284	4,095	0	0	(2,878)	1,217	(1,067)	(8,823)
2058	0	697	1,588	6	0	2,291	3,624	0	0	(2,935)	689	(8,933)	(8,933)
2059	0	727	1,588	6	0	2,321	3,696	0	0	(3,014)	198	(1,639)	(9,037)
2060	0	742	1,588	6	0	2,337	3,262	0	0	(3,064)	882	(2,138)	(9,163)
2061	0	759	1,588	6	0	2,353	4,008	0	0	(3,125)	514	(1,471)	(9,244)
2062	0	5,681	1,588	6	0	7,276	3,227	0	0	(3,214)	376	(6,762)	(9,589)
2063	0	7,430	1,588	6	0	9,025	3,706	0	0	(3,260)	446	(8,579)	(9,997)
2064	0	9,054	1,588	7	0	10,649	(91)	0	0	(3,327)	(3,418)	(14,067)	(10,618)
2065	0	5,011	1,588	7	0	6,606	3,801	0	0	(3,425)	376	(6,230)	(10,874)
2066	0	4,684	1,588	7	0	6,280	4,078	0	0	(3,471)	607	(5,672)	(11,091)
2067	0	3,434	1,588	7	0	5,029	3,608	0	0	(3,544)	64	(4,965)	(11,267)
2068	0	2,191	1,588	7	0	3,786	3,237	0	0	(3,618)	(382)	(4,167)	(11,405)
2069	0	1,004	1,588	7	0	2,599	3,297	0	0	(3,694)	(397)	(2,996)	(11,497)
2070	0	1,021	1,588	7	0	2,617	3,361	0	0	(3,772)	(410)	(3,027)	(11,584)
NOM	0	90,105	75,427	236	0	165,769	175,389.84	0.00	0.00	(85,434.15)	89,956	(75,813)	
NPV	0	19,238	18,355	46	0	37,639	34,256	0	0	(8,200)	26,055	(11,584)	

Discount Rate:  
Benefit/Cost Ratio (Col(12) / Col(7)) : 0.69 %



**ATTACHMENT E**

**Florida Power & Light Company  
Demand-Side Management Modified Program Standards**

# **Florida Power & Light Company**

## **Residential Air Conditioning Program Standards**

**Effective: January 1, 2022**

# FPL Residential Air Conditioning Program Standards

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## Table of Contents

**Program Objective .....2**

**Eligibility Requirements .....2**

**PIC Requirements .....2**

**Rebate Amount and PIC Reimbursement Processing .....3**

**Reporting Requirements.....3**

**Disclaimers .....3**

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# FPL Residential Air Conditioning Program Standards

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## Program Objective

Encourage customers to install high-efficiency air-cooled air conditioning systems (“A/C System”).

## Eligibility Requirements

### **Customer must:**

- Have an active FPL residential account.
- Reside in a residential single-family detached or multi-family home (excludes manufactured or mobile homes).
- Have not received a rebate for the same A/C System within the past two years. This limitation may be waived, at FPL’s sole discretion, if the A/C System is damaged by a state or federally recognized natural disaster, tornado, fire or the like.
- Select an A/C System that meets all equipment specifications.
- Select, verify and hire a Participating Independent Contractor (“PIC”) to perform the installation work.
  - Governmental entities, including local, state and federal agencies may, with FPL’s pre-approval, perform installations themselves provided they comply with all other Program Standards requirements.

### **A/C Systems must reflect the following specifications:**

- Straight-cool and heat pump, electric-driven, air-cooled system with a Seasonal Energy Efficiency Ratio (“SEER”) of 16 or higher.
- New (*i.e.*, cannot be refurbished, previously installed or used).
- Certified by the Air Conditioning, Heating & Refrigeration Institute (“AHRI”) as listed on its website ([www.ahridirectory.org](http://www.ahridirectory.org)) and listed (including any supplemental devices) by Underwriters Laboratories (“UL”) or another nationally recognized testing organization in accordance with UL standards.

### **Installation by the PIC must:**

- Completely replace an existing electric-driven cooling system (*i.e.*, condenser, blower, coil, and any supplemental devices). Replacement of only some components does not qualify.
- If the existing A/C System is connected to an FPL Load Management (On Call<sup>®</sup>) transponder, the FPL low voltage wire must be disconnected from the existing thermostat and reconnected to the new thermostat.
  - The reconnection must be acknowledged in FPL’s Web Incentive Processing System (“WIPS”).
- Systems with non-electric heating or no heating can be replaced with like heating.

## PIC Requirements

- FPL at its sole discretion will determine the number of PICs eligible to participate in the Program.
- A PIC is required to comply with all requirements of these Program Standards and a failure to comply can result in denial of the rebate and the PIC’s removal from participation in the Program.
- PIC must sign an agreement with FPL regarding participation in the Program. This is separate and independent from any agreement between the customer and the PIC.
- PIC must be a licensed mechanical or air conditioning contractor in good standing in the State of Florida at all times.

# **FPL Residential Air Conditioning Program Standards**

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## **Rebate Amount and PIC Reimbursement Processing**

### **Rebate Amount**

- \$150 per installation.
- The rebate amount must appear as an itemized credit on the PIC's invoice to the customer and the customer must have paid the amount net of the rebate.

### **PIC Reimbursement Processing**

- PIC shall complete the Residential Air Conditioning Rebate Certificate (including obtaining the customer's signature) and leave one copy with the customer.
- PIC shall submit its rebate reimbursement request and all required documentation online through WIPS in a timely and accurate manner, or through any other administrative process as may be established by FPL.
- For the sole purpose of ensuring Program compliance in order to issue the rebate, FPL reserves the right to verify any installation and will be the sole determiner of whether the requirements of these Program Standards have been met. Customer must allow access for this purpose.

### **Participation Limitation**

FPL will close current-year participation if FPL determines that additional participation is not needed to achieve its approved Residential sector annual Goals. FPL's prior commitments related to customer installations in progress at the time of such closure will be honored in compliance with these Program Standards. The Program will be reopened to new participants January 1<sup>st</sup> of the following year. FPL will provide customer and PIC messaging through its normal communication channels, which may include FPL's website, customer care center and other FPL representatives.

## **Reporting Requirements**

Program costs will be reported to the Commission in FPL's Energy Conservation Cost Recovery ("ECCR") True-Up and Projection filings. Program achievements will be reported in FPL's Demand-Side Management ("DSM") Annual Report.

## **Disclaimers**

The issuance of a rebate by FPL under the Program shall not be considered or relied upon by the customer to be confirmation that: (i) the customer has selected the proper A/C System for their residence; and/or (ii) that any of the underlying work performed by the PIC was done properly pursuant to the manufacturer recommendations and specifications, building codes, other applicable laws, industry standards or individual contract requirements. FPL does not participate in or approve the selection of the A/C System and does not manage or provide oversight of the work performed by the PIC selected and hired by the customer. It is the sole responsibility of the customer to investigate and select an A/C System that is appropriate for their specific application, perform their own due diligence in selecting the PIC, manage the PIC they select and hire to perform the work, and to take the necessary precautions they deem prudent to ensure the equipment, materials, and work meets their expectations.

FPL does not provide any supervision, control or instructions to PICs regarding the means and methods for performing any work that might be eligible for a rebate. This is entirely the responsibility of the PIC who is

# **FPL Residential Air Conditioning Program Standards**

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an independent contractor and likewise the sole responsibility of the customer to manage and inspect the work performed by the PIC. FPL provides no guaranty or warranty regarding the amount of energy savings to be expected, the equipment and/or the work provided by the PIC.

# **Florida Power & Light Company**

## **Residential Ceiling Insulation Program Standards**

**Effective: January 1, 2022**

# FPL Residential Ceiling Insulation Program Standards

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## Table of Contents

<b>Program Objective .....</b>	<b>2</b>
<b>Eligibility Requirements .....</b>	<b>2</b>
<b>PIC Requirements .....</b>	<b>3</b>
<b>Rebate Amount and PIC Reimbursement Processing .....</b>	<b>3</b>
<b>Reporting Requirements.....</b>	<b>4</b>
<b>Disclaimers.....</b>	<b>4</b>



# FPL Residential Ceiling Insulation Program Standards

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## **Program Objective**

Encourage customers to improve the building envelope's thermal efficiency.

## **Eligibility Requirements**

### **Customer must:**

- Have an active FPL residential account.
- Have whole house electric air conditioning and heating.
- Have not received a ceiling insulation rebate within the last 20 years.
- Select, verify and hire a Participating Independent Contractor (“PIC”) to perform the installation work.
  - Governmental entities, including local, state and federal agencies, may, with FPL’s pre-approval, perform installations themselves provided they comply with all other Program Standards requirements.
- Provide access to all attic spaces in order for either FPL to determine rebate eligibility or PIC to determine and demonstrate to FPL such eligibility.
- Have a verified ceiling insulation R-value of less than R-8.
- Select ceiling insulation that meets all material specifications.

### **Ceiling Insulation material must reflect the following specifications:**

- Have a specified R-Value.
- Include, but not limited to, the following insulation types; blown-in, batt, blanket, and sprayed foam or fiber.
- New (*i.e.*, not refurbished, previously installed or otherwise used).
- Thermal properties, technical specifications, and performance characteristics independently tested and verified using the applicable test methods/standards established by the American Society of Testing and Materials (“ASTM”) or based on other FPL-approved calculations and test methods, where appropriate.

### **Installation by the PIC must:**

- Be installed uniformly on the ceiling as a direct application to insulate the full attic to a minimum R-value of R-30 for climate zone 1 (Miami-Dade, Broward and Monroe counties) or R-38 for climate zone 2 (rest of FPL territory) over all conditioned space including the scuttle hole (additions or renovations do not qualify).
- Be located in an accessible attic (inaccessible attics and flat roof installations are not eligible).
- Not be installed on top of unfinished (drop) ceilings.
- Not cover soffits or any other type of attic ventilation system.
- Have minimum clearance around all recessed lighting and gas-fired appliances as stipulated in state, county and local codes.
- Leave a product specification sheet for FPL at the premises.

# FPL Residential Ceiling Insulation Program Standards

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## PIC Requirements

- FPL at its sole discretion will determine the number of PICs eligible to participate in the Program.
- PIC must comply with all requirements of these Program Standards and a failure to comply can result in denial of the rebate and the PIC's removal from participation in the Program.
- PIC must sign an agreement with FPL regarding their overall participation in the Program. This is separate and independent from any agreement between the customer and the PIC.
- PIC must have the appropriate license in good standing to perform the work.

## Rebate Amount and PIC Reimbursement Processing

### Rebate Amount

<u>Existing R-value</u>	<u>Rebate Amount</u>
R0-R8	\$220

- No rebate payment shall exceed the customer's payment to the PIC which may include both materials and applicable labor.
- The rebate amount must appear as an itemized credit on the PIC's invoice to the customer and the customer must have paid the amount net of the rebate.

### PIC Reimbursement Processing

- Before installation begins, a rebate certificate must be issued to the customer by an FPL representative or PIC.
- After installation, the customer or customer's designee will give the customer-signed rebate certificate to the PIC as partial payment. A rebate certificate cannot be exchanged for cash.
- PIC must submit to FPL date-stamped photo or video documentation showing the before and after R-value levels and any other supporting documentation as required by FPL (*e.g.*, product specification sheet, etc.).
- PIC shall complete and submit its rebate reimbursement request and all required documentation online through FPL's Web Incentive Processing System ("WIPS"), or any other administrative process as may be established by FPL.
- For the sole purpose of ensuring Program compliance in order to issue the rebate, FPL reserves the right to verify any installation and will be the sole determiner of whether the requirements of these Program Standards have been met. Customer must allow access for this purpose.

### Participation Limitation

FPL will close current-year participation if FPL determines that additional participation is not needed to achieve its approved Residential sector annual Goals. FPL's prior commitments related to customer installations in progress at the time of such closure will be honored in compliance with these Program Standards. The Program will be reopened to new participants January 1<sup>st</sup> of the following year. FPL will provide customer and PIC messaging through its normal communication channels, which may include FPL's website, customer care center and other FPL representatives.

# **FPL Residential Ceiling Insulation Program Standards**

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## **Reporting Requirements**

Program costs will be reported to the Commission in FPL's Energy Conservation Cost Recovery ("ECCR") True-Up and Projection filings. Program achievements will be reported in the FPL's Demand-Side Management ("DSM") Annual Report.

## **Disclaimers**

The issuance of a rebate by FPL under the Program shall not be considered or relied upon by the customer to be confirmation that: (i) the customer has selected the proper ceiling insulation for their residence; and/or (ii) that any of the underlying work performed by the PIC was done properly pursuant to the manufacturer recommendations and specifications, building codes, other applicable laws, industry standards or individual contract requirements. FPL does not participate in or approve the selection of the ceiling insulation and does not manage or provide oversight of the work performed by the PIC selected and hired by the customer. It is the sole responsibility of the customer to investigate and select ceiling insulation that is appropriate for their specific application, perform their own due diligence in selecting the PIC, manage the PIC they select and hire to perform the work, and to take the necessary precautions they deem prudent to ensure the equipment, materials, and work meets their expectations.

FPL does not provide any supervision, control or instructions to PICs regarding the means and methods for performing any work that might be eligible for a rebate. This is entirely the responsibility of the PIC who is an independent contractor and likewise the sole responsibility of the customer to manage and inspect the work performed by the PIC. FPL provides no guaranty or warranty regarding the amount of energy savings to be expected, the material and/or the work provided by the PIC.

# **Florida Power & Light Company**

## **Residential Low Income Program Standards**

**Effective: January 1, 2022**

# FPL Residential Low Income Program Standards

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## Table of Contents

<b>Program Objective .....</b>	<b>2</b>
<b>Eligibility Requirements .....</b>	<b>2</b>
<b>Rebate Amount and WAP Reimbursement Processing.....</b>	<b>2</b>
<b>Reporting Requirements.....</b>	<b>3</b>
<b>Disclaimers .....</b>	<b>3</b>

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# FPL Residential Low Income Program Standards

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## Program Objective

Assist low income customers through FPL-conducted “Power to Save” Energy Retrofits, “Community Energy Saver”, and state Weatherization Assistance Provider (“WAP”) agencies.

## Eligibility Requirements

### **Customer must:**

- Have an active FPL residential account.
- For FPL “Power to Save” Energy Retrofits or “Community Energy Saver”, reside in an area where the majority of customers’ incomes are below 200% of the federal poverty level.
- For WAP-provided measures, meet WAP low-income eligibility criteria.
- Live in a residence with whole house cooling or heating.
- Have not previously received an FPL rebate for the same measure.

### **WAP must:**

- Qualify all customers using Federal and State guidelines.
- Conduct an audit using either the National Energy Audit Tool (“NEAT”) or an FPL-approved method.
- Be responsible for all work performed by itself or by its designated contractor(s).

## Rebate Amount and WAP Reimbursement Processing

Customers will receive the measures for free whether provided through an FPL “Power to Save” Energy Retrofit, “Community Energy Saver” or a WAP agency.

### **WAP Rebate Amount (per home)**

- Weatherization/Infiltration \$90
- Air conditioning:
  - Duct testing & repair \$60
  - Unit maintenance \$80
  - Outdoor coil cleaning \$60
- Water heating:
  - Low flow showerhead \$30
  - Faucet aerator \$10
  - Pipe wrap \$40
- Lighting
  - LED bulbs (up to 5) \$6

### **WAP Reimbursement Processing**

- WAP shall submit the Low Income Weatherization Rebate Form to FPL within 90 days of installation.
- For the sole purpose of ensuring program compliance in order to issue the rebate, FPL reserves the right to verify any installation and will be the sole determiner of whether the requirements of these Program Standards have been met. Customer must allow access for this purpose.
- Rebate will be paid to the WAP or its designee.

# FPL Residential Low Income Program Standards

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- WAP must correct any deficiency in installation or materials identified by FPL within 90 days of notification.

## **Participation Limitation**

FPL will close current-year participation if FPL determines that additional participation is not needed to achieve its approved Residential sector annual Goals. FPL's prior commitments related to customer installations in progress at the time of such closure will be honored in compliance with these Program Standards. The Program will be reopened to new participants January 1<sup>st</sup> of the following year. FPL will provide customer messaging through its normal communication channels, which may include FPL's website, customer care center and other FPL representatives.

## **Reporting Requirements**

Program costs will be reported to the Commission in FPL's Energy Conservation Cost Recovery ("ECCR") True-Up and Projection filings. Program achievements will be reported in FPL's Demand-Side Management ("DSM") Annual Report.

## **Disclaimers**

The issuance of a rebate by FPL under the Program shall not be considered or relied upon by the customer to be confirmation that that any of the underlying work performed by the WAP agency was done properly pursuant to the manufacturer recommendations and specifications, building codes, other applicable laws, industry standards or individual contract requirements. FPL does not participate in or approve the selection of conservation measures installed by the WAP agencies and does not manage or provide oversight of the work performed by the WAP agency. It is the sole responsibility of the customer and the WAP agencies to investigate and select conservation measures that are appropriate for their specific application, perform the work and to take the necessary precautions they deem prudent to ensure the equipment, materials, and work meets their expectations.

FPL does not provide any supervision, control or instructions to WAP agencies regarding the means and methods for performing any work that might be eligible for a rebate. This is entirely the responsibility of the WAP and likewise the sole responsibility of the customer to manage and inspect the work performed by the WAP. FPL provides no guaranty or warranty regarding the amount of energy savings to be expected, the equipment and/or the work provided by the WAP agencies.