

Natalie F. Smith Principal Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 691-7207 (561) 691-7135 (Facsimile)

May 19, 2006

VIA HAND DELIVERY

Ms. Blanca S. Bayò, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard, Room 110 Tallahassee, FL 32399-0850

060408-E(

Re: Petition for Approval of Modifications to Florida Power & Light Company's Demand Side Management Plan

Dear Ms. Bayò:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the original and fifteen (15) copies of a Petition for Approval of Modifications to its Demand Side Management Plan. Also included is a computer diskette containing an electronic version of FPL's Petition.

Please do not hesitate to contact me should you or your Staff have any questions regarding this filing. Thanking you for your attention to this matter.

Sincerely,

Natalie F. Smith

NFS:ec Enclosures

Original Tariff forwarded

DOCUMENT NO. 01421-06 5.19.06

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Approval of)	Docket No. 06EG
Modifications to Florida Power &)	
Light Company's Demand Side)	Filed: May 19, 2006
Management Plan)	•

PETITION FOR APPROVAL OF MODIFICATIONS TO FLORIDA POWER & LIGHT COMPANY'S DEMAND SIDE MANAGEMENT PLAN

Florida Power & Light Company ("FPL"), pursuant to Sections 366.82 and 366.06(1), Florida Statutes (2006), and Florida Administrative Code Rule 25-17.0021 petitions the Florida Public Service Commission ("Commission") to approve certain Modifications to FPL's Demand Side Management ("DSM") Plan as described in this petition, and to authorize FPL to recover through its Energy Conservation Cost Recovery ("ECCR") clause reasonable and prudent expenditures associated with implementation of such modifications to FPL's DSM Plan. Approval of the modifications to FPL's DSM Plan, as proposed, will help further the objectives of the Florida Energy Efficiency Conservation Act ("FEECA") by cost-effectively reducing the growth rate of weather sensitive peak demand, reducing and controlling the growth rate of energy consumption, increasing the conservation of expensive resources and increasing the efficiency of the electrical system. See Section 366.81, Florida Statutes (2006); Rule 25-17.001(2), Florida Administrative Code (2006). Reducing the growth rate of weather sensitive peak demand will benefit not only FPL's individual customers who reduce their demand through participation in the new and modified DSM programs, but also all other customers on FPL's system. See Rule 25-17.001(3), Florida Administrative Code. FPL respectfully requests expedited consideration and approval of modifications to its DSM Plan in order that customers

may receive the conservation benefits of its proposed DSM Plan modifications in the near term. In support of this petition FPL states:

- 1. FPL is a public utility subject to the jurisdiction of the Commission pursuant to Chapter 366 of the Florida Statutes. FPL's General Offices are located at 9250 West Flagler Street, Miami, FL 33174.
- 2. The names and addresses of FPL's representatives to receive communications regarding this docket are:

William G. Walker, III Florida Power & Light Company Vice President 215 South Monroe Street Suite 810 Tallahassee, Florida 32301-1859 Natalie F. Smith Principal Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408 Telephone: 561-691-7207

3. FPL is subject to FEECA, Sections 366.80-366.85 and 403.519, Florida Statutes (2006), and its Energy Conservation Cost Recovery clause is subject to the Commission's jurisdiction. Pursuant to FEECA and Commission rules implementing FEECA, FPL is required to seek the Commission's approval of any amendments or modifications to its approved DSM plan and is entitled to seek recovery of associated expenditures. FPL's current DSM Plan was approved by the Commission in Order No. PSC-05-0323-CO-EG issued March 21, 2005 in Docket No. 040029-EG.¹ FPL's DSM Goals were approved in Order No. PSC-04-0850-CO-EG issued September 1, 2004 in Docket No. 040029-EG. FPL has a substantial interest in whether the Commission approves FPL's requested modifications to its DSM Plan and authorizes cost recovery for plan implementation expenditures.

Following a formal proceeding, the BuildSmart and Residential Conservation Service programs were subsequently approved in Order No. PSC-06-0025-FOF-EG issued January 10, 2006 in Docket No. 040029-EG.

FPL's Existing DSM Plan

4. FPL's DSM Plan was approved by the Commission in March of 2005.² As it is currently configured, FPL's DSM Plan contains 17 programs, including seven residential programs,³ nine commercial/industrial ("C/I" or "Business") programs,⁴ and one research and development program.⁵ The Plan also includes three research projects.⁶ Through its conservation programs FPL offers a wide array of conservation measures and audit services to its customers, and through its research efforts FPL has performed extensive DSM research.

Proposed Modifications to FPL's DSM Plan

5. Of these 20 existing conservation offerings, FPL is proposing to continue 11 of the programs or projects with no modifications.⁷ By this petition, FPL is requesting

FPL petitioned for plan approval on November 30, 2004. The Commission issued a PAA Order, Order No. PSC-05-0162-PAA-EG on February 9, 2005, approving FPL's proposed plan. There was a partial protest of the PAA order as it related to the BuildSmart and Residential Conservation Service Programs. The protest was resolved in Order No. PSC-06-0025-FOF-EG, which approved both programs.

FPL's current residential conservation programs are: Residential Building Envelope; Duct System Testing and Repair; Residential Air Conditioning; Residential Load Management (On Call); Residential New Construction (BuildSmart®); Residential Low Income Weatherization and Residential Conservation Service.

FPL's conservation programs currently available to its Commercial/Industrial ("C/I") customers are: C/I Heating, Ventilating and Air Conditioning; C/I Efficient Lighting; C/I Building Envelope; Business Custom Incentive; Business On Call; C/I Demand Reduction; Business Energy Evaluation; Cogeneration and Small Power Production; and C/I Load Control.

⁵ Conservation Research and Development Program.

FPL's currently approved research projects are: Residential On Call Pilot; Green Power Pricing Research Project; and Business Green Energy Project.

The existing programs and projects that FPL proposes to continue with no modifications are: Duct System Testing and Repair; Residential New Construction (BuildSmart®); Residential Conservation Service; Business Custom Incentive; C/I Demand Reduction; Business Energy Evaluation; Cogeneration and Small Power Production; C/I Load Control; Conservation Research and Development Program; Green Power Pricing Research Project and Business Green

modifications to seven of the existing conservation offerings: Residential Building Envelope; Residential Low Income Weatherization; Residential Load Management (On Call); Business Building Envelope (formerly known as the "C/I Building Envelope"); Business Efficient Lighting (formerly known as the "C/I Efficient Lighting"); Business On Call and the Residential On Call Pilot, the proposed changes to which are included in the description of changes to the Residential Load Management program. The proposed plan modifications also include two new programs — the Business Water Heating Program and the Business Refrigeration Program. Appendix A to this petition includes program descriptions for the existing programs to which FPL is proposing modifications, as well as for the two new proposed programs. Appendix B contains the cost-effectiveness analysis for each program. Appendix C contains the Tariff revisions that are necessary to implement FPL's proposed modifications to its DSM Plan, in clean and legislative format.

6. The purpose of the modifications to FPL's DSM Plan is to maximize the availability of cost-effective demand-side management opportunities to FPL's customers. It is anticipated that the implementation of these proposed DSM Plan modifications will increase the penetration of demand-side management in the 2006 through 2014 time period. FPL proposes to initiate program modifications and new programs after the modifications and related changes to the Program Standards and Tariff sheets have been approved and there has been an opportunity

Energy Project.

In accord with Rule 25-6.0438(4)(c), Florida Administrative Code (2006), FPL is providing written notice to each customer who may be affected by the proposed revisions to the On Call programs.

On March 27, 2006, FPL filed a petition for Commission approval to modify two other programs in its DSM Plan: the Residential Air Conditioning and C/I Heating, Ventilating and Air Conditioning programs. That petition is currently being addressed in Docket No. 060286-EG.

to train personnel regarding the program changes. FPL will work with the Commission and its Staff regarding the effective date of program changes.

- 7. The proposed modifications to FPL's DSM Plan are designed to meet the conservation goals approved for FPL by the Commission in Order No. PSC-04-0850-CO-EG. As modified, the proposed programs in FPL's DSM Plan fully implement all the currently known cost-effective Achievable Potential under the Rate Impact Measure ("RIM") and Participants tests through 2014.
- 8. The proposed modifications to FPL's DSM Plan will further help FPL achieve the goals set forth in the FEECA and Florida Administrative Code Rule 25-17.001. The proposed modifications to FPL's DSM Plan are designed to cost-effectively reduce the growth rate of weather-sensitive peak demand, reduce and control the growth rate of energy consumption, increase the conservation of expensive resources and increase the efficiency of the electrical system.
- 9. The proposed modifications to FPL's DSM Plan are cost-effective. In Appendix B, FPL has shown, using the Commission's cost-effectiveness methodology, the cost-effectiveness of each of the proposed programs for which cost-effectiveness can be meaningfully calculated.
- 10. The modifications to FPL's DSM Plan are reasonably monitorable. FPL's monitoring efforts for each of its modified and new DSM programs are set forth in the detailed program and project summaries in FPL's Modifications to DSM Plan Document.
- 11. FPL is not aware of any disputed issues of material fact. FPL's proposed modifications to its DSM Plan, as reflected in Appendix A, should be approved, including the Tariff revisions to sheet nos. 8.208, 8.218 and 8.109 (Appendix C), which are needed to

implement the proposed modifications; the Commission should authorize recovery of the reasonable and prudent expenditures associated with FPL's DSM Plan, as modified, through FPL's ECCR clause; and FPL should be directed to file revisions to its Program Standards for administrative approval in order to implement the Commission's decision on this petition. The statutes and rule which entitle FPL to relief are Sections 366.82(2), 366.06(1), Florida Statutes (2006), and Florida Administrative Code Rule 25-17,0021 (2006).

12. There has not been agency action in this proceeding. Therefore, FPL cannot provide a statement of when and how FPL received notice of agency action.

WHEREFORE, FPL respectfully requests that the Commission: (1) approve FPL's proposed modifications to its DSM Plan, as reflected in Appendix A to this petition, as well as the Tariff revisions reflected in Appendix C, (2) authorize FPL to recover through its ECCR clause reasonable and prudent expenditures associated with the implementation of the modifications to FPL's DSM Plan, (3) direct FPL to file revisions to its Program Standards for administrative approval in order to implement the Commission's decision on this petition and (4) grant such other relief as may be appropriate. Further, FPL respectfully requests expedited treatment of this petition so that FPL's customers may realize the benefits of the proposed modifications in the near term.

Respectfully submitted,

Natalie F. Smith, Principal Attorney Florida Power & Light Company Law Department 700 Universe Boulevard Juno Beach, FL 33408 (561) 691-7207

By: / latale F. Smith / My

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of FPL's Petition For Approval of Modifications to Florida Power & Light Company's Demand Side Management Plan in Docket No. 040029-EG, was served by United States Mail this 19th day of May, 2006, to the following:

Harold McLean Office of Public Counsel 111 West Madison Street, Room 812 Tallahassee, Florida 32399-1400

By: Matalie F. Smith / full

APPENDIX A

TABLE OF CONTENTS

Residential Building Envelope Program	1
Residential Low Income Weatherization Program	6
Residential Load Management Program	11
Business Building Envelope Program	17
Business Efficient Lighting Program	23
Business On Call Program	28
Business Water Heating Program	33
Business Refrigeration Program	38

Residential Building Envelope Program

Program Description

The Residential Building Envelope Program is designed to encourage qualified customers to install energy-efficient roof and ceiling insulation measures that cost-effectively reduce FPL's coincident peak air conditioning load and customer energy consumption. The objective is accomplished by providing incentives to customers to facilitate the installation of these measures.

FPL is proposing the following changes to this program:

- Increase the maximum incentive for ceiling insulation from \$570 per summer kW to \$1,676.
- Increase the maximum incentive for reflective roofs from \$461 per summer kW to \$706.
- Include light colored thermoplastic roof membranes and reflective roof coatings with the maximum incentive of \$1,518 per summer kW.

FPL makes residential customers aware of this program through contractors, retail outlets, other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

FPL plans to facilitate the application of this program to potential low income participants by targeting public agencies and governmental housing authorities for program education and implementation. An example of this effort is the qualification of public agency or housing

authorities as participating contractors, thus assisting in lowering the installation costs of measures for low income participants. FPL also will assist agencies in selecting qualifying contractors, if requested to do so.

Description of Program Administration

The Residential Building Envelope Program will be available to all existing residential customers served by FPL who have whole-house electric air conditioning or heating. Whole-house electric air conditioning or heating is defined as a central system(s) or sufficient window/wall units to provide cooling to the majority of the living spaces of the house. For ceiling insulation, homes must be pre-certified by FPL or its designee, and an incentive certificate will be issued. For reflective roof measures, roof contractors will issue incentive certificates which will be used to reduce the upfront cost to the customer. A list of independent FPL participating contractors is also provided to the customer. When the measure installation is complete, the customer signs and gives the Watt-Saver Certificate to the contractor as partial payment for the installation. The contractor then completes the Watt-Saver certificate and it is processed by FPL. FPL will perform post installation inspections on a random basis for a sample of participants prior to payment of incentives.

Building envelope measures that are required to be installed, by federal, state or local building or energy codes when additions and/or renovations are made to existing buildings, are not eligible for this program. To be eligible for incentives, qualifying building envelope measures must be installed according to manufacturer's recommendations and specifications by contractors who are certified, licensed and insured as deemed necessary by applicable state or local governmental

agencies and FPL. All performance claims must be supported by testing procedures and documentation which are acceptable to FPL. All installations must be accessible for verification by FPL.

All incentive requests will be tracked by a computer system, which will record a history of the incentive payments made to customers/contractors.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 1.77 Participant, 1.28 RIM, and 1.58 TRC for the Residential Building Envelope program.

Program Monitoring and Evaluation

The ceiling insulation measure of the Residential Building Envelope Program is a mature technology, which has been studied by FPL for many years. Demand and energy impacts are allocated as a function of the difference between a final insulation level and the beginning (pre-existing) level of insulation measured in the attic. Ceiling insulation program impacts will be adjusted annually, according to changes in participation patterns by market segment. Over the next several years, evaluation of the Program will emphasize study of the new reflective roof measure of the program.

FPL will utilize any or all three major impact evaluation analysis methods in a manner that most cost-effectively meets the overall impact evaluation objectives: engineering analysis, statistical billing analysis and on-site metering research.

Initially, impacts for reflective roofs will depend upon the savings calculated during the Conservation R&D Energy Efficient Roof Study of six identical homes with different roofs. As participation grows, FPL will begin to utilize billing analysis and/or metered research samples to refine average impacts realized. As participation in the reflective roof measure grows in the future, this will create an opportunity to apply the different evaluation techniques for verifying demand and energy impacts.

Program Name: Residential Building Envelope Program

Attachment A

		(b)		(d)
l	(a)	Total Number of	(c)	Cumulative
l	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	3,910,167	1,017,222	7,231	1%
2007	3,985,164	1,000,987	24,995	3%
2008	4,060,181	985,385	25,198	6%
2009	4,133,181	969,873	18,049	8%
2010	4,205,546	954,744	18,159	10%
2011	4,275,556	939,513	18,290	12%
2012	4,343,167	924,211	18,443	14%
2013	4,409,366	909,074	18,617	16%
2014	4,475,348	894,185	18,813	19%

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	738	0.34	0.30	5,334,422	2,458	2,173
2007	665	0.39	0.27	16,614,275	9,720	6,655
2008	676	0.38	0.27	17,032,472	9,608	6,842
2009	673	0.38	0.27	12,153,602	6,914	4,879
2010	690	0.37	0.28	12,537,277	6,748	5,054
2011	708	0.36	0.29	12,940,012	6,587	5,237
2012	725	0.35	0.29	13,364,119	6,431	5,429
2013	742	0.34	0.30	13,807,286	6,279	5,629
2014	759	0.33	0.31	14,271,825	6,132	5,838

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
ł	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	795	0.37	0.33	5,745,823	2,702	2,389
2007	716	0.43	0.29	17,895,600	10,685	7,316
2008	728	0.42	0.30	18,346,049	10,562	7,521
2009	725	0.42	0.30	13,090,911	7,600	5,363
2010	744	0.41	0.31	13,504,176	7,418	5,556
2011	762	0.40	0.31	13,937,971	7,241	5,757
2012	781	0.38	0.32	14,394,786	7,069	5,968
2013	799	0.37	0.33	14,872,130	6,902	6,188
2014	817	0.36	0.34	15,372,495	6,740	6,418

Residential Low Income Weatherization Program

Program Description

The Residential Low Income Weatherization Program is an energy conservation program designed for low-income, residential customers. The Program employs a combination of energy audits and incentives to encourage low-income housing administrators and customers to retrofit homes with energy efficiency measures. As part of each audit, heating, ventilating and air conditioning (HVAC) systems and reduced air infiltration are addressed.

FPL accepts energy audits performed by FPL, its designees, or local weatherization providers to determine the need for energy efficiency measures in each home. The local weatherization providers work with the Department of Community Affairs (DCA) and include both Weatherization Assistance Program (WAP)¹ providers and State Housing Initiatives Partnership (SHIP)² administrators. Representatives from these agencies are trained by FPL on the program.

Once the energy audit has been conducted, FPL will offer incentives for the following measures:

- HVAC maintenance
- Reduced air infiltration
- Room air conditioning replacement

¹ WAP providers receive funding from the DCA, and use these funds to improve the energy efficiency of low-income housing. Eligible households in the WAP must have income that does not exceed 125% of the poverty level.

² SHIP funding comes from the Sadowski Act. In the SHIP program funds are allocated on a population-based formula to eligible communities from documentary stamps and are deposited into the Local Government Housing Trust Fund. The local administrators use these funds to assist those with very low, low and moderate incomes to install energy efficiency measures in their homes.

FPL is proposing the following changes to this program:

- Increase the incentive for HVAC maintenance from \$35 to \$45 per participant.
- Increase the incentive for reduced air infiltration from \$10 to \$60 per participant.
- Add room air conditioning replacement as a new measure with an incentive of \$25
 per participant.

Description of Program Administration

Residential customers who are eligible for weatherization programs will be eligible for the Program. Thus, local weatherization providers will be one method of qualifying which customers are eligible to participate in the Program. The Program is available to all state-approved, low-income housing administrators. FPL will distribute collateral to all weatherization providers within our service territory. Once an agency demonstrates an interest in participating in the program, FPL will conduct personal follow-up. To be eligible to serve as an agent for the Program, the local housing administrators must comply with all national, state and local codes and ordinances and the Program Standards.

The Department of Community Affairs (DCA) is responsible for providing annual updates to participating providers. Additional program requirements are as follows:

- The residence must be in FPL's service area and be an FPL residential metered customer.
- Participants must meet all state weatherization low-income criteria.
- All installations must be accessible for verification by an FPL representative.
- Homes less than one year old are not eligible for incentives.

 All work must be performed by state approved providers, their approved contractors or contractors approved by FPL.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on the program monitoring and evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 1.78 Participant, 1.47 RIM, and 1.70 TRC for the Weatherization Program.

Program Monitoring and Evaluation

The feasibility and cost-effectiveness of residential low-income weatherization measures were studied in detail during the recently completed Low-Income Weatherization Research Project (Project). The Project report included results from an engineering modeling effort augmented with a statistical billing analyses. The demand and energy impacts from that research effort were used to develop and design the Program described in this filing. The impact of the Program on energy consumption and peak electrical demand will be adjusted over time when significant changes in technology take place. As was the case in the Project, samples of program participants and non-participants will have to be analyzed in order to estimate the net program benefit compared to what would have occurred in the absence of the program. Participant data will be compared against non-participant data to update technology selections, net energy savings and demand impacts. For conservation programs of this size, engineering model adjustments and/or statistical billing analysis remain the most appropriate options for program evaluation. As cumulative participation grows, FPL will have more data to include in such analyses.

Program Name: Residential Low Income Weatherization

Attachment A

1		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	3,910,167	516,340	457	0%
2007	3,960,492	523,468	505	0%
2008	4,030,954	530,811	529	0%
2009	4,100,566	538,087	555	0%
2010	4,169,514	545,454	581	0%
2011	4,238,239	552,634	609	1%
2012	4,306,727	559,628	638	1%
2013	4,374,980	566,565	669	1%
2014	4,443,827	573,494	701	1%

Note:

Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

	AND THE PROPERTY OF THE PROPER					
		Per Customer	Per Customer	1	Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	335	0.05	0.16	152,990	21	73
2007	328	0.04	0.15	165,907	19	76
2008	329	0.04	0.15	173,939	20	80
2009	329	0.04	0.15	182,373	22	84
2010	329	0.04	0.15	191,228	23	88
2011	329	0.04	0.15	200,526	24	93
2012	330	0.04	0.15	210,289	25	97
2013	330	0.04	0.15	220,540	27	102
2014	330	0.04	0.15	231,304	28	107

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	361	0.05	0.17	164,789	23	80
2007	354	0.04	0.17	178,702	21	84
2008	354	0.04	0.17	187,354	23	88
2009	354	0.04	0.17	196,438	24	92
2010	355	0.04	0.17	205,976	25	97
2011	355	0.04	0.17	215,991	26	102
2012	355	0.04	0.17	226,507	28	107
2013	355	0.04	0.17	237,548	29	112
2014	356	0.04	0.17	249,142	31	118

Residential Load Management Program

(On Call Program)

Program Description

The On Call Program is designed primarily to reduce system peak demand, but it also reduces energy consumption. The On Call Program involves the installation of direct load control equipment on selected customer end-use equipment to allow FPL to control customer loads on an as needed basis.

The only proposed change to this program is a modification to the cycling interruption schedule for central air conditioners. The existing cycling interruption schedule for the central electric air conditioning, option C, is currently based on interruptions that can accumulate to a total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. However, the limitations to this interruption schedule do not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of FPL. When these situations occur, central air conditioners, participating under option C, may be interrupted for a continuous time period until the emergency is resolved.

In order to both increase the demand reduction capability for On Call that might occasionally be utilized, and to mitigate the number of times that air conditioners under option C might be continuously interrupted due to emergency conditions, an additional cycling strategy is being added. This extension of option C will provide for the ability to cycle air conditioners for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes

per day. This extension will be used when the current normal cycling operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation with the goal of minimizing the number of times continuous interruption of this equipment is needed. Under normal operations, the 15 minute cycling strategy will continue to be used for air conditioners under option C.

The On Call Program currently has customers participating in the program under two different tariff rate schedules. Rate Schedule RSL was closed on April 1, 2003 to new participants but currently has over 60 percent of the Program participants. The remaining Program participants are served using Rate Schedule RLP which is for a reduced On Call Program incentive pilot that is currently in progress. Both of these rate schedules are being modified to reflect this change in the air conditioning cycling option C. Legislative format and final versions of these two rate schedules are included in Appendix C.

FPL makes residential customers aware of this program through contractors, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

FPL's On Call Program is available to all residential customers who are individually metered (i.e., who do not receive service through commonly owned facilities of condominium, cooperative or homeowners' associations) and who have one or more of the following electrical appliances/equipment: central electric air conditioners, central electric space heaters,

conventional electric water heaters and swimming pool pumps. A customer may sign up for one or more of these appliances/equipments (with the exception of electric space heating, which is eligible only in combination with one of the other equipment types).

Customers who participate in the Program will be eligible, based on three primary factors: whether the customer has the proper eligible loads, whether their service characteristics (voltage, etc.) are compatible with existing load control equipment, and whether the customer receives service from a substation which has load control equipment installed.

Once the customer signs up for the program, the installation request will be sent to a contractor for installation. Once the installation is completed, the contractor sends the information to FPL for entry into the Load Management Information System (LMIS), resulting in the activation of the equipment at the customer's facility. Upon installation and inspection of the equipment, the customer will receive a monthly credit, which may vary seasonally, on his/her electric bill.

The incentives normally are paid as specified in the On Call Program tariff, Schedule RSL. FPL currently has a reduced incentive research and development effort underway which pays incentives as specified in Schedule RLP. FPL maintains an internal audit trail for all incentive payments by means of LMIS. This computer database maintains interview and installation information for each program participant, as well as, a history of all incentives paid.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to,

technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on the program monitoring and evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: infinite Participant, 2.55 RIM, and 6.03 TRC for the On Call Program.

Program Monitoring and Evaluation

During the past several years, an extensive examination of metered data was performed to observe duty cycles during peak hours, by geographic area, for a wide range of temperature conditions. A sophisticated model was developed to estimate system-level impacts as a function of appliance, region, temperature and time of day. Quality control checks are currently under way to ensure reliable communications throughout the entire load control network. FPL is continuously exploring techniques to further verify and refine the impacts for this program.

FPL continuously tracks all participants in the On Call program. Participation by appliance combination and market segment is used annually to adjust program-level impacts. Periodic field metering is the primary method of estimating program impacts by measuring appliance connected loads and duty cycles of HVAC systems.

Program Name: Residential Load Management Program

Attachment A

Principle				
		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
1	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	3,910,167	2,734,446	21,325	1%
2007	3,985,164	2,762,568	27,030	2%
2008	4,060,181	2,789,325	31,680	3%
2009	4,133,181	2,814,371	14,500	3%
2010	4,205,546	2,838,434	15,900	4%
2011	4,275,556	2,860,142	17,200	4%
2012	4,343,167	2,879,502	18,500	5%
2013	4,409,366	2,897,190	19,800	6%
2014	4,475,348	2,911,449	23,300	6%

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	18	1.09	1.12	373,188	23,244	23,884
2007	18	1.09	1.12	473,025	29,463	30,274
2008	18	1.09	1.12	554,400	34,531	35,482
2009	18	1.09	1.12	253,750	15,805	16,240
2010	18	1.09	1.12	278,250	17,331	17,808
2011	18	1.09	1.12	301,000	18,748	19,264
2012	18	1.09	1.12	323,750	20,165	20,720
2013	18	1.09	1.12	346,500	21,582	22,176
2014	18	1.09	1.12	407,750	25,397	26,096

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	19	1.20	1.23	401,968	25,552	26,255
2007	19	1.20	1.23	509,506	32,387	33,279
2008	19	1.20	1.23	597,156	37,959	39,004
2009	19	1.20	1.23	273,320	17,374	17,852
2010	19	1.20	1.23	299,709	19,051	19,576
2011	19	1.20	1.23	324,214	20,609	21,176
2012	19	1.20	1.23	348,718	22,167	22,777
2013	19	1.20	1.23	373,223	23,724	24,377
2014	19	1.20	1.23	439,196	27,918	28,686

Business Building Envelope Program

Program Description

The Business Building Envelope (BBE) Program is designed to reduce FPL's business customers' heating, ventilating and air conditioning (HVAC) loads. This program will encourage eligible business customers to increase the efficiency of qualifying portions of their building's envelope, which will reduce HVAC energy consumption and demand.

This program will provide incentives to customers, or their designees, for the installation of cost-effective high-efficiency building envelope measures and products, such as window treatments, roof/ceiling insulation and reflective roof coatings. The BBE participating customer will also receive all energy, demand and operational savings from the installation of the higher efficiency measures.

FPL proposes to make the following modifications to the existing Program:

- Change the program name from Commercial/Industrial Building Envelope Program to Business Building Envelope Program.
- Window-related technologies will be added to the Program.
- The program incentive structure will change from a maximum of \$181 per summer kW
 to:
 - a maximum of \$185 per summer kW for ceiling insulation,
 - a maximum of \$219 per summer kW for roof insulation,
 - a maximum of \$579 per summer kW for reflective roofs, and
 - a maximum of \$429 per summer kW for window treatments.

FPL plans to make business customers aware of this program through dealers, distributors, contractors and other trade allies, as well as, through direct contact with potential participants by FPL personnel.

Description of Program Administration

The BBE program will be available to business customers who are currently receiving electric service from FPL and whose facility is a completed building for which a Certificate of Occupancy, or equivalent approval for occupancy, has been issued. Participating customers must either replace specific existing building envelope components with higher efficiency products, or enhance these components with higher efficiency retrofit measures.

All measures and products will be required to meet technical eligibility requirements, which will be detailed in the BBE Program Standards. The Program Standards will be subject to periodic review and may be modified over time in response to factors such as, but not limited to, changing program delivery strategies, market needs, program evaluation results and incentive amounts.

In order to qualify for the BBE program, a customer must provide assurance that the portion of the building for which an incentive is being provided is conditioned by an HVAC system using electricity as its primary fuel source. This HVAC system must operate between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October.

Products and measures which are required by or necessary to meet the requirements of any applicable federal, state, or local municipal building or energy codes are not eligible for BBE program incentives. Eligible installations shall be open to inspections before and after installation for verification of qualifying criteria, as well as for monitoring and assessment of the impact of the installed measures and products. The Program Standards will detail all qualifying requirements for participation in the BBE program.

Incentive payments will be tracked in a computer database over the lifetime of the BBE program. Within cost-effectiveness parameters, incentives may be adjusted over the program's lifetime in response to program evaluation results, changing market conditions and the emergence of new technologies.

Incentive amounts to the customer will be based upon the efficiency of existing building envelope components as well as the efficiency of the installed measures or products. BBE program incentives for each measure or product will be limited to provide no less than a two-year payback on the incremental installation cost to the average participant. Incentive amounts for individual participants will be limited to the actual incremental installation cost of the building envelope measures or products.

Incentive certificates will be issued to qualifying customers prior to the installation of building envelope measures and products. It is expected that these certificates will be submitted, upon completion of the installation, to FPL for payment of the incentive. Prior to payment of

incentives, FPL will require proper documentation of all installations and will make the final determination as to eligibility and applicability.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 1.92 Participant, 1.42 RIM, and 2.22 TRC for the Business Building Envelope program.

Program Monitoring and Evaluation

The ceiling insulation measures of the Program are a mature technology which has been studied by FPL for a number of years. Demand and energy impacts are allocated as a function of the difference between the pre- and post-retrofit insulation level. Over the next several years, evaluation of the Program will emphasize study of the growing reflective roof measures and window treatments. Program-level impacts for all measures will be adjusted annually, according to changes in participation patterns by market segment.

FPL will utilize any or all three major impact evaluation analysis methods, engineering analysis, statistical billing analysis and on-site metering research, to most cost-effectively meet the overall impact evaluation objectives.

Program Name: Business Building Envelope

Attachment A

		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	1,314,316	1,122,250	4,955	0%
2007	1,342,671	1,114,621	6,898	1%
2008	1,371,635	1,107,049	7,492	2%
2009	1,401,219	1,099,534	8,060	2%
2010	1,431,437	1,092,074	8,602	3%
2011	1,462,303	1,084,671	9,118	4%
2012	1,493,830	1,077,323	9,609	5%
2013	1,526,033	1,070,030	10,075	6%
2014	1,559,331	1,063,067	10,518	7%

Note: Column a - The total summer kw of all Business building envelope technologies

Column b - The total summer kw of all eligible Business building envelope technologies

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer	T T	Total Annual	Total Annual
ł	1				rotai Annuai	I otal Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	1945	0.05	1.00	9,640,214	257	4,955
2007	2010	0.02	1.00	13,865,450	132	6,898
2008	2013	0.01	1.00	15,085,544	111	7,492
2009	2016	0.01	1.00	16,249,838	92	8,060
2010	2018	0.01	1.00	17,359,389	73	8,602
2011	2020	0.01	1.00	18,415,229	56	9,118
2012	2021	0.00	1.00	19,418,367	40	9,609
2013	2022	0.00	1.00	20,369,788	25	10,075
2014	2022	0.00	1.00	21,271,448	12	10,518

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	2095	0.06	1.10	10,383,685	282	5,447
2007	2165	0.02	1.10	14,934,780	145	7,582
2008	2169	0.02	1.10	16,248,971	122	8,236
2009	2172	0.01	1.10	17,503,057	101	8,860
2010	2174	0.01	1.10	18,698,178	81	9,456
2011	2175	0.01	1.10	19,835,447	62	10,023
2012	2177	0.00	1.10	20,915,949	44	10,563
2013	2178	0.00	1.10	21,940,745	27	11,075
2014	2178	0.00	1.10	22,911,943	13	11,562

Business Efficient Lighting Program

Program Description

The Business Efficient Lighting (BEL) Program is designed to reduce FPL's business on-peak lighting loads and energy usage. This program encourages eligible business customers to install high efficiency, cost-effective lighting measures at time of replacement.

Through the BEL program, FPL will provide incentives to customers, or their designees, for the installation of high efficiency lighting retrofit measures. The BEL participating customer will also receive any energy and operating savings derived from the installation of the higher efficiency lighting measures.

The modifications to this program are:

- Change the program name from Commercial/Industrial Efficient Light Program to Business Efficient Lighting Program
- Revise the maximum cost-effective incentive from \$101 per summer kW to \$132 per summer kW.

FPL plans to make business customers aware of this program through dealers, distributors, contractors, retail outlets and other trade allies, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

The BEL Program will be available to business customers who are ready to receive service from FPL and whose facility is a completed building for which a Certificate of Occupancy, or equivalent approval for occupancy, has been issued. Participating customers must replace existing lighting measures (measures are units of qualifying lighting technologies -- i.e., ballasts, fluorescent and H.I.D. fixtures) with higher efficiency lighting measures that meet the technical requirements and reduce on-peak summer loads. For customers with facilities that have twenty (20) or less lighting fixtures (a self-contained combination of luminaire, lamp and, if necessary, ballast), all qualifying measures must be performed at the same time and included on the same application. For customers with more than twenty (20) lighting fixtures, multiple incentive applications may be submitted, as long as a minimum of twenty (20) measures are installed at each application.

All proposed measures must meet minimum power quality specifications for power factor and total harmonic distortion established by FPL, which will be listed in the Program Standards. Product specific power quality ratings reflecting test results from an accredited independent testing facility must be provided. The lighting levels resulting from the installation of measures must meet or exceed standard levels recommended by the Illuminating Engineering Society of North America.

Installations are to be performed by a contractor. Installations must result in a kW reduction, and the customer must provide assurance that the lighting fixtures for which incentives are provided will operate between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April

through October. All installations shall be open to inspections, before and after installation and prior to payment of incentives. Proof of purchase and purchase price must be provided to FPL prior to an incentive being paid

Incentives will be paid to contractors, and will be based upon the kW reduction as compared to the baseline for specific measures. Measures will be aggregated into groups reflecting permanence and other factors, and incentives will not exceed \$132 per summer kW reduced for all installations. Within cost-effectiveness parameters, incentives will be adjusted over time in response to changing market conditions and emergence of new measures.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 4.31 Participant, 1.44 RIM, and 4.71 TRC for the Business Efficient Lighting program.

Program Monitoring and Evaluation

Revisions to the Federal Consumer Products Conservation Standards (DOE 10 CFR part 430 for fluorescent fixtures) have taken the place of a large portion of the efficiency upgrades formerly covered by FPL's BEL Program. Beginning in 2006, the program is limited to technologies not already addressed by the code change. FPL will promote the other energy efficient lighting technologies remaining in the program, while continuing to follow any new developments in lighting technologies which can be examined for cost-effectiveness.

FPL will utilize any or all three major impact evaluation analysis methods, engineering analysis, statistical billing analysis and on-site metering research, in a manner that most cost-effectively meets the overall impact evaluation objectives. The efficiency levels of lighting equipment installed outside FPL's rebate program may also be periodically measured using non-participant surveys or other sources of efficiency sales data.

Program Name: Business Efficient Lighting

Attachment A

		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
l	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	344,185	169,199	2,853	2%
2007	115,877	55,326	1,070	7%
2008	118,346	54,881	1,217	9%
2009	120,867	54,441	1,357	12%
2010	123,442	54,007	1,489	15%
2011	126,071	53,579	1,614	18%
2012	128,757	53,156	1,733	21%
2013	131,500	52,738	1,844	25%
2014	134,301	52,325	1,949	29%

Note: Column a - The total summer kw of all Business lighting equipment

Column b - The total summer kw of all eligible Business lighting equipment

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	4874	0.65	1.00	13,904,510	1,862	2,853
2007	4876	0.65	1.00	5,216,923	698	1,070
2008	4877	0.65	1.00	5,936,275	794	1,217
2009	4879	0.65	1.00	6,619,225	885	1,357
2010	4880	0.65	1.00	7,266,569	972	1,489
2011	4880	0.65	1.00	7,879,079	1,054	1,614
2012	4881	0.65	1.00	8,457,500	1,131	1,733
2013	4881	0.65	1.00	9,002,548	1,204	1,844
2014	4882	0.65	1.00	9,514,917	1,272	1,949

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	5250	0.72	1.10	14,976,853	2,047	3,136
2007	5252	0.72	1.10	5,619,262	768	1,176
2008	5254	0.72	1.10	6,394,092	873	1,338
2009	5255	0.72	1.10	7,129,712	973	1,491
2010	5256	0.72	1.10	7,826,981	1,068	1,637
2011	5257	0.72	1.10	8,486,729	1,158	1,775
2012	5257	0.72	1.10	9,109,758	1,243	1,905
2013	5258	0.72	1.10	9,696,842	1,323	2,027
2014	5258	0.72	1.10	10,248,725	1,398	2,143

Business On Call Program

Program Description

The Business On Call Program is designed primarily to reduce system peak demand, but will also reduce energy consumption. The Business On Call Program involves the installation of direct load control equipment on customers' direct expansion (DX), central air conditioners, allowing FPL to control customer loads on an as-needed basis.

The only proposed change to this program is a modification to the cycling interruption schedule for central air conditioners. The existing cycling interruption schedule for the central electric air conditioning is currently based on interruptions that can accumulate to a total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. However, the limitations to this interruption schedule do not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of FPL. When these situations occur, central air conditioners may be interrupted for a continuous time period until the emergency is resolved.

In order to both increase the demand reduction capability for the Program that might occasionally be utilized, and to mitigate the number of times that air conditioners might be continuously interrupted due to emergency conditions, an additional cycling strategy is being added. This extension will provide for the ability to cycle air conditioners for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day. This extension will be used when the current normal cycling operation of the Program is not able

to provide sufficient demand reduction to divert an emergency situation with the goal of minimizing the number of times continuous interruption of this equipment is needed. Under normal operations, the 15 minute cycling strategy will continue to be used for air conditioners.

The Business On Call Program tariff rate schedule GSL is being modified to reflect this change.

A legislative format and a final format of this rate schedule are included in Appendix C.

FPL plans to make business customers aware of this program through contractors, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

The Business On Call Program will be available to business customers with a demand of 499 kW or less and who are individually metered and have DX central air conditioners that can be successfully interrupted by FPL when needed. A customer may sign up if its facility has one or more DX central air conditioning units. Customers who participate in the Program will be eligible based on three primary factors: whether the customer has the proper type of air conditioning equipment, whether their service characteristics (voltage, etc.) are compatible with existing load control equipment and whether the customer receives service from a substation which has load control equipment installed.

Participants in the Business On Call Program will receive an incentive payment, in the form of a monthly credit, of \$2.00 per ton of air conditioning. The tonnage will be based on the nameplate

rating of the customer's air conditioning system and will be rounded to the nearest one-half ton. Once the customer signs up for the program, the installation request will be sent to a contractor for installation. Once the installation is completed, the contractor sends the information to FPL for entry into the Load Management Information System (LMIS), resulting in the activation of the equipment at the customer's facility. Upon installation and inspection of the load management equipment, the customer will receive a monthly credit on his/her electric bill.

The incentives will only be paid during the months of April through October. FPL maintains an internal audit trail for all incentive payments by means of its LMIS system. This computer database maintains interview and installation information for each program participant, as well as a history of all incentives paid.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: infinite Participant, 2.62 RIM, and 7.73 TRC for the Business On Call program.

Program Monitoring and Evaluation

Over the past six years, FPL has verified Business On Call load control demand impacts with metered samples for both the eligible rate classes, General Service (GS-1) and General Service Demand (GSD-1). A sophisticated model was developed to estimate system-level impacts as a function of appliance, region, temperature and time of day. Additionally, quality control checks are currently under way to ensure reliable communications throughout the entire load control network. FPL is continuously exploring techniques to further verify and refine the impacts for the Business On Call program.

Program Name: Business On Call

Attachment A

		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	1,331,655	1,283,535	5,432	0%
2007	1,360,019	1,307,376	6,770	1%
2008	1,388,987	1,331,820	6,770	1%
2009	1,418,573	1,356,881	6,524	2%
2010	1,448,788	1,382,573	6,524	2%
2011	1,479,648	1,408,908	6,524	3%
2012	1,511,164	1,435,901	6,524	3%
2013	1,543,352	1,463,565	6,524	4%
2014	1,576,225	1,491,914	6,524	4%

Note: Column a - The total summer kw demand reduction of business controllable load

Column b - The total summer kw demand reduction of eligible business controllable load

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	1	0.00	1.00	4,943	0	5,432
2007	1	0.00	1.00	6,161	0	6,770
2008	1	0.00	1.00	6,161	0	6,770
2009	1	0.00	1.00	5,937	0	6,524
2010	1	0.00	1.00	5,937	0	6,524
2011	1	0.00	1.00	5,937	0	6,524
2012	1	0.00	1.00	5,937	0	6,524
2013	1	0.00	1.00	5,937	0	6,524
2014	1	0.00	1.00	5,937	0	6,524

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
1	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	1	0.00	1.10	5,324	0	5,971
2007	1 .	0.00	1.10	6,636	0	7,442
2008	1	0.00	1.10	6,636	0	7,442
2009	1	0.00	1.10	6,395	0	7,172
2010	1	0.00	1.10	6,395	0	7,172
2011	1	0.00	1.10	6,395	0	7,172
2012	1	0.00	1.10	6,395	0	7,172
2013	1	0.00	1.10	6,395	0	7,172
2014	1	0.00	1.10	6,395	0	7,172

Business Water Heating Program

Program Description

FPL's Business Water Heating Program is a new program. It is designed to reduce the current and future growth of coincident peak demand and energy consumption of business customers by increasing the use of efficient water heating equipment.

FPL proposes to provide an incentive to customers, or their designees, who install qualifying heat recovery units (HRU) or heat pump water heater equipment (HPWH). The customers will also receive all operating savings from the installation of the equipment. FPL proposes a maximum incentive of \$881 per summer kW reduced for both heat recovery units and heat pump water heaters.

Heat Recovery Units are typically desuperheaters installed on the hot gas side of air conditioning units and reclaim heat normally rejected to the outside air. The recovered energy is used to displace electrical power used for commercial water heating. HRU technology can be applied to most business customers that consume hot water.

Heat Pump Water Heaters reclaim energy from the ambient air, water source, groundwater or ground source, and directly heat water circulating through a storage tank. HPWH's are roughly three to four times more efficient than commercial electric water heaters. HPWH technology can be applied to most business customers that consume hot water.

FPL plans to make business customers aware of this program through dealers, distributors, contractors, other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

All business customers are eligible for this program. The program applies to customers who are retrofitting/replacing existing water heating equipment or installing new water heating equipment. They must also comply with the requirements specified in the FPL Program Standards.

The HRU and HPWH systems must be designed and operate to reduce FPL's summer and winter system peaks. The incentive for Heat Recovery Units and Heat Pump Water Heaters will not exceed \$881 per summer kW.

These incentives are based on cost-effectiveness analyses and the assumption the load being reduced is associated with equipment that operates between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October.

FPL will determine the incentive amount based on:

- KW removed from FPL's peak periods for heat recovery units based on the air conditioning size and the water heater electric strip kW displaced.
- KW removed from FPL's peak periods for heat pump water heaters based on the HPWH heating capacity and the water heater electric strip kW displaced.

In order to calculate incentives, the customer or the customer designee will supply FPL with the equipment specifications. FPL will calculate the incentive based on the customer's equipment specifications and FPL Program Standards. All incentive payments will be tracked by a computer system. This system will record a history of incentive payments made to customers.

FPL will do random post installation inspections to verify the proper installation of equipment. The participating customer shall allow FPL, at FPL's discretion, to access, monitor and/or analyze the customer's system.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on studies and published databases provided by third-parties. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 1.49 Participant, 1.11 RIM, and 1.31 TRC for the Business Water Heating Program.

Program Monitoring and Evaluation

The Business Water Heating Program is a new program that provides incentives for qualifying HRU's and HPWH's. Initially, FPL will track participation in this new program. As the number of program participants increases, FPL will continue to monitor and re-evaluate the actual customer savings of the efficiency measure.

Program Name: Business Water Heating

Attachment A

		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
1	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	27,337	21,146	0	0%
2007	27,919	21,596	152	1%
2008	28,514	22,056	165	1%
2009	29,121	22,526	176	2%
2010	29,742	23,006	187	3%
2011	30,375	23,496	197	4%
2012	31,022	23,996	205	5%
2013	31,683	24,507	213	5%
2014	32,358	25,029	220	6%

Note: Column a - The total summer kw of all Business water heating equipment

Column b - The total summer kw of all eligible Business water heating equipment

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer	i i i i i i i i i i i i i i i i i i i	Total Annual	Total Americal
ļ		·		}		Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	0	0.00	0.00	0	0	0
2007	10255	1.16	1.00	1,560,182	176	152
2008	10255	1.16	1.00	1,688,503	191	165
2009	10255	1.16	1.00	1,807,254	204	176
2010	10255	1.16	1.00	1,916,301	217	187
2011	10255	1.16	1.00	2,015,531	228	197
2012	10255	1.16	1.00	2,104,853	238	205
2013	10255	1.16	1.00	2,184,204	247	213
2014	10255	1.16	1.00	2,253,544	255	220

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2006	0	0.00	0.00	0	0	0
2007	11045	1.27	1.10	1,680,506	194	167
2008	11045	1.27	1.10	1,818,724	210	181
2009	11045	1.27	1.10	1,946,633	225	194
2010	11045	1.27	1.10	2,064,090	238	205
2011	11045	1.27	1.10	2,170,972	251	216
2012	11045	1.27	1.10	2,267,183	262	226
2013	11045	1.27	1.10	2,352,654	272	234
2014	11045	1.27	1.10	2,427,342	280	242

Business Refrigeration Program

Program Description

FPL's Business Refrigeration Program is a new program. It is designed to reduce the current and future growth of coincident peak demand and energy consumption of business customers by increasing the use of efficient refrigeration controls and equipment.

FPL proposes to provide an incentive to customers, or their designees, who install qualifying controls and equipment that reduce electric strip heater usage in refrigeration equipment. The customers will also receive all operating savings from the installation of the equipment. FPL proposes a maximum incentive of \$80 per summer kW reduced for refrigeration equipment (such as glass display cases, door rails, case frames, and freezer doorways).

Advance refrigeration controls and equipment can reduce the electrical power of refrigeration glass display cases, door rails, case frames, and freezer doorways that are in widespread use in supermarkets, convenient stores, restaurants, and distribution centers. Electric heater elements are normally needed to prevent condensation in display cases and to defrost freezer doorways. The electric strip heaters around the doors of display cases can use advanced controls to stagger defrost heater cycles to limit the quantity of strip heater load that can operate during each time period. Automatic controls can also include humidistats to de-energize electric heaters when they are not needed. A freezer can incorporate hot gas reclaim as its heat source for doorways that can reduce or eliminate electric strip heaters normally used for defrost control.

FPL plans to make business customers aware of this program through dealers, distributors, contractors, other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

All business customers are eligible for this program. The program applies to customers who are retrofitting/replacing existing refrigeration equipment or are installing new refrigeration equipment. They must also comply with the requirements specified in the Program Standards FPL files for this program.

Refrigeration controls and equipment must be designed and operate to reduce FPL's summer and winter system peaks. The incentive for refrigeration controls and equipment will not exceed \$80 per summer kW. These incentives are based on cost-effectiveness analyses and the assumption that the load being reduced is associated with equipment that operates between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October.

FPL will determine the incentive amount based on kW removed from FPL's peak periods for refrigeration controls and equipment based on electric strip kW displaced. In order to calculate incentives, the customer or the customer designee will supply FPL with the equipment specifications. FPL will calculate the incentive based on the customer's equipment specifications and FPL Program Standards. All incentive payments will be tracked by a computer system. This system will record a history of incentive payments made to customers.

FPL will do random post installation inspections to verify that program-qualifying equipment was installed. The participating customer shall allow FPL, at FPL's discretion, to access, monitor and/or analyze the customer's equipment.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on studies and published databases provided by third-parties. The projected participation in this program and associated savings are shown on Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B. These analyses show the following benefit-cost ratios: 2.42 Participant, 1.40 RIM, and 2.57 TRC for the Business Refrigeration Program.

Program Monitoring and Evaluation

The Business Refrigeration Program is a new program which includes refrigeration controls and equipment that reduce electric strip heater usage in equipment such as glass display cases, door rails, case frames, and freezer doorways. Initially, FPL will track participation in this new business refrigeration measure. As the number of program participants increases, FPL will continue to monitor and re-evaluate the actual customer savings of the efficiency measure.

Program Name: Business Refrigeration

Attachment A

		(b)		(d)
	(a)	Total Number of	(c)	Cumulative
	Total Number of	Eligible	Annual Number	Penetration
Year	Customers	Customers	of Participants	Level %
2006	8,240	6,592	0	0%
2007	8,416	6,733	274	4%
2008	8,595	6,876	289	8%
2009	8,778	7,023	299	12%
2010	8,965	7,172	304	16%
2011	9,156	7,325	304	20%
2012	9,351	7,481	299	24%
2013	9,550	7,640	290	27%
2014	9,754	7,803	278	30%

Note: Column a - The total summer kw of all electric strip heaters in Business refrigeration equipment

Column b - The total summer kw of all eligible electric strip heaters in Business refrigeration equipment

Column d - Column c cumulative / Column b (does not reflect participation prior to 2006)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	
İ	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Total Annual Summer
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	KW Reduction
2006	0	0.00	0.00	0	0	0
2007	8070	0.89	1.00	2,213,554	244	274
2008	8070	0.89	1.00	2,332,261	257	289
2009	8070	0.89	1.00	2,410,898	266	299
2010	8070	0.89	1.00	2,449,689	270	304
2011	8070	0.89	1.00	2,449,716	270	304
2012	8070	0.89	1.00	2,412,883	266	299
2013	8070	0.89	1.00	2,341,840	258	290
2014	8070	0.89	1.00	2,239,901	247	278

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	
1	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Total Annual Summer
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	KW Reduction
2006	0	0.00	0.00	0	0	0
2007	8692	0.98	1.10	2,384,268	268	302
2008	8692	0.98	1.10	2,512,130	283	318
2009	8692	0.98	1.10	2,596,831	292	328
2010	8692	0.98	1.10	2,638,613	297	334
2011	8692	0.98	1.10	2,638,643	297	334
2012	8692	0.98	1.10	2,598,969	293	329
2013	8692	0.98	1.10	2,522,447	284	319
2014	8692	0.98	1.10	2,412,647	272	305

APPENDIX B

INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

I.	PROGRAM DEMAND SAVINGS & LINE LOSSES		
	(1) CUSTOMER KW REDUCTION AT METER	0.29	kW
	(2) GENERATOR KW REDUCTION PER CUSTOMER	0.39	kW
	(3) kW LINE LOSS PERCENTAGE	9.03	%
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	718.69	kWh
	(5) kWh LINE LOSS PERCENTAGE	7.16	%
	(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	26	YEARS
	(2) GENERATOR ECONOMIC LIFE		YEARS
	(3) T&D ECONOMIC LIFE		YEARS
	(4) K FACTOR FOR GENERATION	1.65312	
	(5) K. FACTOR FOR T & D	1.61194	
m.	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		\$/CUST/YR
	(7) CUSTOMER O & M COST ESCALATION RATE		%**
٠	(8) INCREASED SUPPLY COSTS		\$/CUST/YR
۰	(9) SUPPLY COSTS ESCALATION RATES		%++
^	(10) UTILITY DISCOUNT RATE	8.37	%
~	(11) UTILITY AFUDC RATE	7.84	
٠	(12) UTILITY NON RECURRING REBATE/INCENTIVE		\$/CUST
۰	(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

V.

(1) BASE YEAR		2006	
(2) IN-SERVICE YEAR	FOR AVOIDED GENERATING UNIT	2011	
(3) IN-SERVICE YEAR	FOR AVOIDED T&D	2009-2013	
(4) BASE YEAR AVOID	DED GENERATING COST	492.12	\$/kW
(5) BASE YEAR AVOID	DED TRANSMISSION COST	147.00	\$/kW
(6) BASE YEAR DISTR	IBUTION COST	17.27	\$/kW
(7) GEN, TRAN & DIST	COST ESCALATION RATE	3.00	%++
(8) GENERATOR FIXE	D O & M COST	30.93	\$/kW/YR
(9) GENERATOR FIXE	D O&M ESCALATION RATE	4.35	%**
(10) TRANSMISSION F	TXED O & M COST	2.68	\$/kW
(11) DISTRIBUTION FI	XED O & M COST	0.95	\$/kW
(12) T&D FIXED O&M	ESCALATION RATE	4.35	%++
(13) AVOIDED GEN UN	HT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14) GENERATOR VAR	IABLE O&M COST ESCALATION RATE	1.99	%++
(15) GENERATOR CAP.	ACITY FACTOR	4%	** (In-service year)
(16) AVOIDED GENERA	ATING UNIT FUEL COST	6 32	CENTS PER kWh** (In-service year)
(17) AVOIDED GEN UN	IIT FUEL COST ESCALATION RATE	4.44	%**
NON-FUEL ENERGY	AND DEMAND CHARGES		
(1) NON FUEL COST IN	CUSTOMER BILL	ngi neraji	CENTS/kWh
(2) NON-FUEL COST ES	SCALATION RATE		%
(3) DEMAND CHARGE I	IN CUSTOMER BILL		\$/kW/MO
` '	ESCALATION RATE		%

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

	(1) UTILITY	(2)	(3)	(4) TOTAL	(5) ENERGY	(6) DEMAND	(7)	(8)	(9)	(10)
	PROGRAM COSTS		OTHER	UTILITY	CHARGE	CHARGE	PARTICIPANT	PARTICIPANT	OTHER	TOTAL
	WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
	INCENTIVES	INCENTIVES	COSTS	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	Ö	0	0	0	0	0	0	0	0
2007	1,026	9,129	0	10,155	719	0	14,082	203	0	14,285
2008	1,074	9,232	0	10,306	2,137	0	14,555	645	0	15,200
2009	783	6,608	0	7,391	3,421	0	10,647	1,058	0	11,705
2010	828	6,679	0	7,507	4,488	0	11,036	1,444	0	12,480
2011	0	0	0	0	5,068	0	0	1,678	0	1,678
2012	0	0	0	0	5,127	0	0	1,723	0	1,723
2013	0	0	0	0	5,204	0	0	1,770	0	1,770
2014	0	0	0	0	5,255	0	0	1,817	0	1,817
2015	0	0	0	0	5,316	0	0	1,865	0	1,865
2016	0	0	0	0	5,368	0	0	1,916	0	1,916
2017	0	0	0	0	5,443	0	0	1,968	0	1,968
2018	0	0	0	0	5,537	0	0	2,022	0	2,022
2019	0	0	0	0	5,629	0	0	2,078	0	2,078
2020	0	0	0	0	5,729	0	0	2,136	0	2,136
2021	0	0	0	0	5,799	0	0	2,194	0	2,194
2022	33	350	0	383	5,971	0	910	2,254	0	3,164
2023	37	386	0	423	6,050	0	1,031	2,316	0	3,347
2024	27	271	0	298	6,158	0	744	2,380	0	3,124
2025	31	309	0	340	6,268	0	871	2,445	ø	3,316
2026	0	0	0	0	6,379	0	0	2,512	0	2,512
2027	0	0	0	0	6,493	0	0	2,581	0	2,581
2028	0	0	0	0	6,609	0	0	2,651	0	2,651
2029	0	0	0	0	6,727	0	0	2,724	0	2,724
2030	0	0	0	0	6,846	0	0	2,799	0	2,799
2031	0	0	0	0	6,968	0	0	2,877	0	2,877

NOM 3,840 32,965 0 36,805 134,711 0 53,876 50,056 0 103,932 NPV 3,109 26,646 0 29,755 48,222 0 42,634 17,150 0 59,784											
	NOM	3,840	32,965	0	36,805	134,711	0	53,876	50,056	0	103,932
	NPV	3,109	26,646	0	29,755	48,222	0	42,634	17,150	0	59,784

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

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Residential Building Envelope

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
											PRESENT		REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	20,434	634	0	1,321	865	0	0	802	(4)	3,618	3,618	3,618	20,653
2012	19,635	610	0	1,269	568	369	96	802	261	3,974	3,667	7,285	20,653
2013	18,572	577	0	1,200	566	353	99	802	220	3,816	3,250	10,535	20,654
2014	17,551	545	0	1,134	562	337	102	802	182	3,664	2,879	13,414	21,274
2015	16,567	514	0	1,071	558	321	105	802	146	3,517	2,550	15,964	21,912
2016	15,619	485	0	1,009	552	305	108	802	113	3,375	2,258	18,222	22,569
2017	14,704	457	0	950	545	289	112	802	83	3,238	1,999	20,221	23,246
2018	13,818	429	0	893	537	273	115	802	55	3,104	1,768	21,989	23,944
2019	12,961	402	0	838	507	257	118	802	51	2,975	1,564	23,553	24,662
2020	12,109	376	0	783	473	241	122	802	50	2,846	1,381	24,934	25,402
2021	11,256	350	0	727	438	225	126	802	51	2,718	1,216	26,150	26,164
2022	10,404	323	0	672	403	209	129	802	50	2,589	1,069	27,220	26,949
2023	9,551	297	0	617	369	193	133	802	51	2,461	938	28,158	27,757
2024	8,698	270	0	562	334	176	137	802	50	2,333	820	28,978	28,590
2025	7,846	244	0	507	299	160	141	802	51	2,205	715	29,693	29,448
2026	6,993	217	0	452	265	144	146	802	50	2,077	622	30,315	30,331
2027	6,141	191	0	397	230	128	150	802	51	1,949	539	30,854	31,241
2028	5,288	164	0	342	196	112	154	802	50	1,821	464	31,318	32,178
2029	4,436	138	0	287	161	96	159	802	51	1,693	398	31,717	33,144
2030	3,583	111	0	232	127	80	164	802	50	1,566	340	32,057	34,138
2031	2,730	85	0	176	262	64	169	802	(120)	1,439	288	32,345	35,162
2032	2,048	64	0	132	405	48	174	802	(290)	1,335	247	32,592	36,217
2033	1,536	48	0	99	384	32	179	802	(290)	1,254	214	32,806	37,304
2034	1,024	32	0	66	363	16	184	802	(290)	1,174	185	32,990	38,423
2035	512	16	0	33	342	0	190	802	(290)	1,093	159	33,149	39,575

IN SERVICE COST (\$000)	20,053
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38,575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	\Box
DEBT	45%	6.90	%
P/S	0%	0.00	%
C/S	55%	11.75	%

K-FACTOR = CPWFC / IN-SVC COST =

1.65312

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

PROGRAM NAME: Residential Building Envelope

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
						BOOK	ACCUMULATED	DEFERRED						
			ACCUMULATED		ACCUMULATED	DEPRECIATION	BOOK DEPR	TAX	TOTAL				ANNUAL	ACCUMULATED
	TAX	TAX	TAX	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(10)*(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION		DEFERRED TAX		DEPRECIATION	AFUDC	RATE	TAXRATE	TAXRATE	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	MINUS 1/LIFE	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	742	742	802	802	752	752	(4)	1,257	0	0	0	(4)	(385)
2012	7.22%	1,428	2,170	802	1,604	752	1,504	261	1,257	0	0	0	261	(124)
2013	6.68%	1,321	3,491	802	2,406	752	2,256	220	1,257	0	0	0	220	95
2014	6.18%	1,223	4,714	802	3,208	752	3,007	182	1,257	0	0	0	182	277
2015	5.71%	1,130	5,844	802	4,011	752	3,759	146	1,257	0	0	0	146	423
2016	5.29%	1,046	6,890	802	4,813	752	4,511	113	1,257	0	0	0	113	536
2017	4.89%	967	7,857	802	5,615	752	5,263	83	1,257	0	0	0	83	619
2018	4.52%	895	8,751	802	6,417	752	6,015	55	1,257	0	0	0	55	674
2019	4.46%	883	9,634	802	7,219	752	6,767	51	1,257	0	0	0	51	725
2020	4.46%	883	10,517	802	8,021	752	7,518	50	1,257	0	0	0	50	775
2021	4.46%	883	11,399	802	8,823	752	8,270	51	1,257	0	0	0	51	826
2022	4.46%	883	12,282	802	9,625	752	9,022	50	1,257	0	0	0	50	876
2023	4.46%	883	13,165	802	10,427	752	9,774	51	1,257	0	0	0	51	927
2024	4.46%	883	14,047	802	11,229	752	10,526	50	1,257	0	0	0	50	977
2025	4.46%	883	14,930	802	12,032	752	11,278	51	1,257	0	0	0	51	1,028
2026	4.46%	883	15,813	802	12,834	752	12,029	50	1,257	0	0	0	50	1,078
2027	4.46%	883	16,695	802	13,636	752	12,781	51	1,257	0	0	0	51	1,129
2028	4.46%	883	17,578	802	14,438	752	13,533	50	1,257	0	0	0	50	1,179
2029	4.46%	883	18,461	802	15,240	752	14,285	51	1,257	0	0	0	51	1,230
2030	4.46%	883	19,343	802	16,042	752	15,037	50	1,257	0	0	0	50	1,280
2031	2.23%	441	19,785	802	16,844	752	15,789	(120)	1,257	0	0	0	(127)	1,160
2032	0.00%	0	19,785	802	17,646	752	16,540	(290)	1,257	0	0	0	(293)	870
2033	0.00%	0	19,785	802	18,448	752	17,292	(290)	1,257	0	0	0	(293)	580
2034	0.00%	0	19,785	802	19,250	752	18,044	(290)	1,257	0	0	0	(290)	290
2035	0.00%	0	19,785	802	20,053	752	18,796	(290)	1,257	0	0	0	(290)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(381)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,257
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

	(1)	(2)	(3)	(4)	(5) END OF YEAR	(5a)*	(5b)*	(6)	(7)	(8)
					NET			BEGINNING	ENDING OF	
		TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
		DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
Y	EAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)	\$(000)
2	2011	3.75%	742	(4)	19,250	802	(385)	20,434	19,635	20,035
2	2012	7.22%	1,428	261	18,448	1,604	(124)	19,635	18,572	19,104
2	2013	6.68%	1,321	220	17,646	2,406	95	18,572	17,551	18,062
2	2014	6.18%	1,223	182	16,844	3,208	277	17,551	16,567	17,059
2	2015	5.71%	1,130	146	16,042	4,011	423	16,567	15,619	16,093
2	2016	5.29%	1,046	113	15,240	4,813	536	15,619	14,704	15,161
2	2017	4.89%	967	83	14,438	5,615	619	14,704	13,818	14,261
2	2018	4.52%	895	55	13,636	6,417	674	13,818	12,961	13,390
2	2019	4.46%	883	51	12,834	7,219	725	12,961	12,109	12,535
2	2020	4.46%	883	50	12,032	8,021	775	12,109	11,256	11,682
2	2021	4.46%	883	51	11,229	8,823	826	11,256	10,404	10,830
2	2022	4.46%	883	50	10,427	9,625	876	10,404	9,551	9,977
2	2023	4.46%	883	51	9,625	10,427	927	9,551	8,698	9,125
2	2024	4.46%	883	50	8,823	11,229	977	8,698	7,846	8,272
2	2025	4.46%	883	51	8,021	12,032	1,028	7,846	6,993	7,420
2	2026	4.46%	883	50	7,219	12,834	1,078	6,993	6,141	6,567
2	2027	4.46%	883	51	6,417	13,636	1,129	6,141	5,288	5,714
2	2028	4.46%	883	50	5,615	14,438	1,179	5,288	4,436	4,862
2	2029	4.46%	883	51	4,813	15,240	1,230	4,436	3,583	4,009
2	2030	4.46%	883	50	4,011	16,042	1,280	3,583	2,730	3,157
2	2031	2.23%	441	(120)	3,208	16,844	1,160	2,730	2,048	2,389
2	2032	0.00%	0	(290)	2,406	17,646	870	2,048	1,536	1,792
	2033	0.00%	0	(290)	1,604	18,448	580	1,536	1,024	1,280
2	2034	0.00%	0	(290)	802	19,250	290	1,024	512	768
2	2035	0.00%	0	(290)	0	20,053	0	512	0	256

^{*} Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
YEAR	NO.YEARS BEFORE IN-SERVICE	PLANT ESCALATION RATE	CUMULATIVE ESCALATION FACTOR	YEARLY EXPENDITURE (%)	ANNUAL SPENDING (\$/kW)	AVERAGE SPENDING (\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2007	-4	3.00%	1,030	0.00%	0.00	0.00
2008	-3	3.00%	1.061	17.00%	88.76	44.38
2009	-2	3.00%	1.093	59.00%	317.27	247.39
2010	-1	3.00%	1.126	24.00%	132.93	472.50

					100.00%	538.96	-						
			(8)	(8a)*	(8b)*	(9)	(9a)*	(9b)*	(9c)*	(9d)*	(9e)* CUMULATIVE	(10) INCREMENTAL	(11)
		NO.YEARS	CUMULATIVE SPENDING	DEBT	CUMULATIVE DEBT	YEARLY TOTAL	CUMULATIVE TOTAL	CONSTRUCTION PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
_		BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE (\$/kW)	BOOK VALUE (\$/kW)
	/EAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(3/KW)	
	2006	-5	0,00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00
2	2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2	2009	-2	250.87	7.81	9.19	19.72	23,20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2	2010	-1	495.69	15,52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

	24.71	62.40		54.35		(11.43)	601.36
	Γ		BOOK BASIS	BOOK BASIS FOR DEF TAX	TAX BASIS		
IN SERVICE YEAR 2011 PLANT COSTS 492.12 AFUDC RATE 7.84%	EQ	ONSTRUCTION CASH QUITY AFUDC OBT AFUDC	17,972 1,257 824	17,972 824	17,972		
	СР	TOTAL	20,053	18,796	1,812 19,784		

^{*} Column not specified in workbook

INPUT DATA -- PART 2 PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Bullding Envelope

(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
	CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
	TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
	PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
YEAR.	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
2006	0	0	7.71	9.43	8,69	0.00	1.00	1.00
2007	24,995	24,995	7.74	9.36	8.46	0.00	1.00	1.00
2008	50,193	50,193	6.46	8.21	7.16	0,00	1.00	1.00
2009	68,242	68,242	6,20	7.80	6.91	0.00	1.00	1.00
2010	86,401	86,401	5.58	7.04	6.21	0.00	1.00	1.00
2011	86,401	86,401	5.89	7.49	6.57	7.52	1.00	1.00
2012	86,401	86,401	6.06	7.72	6,77	6,80	1.00	1.00
2013	86,401	86,401	6.29	8.13	7.09	7.65	1.00	1.00
2014	86,401	86,401	6.43	8.48	7.26	8.10	1.00	1.00
2015	86,401	86,401	6.79	8.84	7.67	7.74	1.00	1.00
2016	86,401	86,401	7.14	9.48	8.03	9.08	1.00	1.00
2017	86,401	86,401	7.21	10.06	8.03	9.93	1.00	1.00
2018	86,401	86,401	7.67	10.79	8.53	9.87	1.00	1.00
2019	86,401	86,401	8.05	11.28	8.93	10.52	1.00	1.00
2020	86,401	86,401	8.30	11.59	9.13	10.44	1.00	1.00
2021	86,401	86,401	8.51	11.85	9,34	12.95	1.00	1.00
2022	86,401	86,401	8.73	11.92	9.53	10.56	1.00	1.00
2023	86,401	86,401	8.86	11.92	9.61	11.55	1.00	1.00
2024	86,401	86,401	8.91	11.50	9.54	15.91	1.00	1.00
2025	86,401	86,401	9.22	11.82	9.83	14.25	1.00	1.00
2026	86,401	86,401	9.42	11.88	9.99	15.42	1.00	1.00
2027	86,401	86,401	9.66	12.04	10.20	17.44	1.00	1.00
2028	86,401	86,401	9.85	11.97	10.32	15.36	1.00	1.00
2029	86,401	86,401	10.04	11.98	10.48	16.09	1.00	1.00
2030	86,401	86,401	10.24	11.99	10.63	18.01	1.00	1.00
2031	86,401	86,401	10.54	12.20	10.92	13.65	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 Building Envelope

	(2) AVOIDED GEN UNIT CAPACITY COST	(3) AVOIDED GEN UNIT FIXED O&M	(4) AVOIDED GEN UNIT VARIABLE O&M	(5) AVOIDED GEN UNIT FUEL COST	(6) REPLACEMENT FUEL COST	(7) AVOIDED GEN UNIT BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	3,618	1,282	11	779	927	4,763
2012	3,974	1,342	18	1,247	1,284	5,297
2013	3,816	1,405	36	2,607	2,865	5,000
2014	3,664	1,469	42	3,053	3,440	4,789
2015	3,517	1,534	68	4,937	5,122	4,935
2016	3,375	1,604	75	5,658	6,450	4,261
2017	3,238	1,677	56	4,423	5,142	4,252
2018	3,104	1,754	55	4,462	4,886	4,489
2019	2,975	1,834	49	4,095	4,538	4,416
2020	2,846	1,918	41	3,526	3,692	4,640
2021	2,718	2,006	42	3,581	4,503	3,844
2022	2,589	2,097	36	3,078	3,060	4,741
2023	2,461	2,191	33	2,874	3,021	4,537
2024	2,333	2,287	26	2,238	3,141	3,743
2025	2,205	2,387	26	2,303	2,800	4,121
2026	2,077	2,492	25	2,165	2,754	4,004
2027	1,949	2,601	23	2,049	2,859	3,763
2028	1,821	2,715	20	1,745	2,076	4,224
2029	1,693	2,834	19	1,676	2,027	4,196
2030	1,566	2,958	17	1,485	1,945	4,080
2031	1,439	3,087	16	1,406	1,350	4,597

NOM	56,977	43,475	734	59,388	67,881	92,694
NPV	21,640	12,878	266	20,882	23,533	32,133

AVOIDED T&D AND PROGRAM FUEL, SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	934	0
2008	269	28	297	24	7	31	2,522	0 .
2009	532	59	591	47	16	62	3,757	0
2010	709	84	793	62	22	84	4,431	0
2011	883	111	994	77	29	107	5,280	0
2012	850	116	966	74	31	105	5,453	0
2013	817	122	939	72	32	104	5,777	0
2014	786	127	913	69	34	102	6,075	0
2015	755	133	888	66	35	101	6,302	0
2016	726	139	865	64	37	100	6,819	0
2017	697	145	842	61	38	99	7,378	0
2018	668	152	820	59	40	99	7,941	0
2019	639	159	798	56	42	98	8,286	0
2020	611	166	777	54	44	97	8,501	0
2021	583	174	756	51	46	97	8,682	0
2022	554	182	736	49	48	97	8,671	0
2023	526	190	715	46	50	96	8,619	0
2024	497	198	695	44	52	96	8,173	0
2025	469	207	675	41	55	96	8,376	0 .
2026	440	216	656	39	57	96	8,350	0
2027	412	225	637	36	60	96	8,421	0
2028	384	235	619	34	62	96	8,280	0
2029	359	246	605	31	65	96	8,210	0
2030	337	256	593	30	68	97	8, 146	0
2031	317	267	585	28	71	99	8,239	0

NOM.	13,818	3,938	17,756	1,210	1,041	2,251	171,626	0
NPV	5.869	1,247	7,116	514	330	844	59,574	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 Building Envelope

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED SUPPLY COSTS	UTILITY PROGRAM COSTS	PARTICIPANT PROGRAM COSTS	OTHER COSTS	TOTAL COSTS	AVOIDED GEN UNIT BENEFITS	AVOIDED T&D BENEFITS	PROGRAM FUEL SAVINGS	OTHER BENEFITS	TOTAL BENEFITS	NET BENEFITS	CUMULATIVE DISCOUNTED NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	Û	0	0	0	0	0
2007	0	1,026	14,285	0	15,311	0	0	934	0	934	(14,377)	(13,267)
2008	0	1,074	15,200	0	16,274	0	328	2,522	0	2,849	(13,424)	(24,698)
2009	0	783	11,705	0	12,488	O	653	3,757	0	4,410	(8,079)	(31,045)
2010	0	828	12,480	0	13,308	0	877	4,431	0	5,309	(7,999)	(36,845)
2011	0	0	1,678	0	1,678	4,763	1,101	5,280	0	11,145	9,467	(30,511)
2012	0	0	1,723	0	1,723	5,297	1,072	5,453	0	11,822	10,099	(24,277)
2013	0	0	1,770	0	1,770	5,000	1,043	5,777	0	11,820	10,050	(18,551)
2014	0	0	1,817	0	1,817	4,789	1,015	6,075	0	11,879	10,062	(13,261)
2015	0	0	1,865	0	1,865	4,935	989	6,302	0	12,226	10,361	(8,236)
2016	0	0	1,916	0	1,916	4,261	965	6,819	0	12,046	10,130	(3,701)
2017	0	0	1,968	0	1,968	4,252	941	7,378	0	12,571	10,604	679
2018	0	0	2,022	0	2,022	4,489	919	7,941	0	13,349	11,327	4,996
2019	0	0	2,078	0	2,078	4,416	896	8,286	0	13,599	11,520	9,048
2020	0	0	2,136	0	2,136	4,640	875	8,501	0	14,016	11,880	12,903
2021	0	0	2,194	0	2,194	3,844	853	8,682	0	13,380	11,186	16,253
2022	0	33	3,164	0	3,197	4,741	832	8,671	0	14,245	11,047	19,306
2023	0	37	3,347	0	3,385	4,537	812	8,619	0	13,968	10,583	22,005
2024	0	27	3,124	0	3,151	3,743	791	8,173	0	12,707	9,556	24,253
2025	0	31	3,316	0	3,347	4,121	771	8,376	0	13,268	9,921	26,408
2026	0	0	2,512	0	2,512	4,004	752	8,350	0	13,105	10,593	28,530
2027	0	0	2,581	0	2,581	3,763	733	8,421	0	12,917	10,336	30,441
2028	0	0	2,651	0	2,651	4,224	715	8,280	0	13,220	10,568	32,244
2029	0	0	2.724	0	2,724	4,196	701	8,210	0	13,107	10,383	33,879
2030	0	0	2,799	0	2,799	4,080	690	8,146	0	12,916	10,117	35,349
2031	0	0	2,877	0	2,877	4,597	683	8,239	0	13,519	10,643	36,775

IN.	PV	U	3,109	39,784	U	62,892	32,133	7,960	59,574	V	99,668	36,775
	₽V	•	3,109	59.784	^	62,892	20,100	7.960	50.574		00.550	
No	MC	0	3,840	103,932	0	107,772	92,694	20,007	171,626	0	284,327	176,555
_												

Discount Rate:

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

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN	maar	UTILITY	OTHER	TOTAL	CUSTOMER EQUIPMENT	CUSTOMER	OTHER	TOTAL,	NET	CUMULATIVE DISCOUNTED
	PARTICIPANTS BILLS	TAX CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	O&M COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0	0	. 0	0
2007	1,179	ñ	9,129	0	10,309	14,082	203	0	14,285	(3,976)	(3,669)
2008	3,504	0	9,232	0	12,736	14,555	645	0	15,200	(2,464)	(5,767)
2009	5,608	0	6,608	0	12,216	10,647	1,058	0	11,705	511	(5,366)
2010	7,357	0	6,679	0	14,037	11,036	1,444	0	12,480	1,557	(4,237)
2011	8,309	0	0	0	8,309	0	1,678	0	1,678	6,631	199
2012	8,405	0	0	0	8,405	0	1,723	0	1,723	6,682	4,324
2013	8,531	0	0	0	8,531	0	1,770	0	1,770	6,761	8,176
2014	8,614	0	0	0	8,614	0	1,817	0	1,817	6,797	11,750
2015	8,715	0	0	0	8,715	0	1,865	0	1,865	6,850	15,073
2016	8,799	0	0	0	8,799	0	1,916	0	1,916	6,884	18,154
2017	8,922	0	0	0	8,922	0	1,968	0	1,968	6,955	21,026
2018	9,076	0	0	0	9,076	0	2,022	0	2,022	7,054	23,715
2019	9,229	0	0	0	9,229	0	2,078	0	2,078	7,150	26,230
2020	9,392	0	0	0	9,392	0	2,136	0	2,136	7,256	28,585
2021	9,506	0	0	0	9,506	0	2,194	0	2,194	7,312	30,775
2022	9,789	0	350	0	10,139	910	2,254	0	3,164	6,975	32,702
2023	9,918	0	386	0	10,305	1,031	2,316	0 .	3,347	6,957	34,476
2024	10,095	0	271	0	10,366	744	2,380	0	3,124	7,243	36,181
2025	10,275	0	309	0	10,584	871	2,445	0	3,316	7,268	37,759
2026	10,458	0	0	0	10,458	0	2,512	0	2,512	7,946	39,351
2027	10,644	0	0	0	10,644	0	2,581	0	2,581	8,064	40,842
2028	10,834	0	0	0	10,834	0	2,651	0	2,651	8,183	42,238
2029	11,027	0	0	0	11,027	0	2,724	0	2,724	8,303	43,545
2030	11,224	0	0	0	11,224	0	2,799	0	2,799	8,425	44,769
2031	11,424	0	0	0	11,424	0	2,877	0	2,877	8,547	45,914

MOM	220,838	0	32,965	0	253,802	53,876	50,056	0	103,932	149,870
NPA	79,052	0	26,646	0	105,698	42,634	17,150	0 .	59,784	45,914

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

RATE IMPACT TEST PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Building Envelope

(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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	1,026	9,129	719	0	10,875	934	0	0	0	934	(9,941)	(9,173)
2008	0	1,074	9,232	2,137	0	12,443	2,522	328	0	0	2,849	(9,594)	(17,342)
2009	0	783	6,608	3,421	0	10,812	3,757	653	0	0	4,410	(6,403)	(22,373)
2010	0	828	6,679	4,488	0	11,995	4,431	877	0	0	5,309	(6,686)	(27,221)
2011	0	0	0	5,068	0	5,068	10,044	1,101	0	0	11,145	6,076	(23,155)
2012	0	0	0	5,127	0	5,127	10,750	1,072	0	0	11,822	6,695	(19,022)
2013	0	0	0	5,204	0	5,204	10,777	1,043	0	0	11,820	6,616	(15,253)
2014	0	0	0	5,255	0	5,255	10,864	1,015	0	0	11,879	6,624	(11,771)
2015	0	0	0	5,316	0	5,316	11,237	989	0	0	12,226	6,910	(8,419)
2016	0	0	0	5,368	0	5,368	11,081	965	0	0	12,046	6,678	(5,430)
2017	0	0	0	5,443	0	5,443	11,630	941	0	0	12,571	7,129	(2,485)
2018	0	0	0	5,537	0	5,537	12,431	919	0	0	13,349	7,813	492
2019	0	0	0	5,629	0	5,629	12,702	896	0	0	13,599	7,969	3,295
2020	0	0	0	5,729	0	5,729	13,141	875	0	0	14,016	8,287	5,985
2021	0	0	0	5,799	0	5,799	12,526	853	0	0	13,380	7,581	8,255
2022	0	33	350	5,971	0	6,354	13,412	832	0	0	14,245	7,890	10,435
2023	0	37	386	6,050	0	6,474	13,156	812	0	0	13,968	7,494	12,346
2024	0	27	271	6,158	0	6,456	11,915	791	0	0	12,707	6,250	13,817
2025	0	31	309	6,268	0	6,608	12,497	771	0	0	13,268	6,660	15,263
2026	0	0	0	6,379	0	6,379	12,354	752	0	0	13,105	6,726	16,611
2027	0	0	0	6,493	0	6,493	12,184	733	0	0	12,917	6,424	17,799
2028	0	0	0	6,609	0	6,609	12,505	715	0	0	13,220	6,611	18,927
2029	0	0	0	6,727	0	6,727	12,406	701	0	0	13,107	6,381	19,931
2030	0	0	0	6,846	0	6,846	12,226	690	0	0	12,916	6,070	20,813
2031	0	0	0	6,968	0	6,968	12,836	683	0	0	13,519	6,551	21,691

NOM.	0	3,840	32,965	134,711	0	171,515	264,319	20,007	Λ	Λ	284,327	112,811
	•		,		*	1,1,010	201,010	20,007	· ·	v	204,327	112,011
NPV	0	3.109	26,646	48,222	0	77.977	01 707	7.040	•	^	99,668	01 (01
INF V	U	3,103	20,040	40,222	U	11,911	91,707	7,900	U	U	99,008	21,691

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

INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weathertzation

ĭ.	PROGRAM DEMAND SAVINGS & LINE LOSSES		
	(1) CUSTOMER kW REDUCTION AT METER	0.13	kW
	(2) GENERATOR kW REDUCTION PER CUSTOMER	0.18	kW
	(3) kW LINE LOSS PERCENTAGE	9.03	%
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	354.07	kWh
	(5) kWh LINE LOSS PERCENTAGE	7.16	%
	(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	26	YEARS
	(2) GENERATOR ECONOMIC LIFE	25	YEARS
	(3) T&D ECONOMIC LIFE	35	YEARS
	(4) K FACTOR FOR GENERATION	1.65312	
	(5) K FACTOR FOR T & D	1.61194	
III.	UTILITY & CUSTOMER COSTS		
III.	UTILITY & CUSTOMER COSTS (1) UTILITY NON RECURRING COST PER CUSTOMER	**	\$/CUST
III.			\$/CUST \$/CUST
III.	(1) UTILITY NON RECURRING COST PER CUSTOMER	***	**
III.	(1) UTILITY NON RECURRING COST PER CUSTOMER(2) UTILITY RECURRING COST PER CUSTOMER	nje sije nje nje sije sije	\$/CUST %** \$/CUST
III.	(1) UTILITY NON RECURRING COST PER CUSTOMER (2) UTILITY RECURRING COST PER CUSTOMER (3) UTILITY COST ESCALATION RATE	nje sije nje nje sije sije	\$/CUST %**
III.	(1) UTILITY NON RECURRING COST PER CUSTOMER (2) UTILITY RECURRING COST PER CUSTOMER (3) UTILITY COST ESCALATION RATE (4) CUSTOMER EQUIPMENT COST	nije nije nije nije nije nije nije nije nije nije nije nije	\$/CUST %*** \$/CUST %*** \$/CUST/YR
III.	(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	alle sele sele alle sele sele alle sele sele alle sele sele alle sele sele alle sele sele	\$/CUST %*** \$/CUST %*** \$/CUST/YR %***
HI.	(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	*** *** *** *** *** *** ***	\$/CUST %*** \$/CUST %*** \$/CUST/YR %*** \$/CUST/YR
	(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.	**** *** *** *** *** *** *** *** ***	\$/CUST %*** \$/CUST %*** \$/CUST/YR %*** \$/CUST/YR %***
*	(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	*** *** *** *** *** *** ***	\$/CUST %*** \$/CUST %*** \$/CUST/YR %*** \$/CUST/YR %***
*	(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 (8) INCREASED SUPPLY COSTS (9) SUPPLY COSTS ESCALATION RATES. (10) UTILITY DISCOUNT RATE (11) UTILITY AFUDC RATE.	*** *** *** *** *** *** 8.37	\$/CUST %*** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %** % %
*	(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	*** *** *** *** *** 8.37 7.84	\$/CUST %*** \$/CUST %*** \$/CUST/YR %*** %/** % % % % % \$/CUST/YR
*	(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 (8) INCREASED SUPPLY COSTS (9) SUPPLY COSTS ESCALATION RATES. (10) UTILITY DISCOUNT RATE (11) UTILITY AFUDC RATE.	*** *** *** *** *** 8.37 7.84	\$/CUST %*** \$/CUST %*** \$/CUST/YR %** \$/CUST/YR %** % \$/CUST/YR %** % \$/CUST/YR

- * 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

v.

(1) BASE YEAR	2006	
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2011	
(3) IN-SERVICE YEAR FOR AVOIDED T&D	2009-2011	
(-	4) BASE YEAR AVOIDED GENERATING COST	492.12	\$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST	147.00	\$/kW
(6) BASE YEAR DISTRIBUTION COST	17.27	\$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
0	B) GENERATOR FIXED O & M COST	30.93	\$/kW/YR
() GENERATOR FIXED O&M ESCALATION RATE	4.35	%**
(10) TRANSMISSION FIXED O & M COST	2.68	\$/kW
(11) DISTRIBUTION FIXED O & M COST	0.95	\$/kW
(12) T&D FIXED O&M ESCALATION RATE	4.35	%**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99	%**
(15) GENERATOR CAPACITY FACTOR	4%	** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST	6.32	CENTS PER kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44	%**
ľ	ON-FUEL ENERGY AND DEMAND CHARGES		
(1) NON FUEL COST IN CUSTOMER BILL	eji mendi	CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE	***	%
(B) DEMAND CHARGE IN CUSTOMER BILL	***	\$/kW/MO
	4) DEMAND CHARGE ESCALATION RATE	***	%

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ

PROGRAM NAME: Residential Low Income Weatherization

PROGRAM COSTS OTHER UTILITY CHARGE CHARGE PARTICIPANT PARTICIPANT OTHER TOTAL		(1) UTIL IT Y	(2)	(3)	(4) TOTAL	(5) ENERGY	(6) DEMAND	(7)	(8)	(9)	(10)
WITHOUT NICENTIVES COSTS COSTS				OTHER				PARTICIPANT	PARTICIPANT	OTHER	TOTAL
Nicentives Nic			ITTE ITV								PARTICIPANT
YEAR \$ (000) \$								•			
2006 0 83 0 0 0 0 0 89 0 0 0 0 89 0 0 0 0 89 0 0 0 89 0 0 0 89 0 0 0 89 0 0 0 89 0 0 0 88 0 95 0	YEAR										
2007					_ ```	0	0	0	0		0
2008 14 26 0 40 22 0 89 0 0 89 2009 15 28 0 43 38 0 95 0 0 95 2010 16 29 0 45 54 0 102 0 0 0 102 201 0 <				0	38	7	0	83	0	0	83
2009 15 28 0 43 38 0 95 0 0 95 2010 16 29 0 45 54 0 102 0				0	40	22	0	89	0	0	89
2010 16 29 0 45 54 0 102 0 0 102 2011 0 0 0 0 63 0 0 0 0 0 2013 0 0 0 0 64 0 0 0 0 0 2014 7 11 0 18 65 0 58 0 0 58 2015 8 11 0 19 66 0 63 0 0 0 63 2016 9 12 0 20 66 0 68 0 0 68 2017 9 12 0 22 67 0 73 0 0 0 68 2017 9 12 0 0 0 70 0 0 0 0 0 0 0 0 0 0 0		15	28	0	43	38	0	95	0	0	95
2012 0 0 0 0 0 0 63 0 0 0 0 0 0 0 0 0 0 0 0			29	0	45	54	0	102	0	0	102
2013 0 0 0 0 0 0 0 64 0 0 0 0 0 0 0 0 0 2014 7 11 0 0 18 65 0 0 58 0 0 0 0 58 0 0 0 58 2015 8 11 1 0 0 19 66 0 0 63 0 0 0 63 2016 9 12 0 0 20 66 0 66 0 68 0 0 0 0 68 2017 9 12 0 0 22 67 0 0 73 0 0 0 0 0 68 2019 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2011	0	0	0	0	63	0	0	0	0	0
2014 7 111 0 18 65 0 58 0 0 58 0 0 58 2015 8 111 0 0 19 66 0 0 63 0 0 0 63 2016 9 12 0 0 20 66 0 0 68 0 0 0 0 68 2017 9 12 0 0 22 67 0 73 0 0 0 0 73 2018 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2012	0	0	0	0	63	0	0	0	0	0
2015 8 11 0 19 66 0 63 0 63 0 0 63 2016 9 12 0 20 66 0 68 0 68 0 0 68 2017 9 12 0 22 67 0 73 0 0 0 73 2018 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2013	0	0	0	0	64	0	0	0	0	0
2016 9 12 0 20 66 0 68 0 0 68 2017 9 12 0 22 67 0 73 0 0 73 2018 0 0 0 0 69 0	2014	7	11	0	18	65	0	58	0	0	58
2017 9 12 0 22 67 0 73 0 0 73 0 0 73 2018 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2015	8	11	0	19	66	0	63	0	0	63
2018 0 0 0 69 0 0 0 0 0 2019 0 0 0 0 70 0 0 0 0 0 2020 0 0 0 0 71 0 0 0 0 0 2021 9 11 0 20 72 0 71 0 0 0 0 71 2022 20 26 0 45 74 0 126 0 0 126 2023 21 27 0 48 75 0 136 0 0 136 2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 0 62 2026 0 0 0 0 7	2016	9	12	0	20	66	0	68	0	0	68
2019 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2017	9	12	0	22	67	0	73	0	0	73
2020 0 0 0 0 71 0 0 0 0 0 2021 9 11 0 20 72 0 71 0 0 71 2022 20 26 0 45 74 0 126 0 0 126 2023 21 27 0 48 75 0 136 0 0 136 2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 2027 0 0 0 80 0 0 0 0 0 2027 0 0 0 80 0 0 0	2018	0	0	0	0	69	0	0	0	0	0
2021 9 11 0 20 72 0 71 0 0 71 2022 20 26 0 45 74 0 126 0 0 126 2023 21 27 0 48 75 0 136 0 0 136 2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 2027 0 0 0 0 80 0 0 0 0 0 2028 11 11 0 22 82 0 85 0 0 0 92 2029 12 11 0 23 83	2019	0	0	0	0	70	0	0	0	0	0
2022 20 26 0 45 74 0 126 0 0 126 2023 21 27 0 48 75 0 136 0 0 136 2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 2027 0 0 0 0 80 0 0 0 0 0 2027 1 0 0 2 82 0 85 0 0 0 0 2028 11 11 0 23 83 0 92 0 0 0 92	2020	0	0	0	0	71	0	0	0	0	0
2023 21 27 0 48 75 0 136 0 0 136 2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 2027 0 0 0 0 80 0 0 0 0 0 2028 11 11 0 22 82 0 85 0 0 85 2029 12 11 0 23 83 0 92 0 0 0 92	2021	9	11	0	20	72	0	71	0	0	71
2024 23 28 0 51 76 0 146 0 0 146 2025 13 16 0 29 78 0 62 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 0 2027 0 85 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 0 <	2022	20	26	0	45	74	0	126	0	0	126
2025 13 16 0 29 78 0 62 0 0 62 2026 0 0 0 0 79 0 0 0 0 0 2027 0 0 0 0 0 0 0 0 0 2028 11 11 0 22 82 0 85 0 0 0 85 2029 12 11 0 23 83 0 92 0 0 92	2023	21	27	0	48	75	0	136	0	0	136
2026 0 0 0 0 79 0 0 0 0 0 2027 0 85 0 0 85 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0 0 0 92 0	2024	23	28	0	51	76	0	146	0	0	146
2027 0 0 0 0 80 0 0 0 0 0 2028 11 11 0 22 82 0 85 0 0 85 2029 12 11 0 23 83 0 92 0 0 92	2025	13	16	0	29	78	0	62	0	0	62
2028 11 11 0 22 82 0 85 0 0 85 2029 12 11 0 23 83 0 92 0 0 92	2026	0	0	0	0	79	0	0	0	0	0
2029 12 11 0 23 83 0 92 0 0 92	2027	0	0	0	0	80	0	0	0	0	0
	2028	11	11	0	22	82	0	85	0	0	85
2030 13 12 0 24 85 0 99 0 0 99	2029	12	11	0	23	83	0	92	0	0	92
	2030	13	12	0	24	85	0		0	0	99
2031 14 12 0 26 86 0 107 0 0 107	2031	14	12	0	26	86	0	107	0	0	107

NOM	226	308	0	534	1,654	0	1,556	0	0	1,556
NPV	92	144	0	236	586	0	619	0	0	619

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

2035

465

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Residential Low Income Weatherization

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	240	7	Ô	16	10	0	0	9	(0)	42	42	42	235
2012	231	7	0	15	7	4	1	9	3	47	43	86	235
2013	218	7	0	14	7	4	i	9	3	45	38	124	243
2014	206	6	0	13	7	4	1	9	2	43	34	158	250
2015	195	6	0	13	7	4	1	9	2	41	30	187	257
2016	183	6	0	12	6	4	1	9	1	40	27	214	265
2017	173	5	0	11	6	3	1	9	1	38	23	237	273
2018	162	5	0	10	6	3	1	9	1	36	21	258	281
2019	152	5	0	10	6	3	1	9	1	35	18	277	290
2020	142	4	0	9	6	3	1	9	l	33	16	293	298
2021	132	4	0	9	5	3	1	9	1	32	14	307	307
2022	122	4	0	8	5	2	2	9	I	30	13	320	316
2023	112	3	0	7	4	2	2	9	1	29	11	331	326
2024	102	3	0	7	4	2	2	9	1	27	10	340	336
2025	92	3	0	6	4	2	2	9	1	26	8	349	346
2026	82	3	0	5	3	2	2	9	1	24	7	356	356
2027	72	2	0	5	3	2	2	9	1	23	6	362	367
2028	62	2	0	4	2	1	2	9	1	21	5	368	378
2029	52	2	0	3	2	1	2	9	1	20	5	372	389
2030	42	1	0	3	1	1	2	9	1	18	4	376	401
2031	32	1	0	2	3	1	2	9	(1)	17	3	380	413
2032	24	1	0	2	5	ı	2	9	(3)	16	3	383	425
2033	18	î	0	i	5	0	2	9	(3)	15	3	385	438
2034	12	0	ů	í	4	0	2	9	(3)	14	2	387	451
2034	12	•	•	-				1	5(- 22	_	***	4.00

IN SERVICE COST (\$000)	235
. ,	
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38.575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAP	TIAL	SIK	DCIURE	

WEIGHT	COST	_
45%	6.90	⁻ઃ
0%	0.00	9
55%	11.75	,
	45% 0%	45% 6.90 0% 0.00

K-FACTOR = CPWFC / IN-SVC COST =

page 4a

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PSC FORM CE 1.1A PAGE 2a OF 2

PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weatherization

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
						BOOK	ACCUMULATED	DEFERRED						
			ACCUMULATED		ACCUMULATED	DEPRECIATION	BOOK DEPR	TAX	TOTAL				ANNUAL	ACCUMULATED
	TAX	TAX	TAX	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(10)*(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEFERRED TAX	DEFERRED TAX	DEPRECIATION	AFUDC	RATE	TAX RATE	TAX RATE	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$ (000)	\$(000)	\$(000)	MINUS I/LIFE	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	9	9	9	9	9	9	(0)	15	0	0	0	(0)	(5)
2012	7.22%	17	25	9	19	9	18	3	15	0	0	0	3	(1)
2013	6.68%	16	41	9	28	9	26	3	15	0	0	0	3	1
2014	6.18%	14	55	9	38	9	35	2	15	0	0	0	2	3
2015	5.71%	13	69	9	47	9	44	2	15	0	0	0	2	5
2016	5.29%	12	81	9	57	9	53	ì	15	0	0	0	1	6
2017	4.89%	11	92	9	66	9	62	1	15	0	0	0	1	7
2018	4.52%	11	103	9	75	9	71	1	15	0	0	0	1	8
2019	4.46%	10	113	9	85	9	79	1	15	0	0	0	1	9
2020	4.46%	10	123	9	94	9	88	1	15	0	0	0	i	9
2021	4.46%	10	134	9	104	9	97	1	15	0	0	0	1	10
2022	4.46%	10	144	9	113	9	106	1	15	0	0	0	1	10
2023	4.46%	10	155	9	122	9	115	1	15	0	0	0	1	11
2024	4.46%	10	165	9	132	9	124	1	15	0	0	0	1	11
2025	4.46%	10	175	9	141	9	132	1	15	0	0	0	1	12
2026	4.46%	10	186	9	151	9	141	1	15	0	0	0	1	13
2027	4.46%	10	196	9	160	9	150	1	15	0	0	0	1	13
2028	4.46%	10	206	9	170	9	159	1	15	0	0	0	ī	14
2029	4.46%	10	217	9	179	9	168	1	15	0	0	0	1	14
2030	4.46%	10	227	9	188	9	177	1	15	0	0	0	1	15
2031	2.23%	5	232	9	198	9	185	(1)	15	0	0	0	(1)	14
2032	0.00%	0	232	9	207	9	194	(3)	15	0	0	0	(3)	10
2033	0.00%	0	232	9	217	9	203	(3)	15	0	0	0	(3)	7
2034	0.00%	0	232	9	226	9	212	(3)	15	0	0	0	(3)	3
2035	0.00%	0	232	9	235	9	221	(3)	15	0	0	0	(3)	0

	_
SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(4)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	15
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weatherization

(1)	(2)	(3)	(4)	(5) END OF YEAR NET	(5a)*	(5b)*	(6)	(7) ENDING OF	(8)
			DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	BEGINNING YEAR RATE	YEAR RATE	MID-YEAR
	TAX DEPRECIATION	TAX DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	9	(0)	226	9	(5)	240	231	235
2012	7.22%	17	3	217	19	(1)	231	218	224
2013	6.68%	16	3	207	28	ì	218	206	212
2014	6.18%	14	2	198	38	3	206	195	200
2015	5.71%	13	2	188	47	5	195	183	189
2016	5.29%	12	l	179	57	6	183	173	178
2017	4.89%	11	1	170	66	7	173	162	167
2018	4.52%	11	1	160	75	8	162	152	157
2019	4.46%	10	1	151	85	9	152	142	147
2020	4.46%	10	1	141	94	9	142	132	137
2021	4.46%	10	1	132	104	10	132	122	127
2022	4.46%	10	1	122	113	10	122	112	117
2023	4.46%	10	1	113	122	11	112	102	107
2024	4.46%	10	1	104	132	11	102	92	97
2025	4.46%	10	1	94	141	12	92	82	87
2026	4.46%	10	1	85	151	13	82	72	77
2027	4.46%	10	1	75	160	13	72	62	67
2028	4.46%	10	1	66	170	14	62	52	57
2029	4.46%	10	1	57	179	14	52	42	47
2030	4.46%	10	1	47	188	15	42	32	37
2031	2.23%	5	(1)	38	198	14	32	24	28
2032	0.00%	0	(3)	28	207	10	24	18	21
2033	0.00%	0	(3)	19	217	7	18	12	15
2034	0.00%	0	(3)	9	226	3	12	6	9
2035	0.00%	0	(3)	(0)	235	0	6	0	3

^{*} Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
YEAR	NO.YEARS BEFORE IN-SERVICE	PLANT ESCALATION RATE	CUMULATIVE ESCALATION FACTOR	YEARLY EXPENDITURE (%)	ANNUAL SPENDING (\$/kW)	AVERAGE SPENDING (\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2006 2007	-5 -4	0.00% 3.00%	1.000 1.030	0.00% 0.00%	0.00 0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00

				100.00%	538.96	-						
		(8) CUMULATIVE	(8a)*	(8b)* CUMULATIVE	(9) YEARLY	(9a)* CUMULATIVE	(9b)* CONSTRUCTION	(9c)*	(9d)*	(9e)* CUMULATIVE	(10) INCREMENTAL	(11) CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES		BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$ /kW)	(\$/kW)	(\$ /kW)	(\$ /kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2010	-1	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

	24.71	62.40	•	54.35		(11.43)	601.36
				DOOM DAGE		•	
			BOOK BASIS	BOOK BASIS FOR DEF TAX	TAX BASIS		
IN SERVICE YEAR 2011		CONSTRUCTION CASH	211	211	211	1	
PLANT COSTS 492.12 AFUDC RATE 7.84%		EQUITY AFUDC DEBT AFUDC	15	10			
AFUDC RATE 7.84%		CPI	10	10	21		
		TOTAL	235	221	232	1	

^{*} Column not specified in workbook

INPUT DATA -- PART 2 PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weatherization

	(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
		CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
		TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
		PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
	YEAR	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
-	2006	0	0	7.71	9.49	8.61	0.00	1.00	1.00
	2007	505	505	7.74	9.42	8.37	0,00	1.00	1.00
	2008	1,035	1,035	6.46	8.26	7.08	0.00	1.00	1.00
	2009	1,589	1,589	6.20	7.84	6.82	0.00	1.00	1.00
	2010	2,170	2,170	5.58	7.08	6.13	0,00	1.00	1.00
	2011	2,170	2,170	5.89	7.53	6.49	7.52	1.00	1.00
	2012	2,170	2,170	6.06	7.76	6.68	6.80	1.00	1.00
	2013	2,170	2,170	6.29	8.18	7.00	7.65	1.00	1.00
	2014	2,170	2,170	6.43	8.53	7.16	8,10	1.00	1.00
	2015	2,170	2,170	6.79	8.89	7.56	7.74	1.00	1.00
	2016	2,170	2,170	7.14	9.58	7.92	9.08	1.00	1.00
	2017	2,170	2,170	7.21	10.25	7.92	9.93	1.00	1.00
	2018	2,170	2,170	7.67	11.02	8.41	9.87	1.00	1.00
	2019	2,170	2,170	8.05	11.58	8.81	10.52	1.00	1.00
	2020	2,170	2,170	8.30	11.94	9.02	10.44	1.00	1.00
	2021	2,170	2,170	8.51	12.25	9.22	12.95	1.00	1.00
	2022	2,170	2,170	8.73	12.32	9.41	10.56	1.00	1.00
	2023	2,170	2,170	8.86	12.32	9.50	11.55	1.00	1.00
	2024	2,170	2,170	8.91	11.87	9.45	15.91	1.00	1.00
	2025	2,170	2,170	9.22	12.22	9.74	14.25	1.00	1.00
	2026	2,170	2,170	9.42	12.26	9.91	15.42	1.00	1.00
	2027	2,170	2,170	9.66	12.41	10.12	17.44	1.00	1.00
	2028	2,170	2,170	9.85	12.30	10.25	15.36	1.00	1.00
	2029	2,170	2,170	10.04	12.26	10.41	16.09	1.00	1.00
	2030	2,170	2,170	10.24	12.26	10.57	18.01	1.00	1.00
	2031	2,170	2,170	10.54	12.46	10.86	13.65	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 Low Income Weathertration

(6) AVOIDED REPLACEMENT GEN UNIT FUBI. COST HENEFITS \$(000) \$(000) 0
--

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weatherization

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	9	0
2008	3	0	3	0	0	0	26	0
2009	5	1	6	0	0	1	41	0
2010	8	1	9	1	0	1	53	0
2011	10	1	12	1	0	1	66	0
2012	10	1	11	1	0	1	68	0
2013	10	1	11	1	0	I	72	0
2014	9	1	11	1	0	1	76	0
2015	9	2	11	1	0	ī	79	0
2016	9	2	10	1	0	1	86	0
2017	8	2	10	1	0	1	94	0
2018	8	2	10	1	0	1	101	0
2019	8	2	9	1	0	1	106	0
2020	7	2	9	1	1	1	110	0
2021	7	2	9	1	1	1	112	0
2022	7	2	9	1	1	1	112	0
2023	6	2	8	1	1	1	112	0
2024	6	2	8	1	1	1	106	0
2025	6	2	8	0	1	1	109	0
2026	5	3	8	0	1	1	108	0
2027	5	3	8	0	1	1	109	0
2028	5	3	7	0	1	1	107	0
2029	4	3	7	0	1	1	105	0
2030	4	3	7	0	1	I	104	0
2031	4	3	7	0	1	1	105	0

NOM.	162	46	208	14	12	26	2,176	0
NPV	68	14	82	6	4	10	743	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 Low Income Weatherization

(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)
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	13	83	0	96	0	0	9	0	9	(87)	(80)
2008	0	14	89	0	103	0	3	26	0	29	(74)	(143)
2009	0	15	95	0	110	0	6	41	0	48	(63)	(193)
2010	0	16	102	0	118	0	10	53	0	63	(55)	(233)
2011	0	0	0	0	0	56	13	66	0	135	135	(143)
2012	0	0	0	0	0	62	13	68	0	143	143	(54)
2013	0	0	0	0	0	59	12	72	0	143	143	27
2014	0	7	58	0	66	56	12	76	0	144	78	68
2015	0	8	63	0	71	58	12	79	0	148	77	106
2016	0	9	68	0	76	50	11	86	0	147	71	138
2017	0	9	73	0	82	50	11	94	0	155	72	168
2018	0	0	0	0	0	53	11	101	0	165	165	230
2019	0	0	0	0	0	52	11	106	0	169	169	290
2020	0	0	0	0	0	54	10	110	0	175	175	346
2021	0	9	71	0	79	45	10	112	0	168	88	373
2022	0	20	126	0	146	56	10	112	0	178	32	382
2023	0	21	136	0	157	53	10	112	0	175	17	386
2024	0	23	146	0	169	44	9	106	0	159	(10)	384
2025	0	13	62	0	74	48	9	109	0	166	92	404
2026	0	0	0	0	0	47	9	108	0	164	164	436
2027	0	0	0	0	0	44	9	109	0	162	162	466
2028	0	11	85	0	96	50	8	107	0	165	69	478
2029	0	12	92	0	104	49	8	105	0	163	59	487
2030	0	13	99	0	112	48	8	164	0	160	49	494
2031	0	14	107	0	121	54	8	105	0	167	47	501

NOM	0	226	1,556	0	1,781	1,088	234	2,176	0	3,498	1,717
NPV	0	92	619	0	711	377	92	743	0	1,212	501

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

M(11) / Cal(6)) ·

8.37 1.70

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Low Income Weathertzation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILLS \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O&M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	0	0	0	0	0	0	0	0	0	0	0
2007	12	0	25	0	37	83	0	0	83	(46)	(43)
2008	36	0	26	0	62	89	0	0	89	(27)	(66)
2009	62	0	28	0	89	95	0	0	95	(6)	(71)
2010	88	0	29	0	117	102	0	0	102	15	(60)
2011	103	0	0	0	103	0	0	0	0	103	9
2012	104	0	0	0	104	0	0	0	0	104	73
2013	106	0	0	0	106	0	0	0	0	106	134
2014	107	0	11	0	117	58	0	0	58	59	165
2015	108	0	11	0	119	63	0	0	63	56	192
2016	109	0	12	0	121	68	0	0	68	53	216
2017	110	0	12	0	123	73	0	0	73	50	236
2018	112	0	0	0	112	0	0	0	0	112	279
2019	114	0	0	0	114	0	0	0	0	114	319
2020	116	0	0	0	116	0	0	0	0	116	357
2021	118	0	11	0	128	71	0	0	71	58	374
2022	121	0	26	0	147	126	0	0	126	20	380
2023	123	0	27	0	150	136	0	0	136	14	383
2024	125	0	28	0	153	146	0	0	146	7	385
2025	127	0	16	0	144	62	0	0	62	82	403
2026	129	0	0	0	129	0	0	0	0	129	429
2027	132	0	0	0	132	0	0	0	0	132	453
2028	134	0	11	0	145	85	0	0	85	60	463
2029	136	0	11	0	148	92	0	0	92	56	472
2030	139	0	12	0	151	99	0	0	99	52	479
2031	141	0	12	0	154	107	0	0	107	47	486

NOM	2.712	0	308	0	3.021	1.556	0	0	1,556	1,465
	-, ,	· ·	500	o o	5,021	1,550	v	· ·	1,550	1,403
NPV	961	۵	144	۸	1.105	619	0	0	619	486
141 V			477	v	1,105	017	v	U	019	400

In Service of Gen Unit: Discount Rate : 2011 8.37

Benefit/Cost Ratio (Col(6) / Col(10))

PROGRAM NAME: Residential Low Income Weatherization

(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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	13	25	7	0	45	9	0	0	0	9	(36)	(33)
2008	0	14	26	22	0	62	26	3	0	0	29	(33)	(62)
2009	0	15	28	38	0	80	41	6	0	0	48	(33)	(87)
2010	0	16	29	54	0	99	53	10	0	0	63	(36)	(113)
2011	0	0	0	63	0	63	122	13	0	0	135	72	(65)
2012	0	0	0	63	0	63	130	13	0	0	143	79	(16)
2013	0	0	0	64	0	64	131	12	0	0	143	79	29
2014	0	7	11	65	0	83	132	12	0	0	144	61	61
2015	0	8	11	66	0	85	137	12	0	0	148	63	92
2016	0	9	12	66	0	87	136	11	0	0	147	60	119
2017	0	9	12	67	0	89	144	11	0	0	155	66	146
2018	0	0	0	69	0	69	154	11	0	0	165	96	182
2019	0	0	0	70	0	70	158	11	0	0	169	99	217
2020	0	0	0	71	0	71	164	10	0	0	175	104	251
2021	0	9	11	72	0	91	158	10	0	0	168	76	274
2022	0	20	26	74	0	119	168	10	0	0	178	59	290
2023	0	21	27	75	0	123	165	10	0	0	175	52	303
2024	0	23	28	76	0	127	150	9	0	0	159	32	311
2025	0	13	16	78	0	107	157	9	0	0	166	60	324
2026	0	0	0	79	0	79	155	9	0	0	164	85	341
2027	0	0	0	80	0	80	153	9	0	0	162	81	356
2028	0	11	11	82	0	103	156	8	0	0	165	61	366
2029	0	12	11	83	0	106	154	8	0	0	163	56	375
2030	0	13	12	85	0	109	152	8	0	0	160	51	383
2031	0	14	12	86	0	112	159	8	0	0	167	55	390

NOM.	0	226	308	1,654	0	2,188	3,264	234	0	0	3,498	1,310
NPV	0	92	144	586	0	822	1,120	92	0	0	1,212	390

Discount Rate Benefit/Cost Ratio (Col(12) / Col(7)): 1.47

INPUT DATA -- PART I CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call)

I.	PROGRAM DEMAND SAVINGS & LINE LOSSES		IV.	AVOIDED GENERATOR AND T&D COSTS	
	(1) CUSTOMER kW REDUCTION AT METER	1.12 kW		(1) BASE YEAR	2006
	(2) GENERATOR kW REDUCTION PER CUSTOMER	1.50 kW		(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2011
	(3) kW LINE LOSS PERCENTAGE	9.03 %		(3) IN-SERVICE YEAR FOR AVOIDED T&D	2069-2011
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	48.61 kWh ****		(4) BASE YEAR AVOIDED GENERATING COST	492.12 \$/kW
	(5) kWh LINE LOSS PERCENTAGE	7.16 %		(5) BASE YEAR AVOIDED TRANSMISSION COST	147.00 \$/kW
	(6) GROUP LINE LOSS MULTIPLIER	1.00		(6) BASE YEAR DISTRIBUTION COST	10.36 \$/ kW
	(7) CUSTOMER kWh INCREASE AT METER	22.63 kWh ****		(7) GEN, TRAN & DIST COST ESCALATION RATE	3.00 %**
				(8) GENERATOR FIXED O & M COST	30.93 \$/kW/YR
II.	ECONOMIC LIFE & K FACTORS			(9) GENERATOR FIXED O&M ESCALATION RATE	4.35 %**
				(10) TRANSMISSION FIXED O & M COST	2.68 \$ /kW
	(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM	26 YEARS		(11) DISTRIBUTION FIXED O & M COST	0.95 \$/kW
	(2) GENERATOR ECONOMIC LIFE	25 YEARS		(12) T&D FIXED O&M ESCALATION RATE	4.35 %**
	(3) T&D ECONOMIC LIFE	35 YEARS		(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082 CENTS/kWh
	(4) K FACTOR FOR GENERATION	1.65312		(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99 %**
	(5) K FACTOR FOR T & D	1.61194		(15) GENERATOR CAPACITY FACTOR	4% ** (In-service year)
				(16) AVOIDED GENERATING UNIT FUEL COST	6.32 CENTS PER kWh** (In-service year)
III.	UTILITY & CUSTOMER COSTS			(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44 %**
	(1) UTILITY NON RECURRING COST PER CUSTOMER	*** \$/CUST	v.	NON-FUEL ENERGY AND DEMAND CHARGES	
	(2) UTILITY RECURRING COST PER CUSTOMER	*** \$/CUST			
	(3) UTILITY COST ESCALATION RATE	***		(1) NON FUEL COST IN CUSTOMER BILL	**** CENTS/kWh
	(4) CUSTOMER EQUIPMENT COST	*** \$/CUST		(2) NON-FUEL COST ESCALATION RATE	*** %
	(5) CUSTOMER EQUIPMENT ESCALATION RATE	*** %**		(3) DEMAND CHARGE IN CUSTOMER BILL	*** \$/kW/MO
	(6) CUSTOMER O & M COST	*** \$/CUST/YR		(4) DEMAND CHARGE ESCALATION RATE	444 %
	(7) CUSTOMER O & M COST ESCALATION RATE	*** %**			
٠	(8) INCREASED SUPPLY COSTS	^ \$/CUST/YR			
45	(9) SUPPLY COSTS ESCALATION RATES	*** %**			
^	(10) UTILITY DISCOUNT RATE	8.37 %			
*	(11) UTILITY AFUDC RATE	7.84 %			
*	(12) UTILITY NON RECURRING REBATE/INCENTIVE	*** \$/CUST			
45	(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
- *** THIS IS A LOAD SHIFTING PROGRAM. VALUE SHOWN IN ITEM (4) IS ANNUAL KWH/CUST SHIFTED AWAY FROM PEAK HRS. VALUE SHOWN IN ITEM (7) IS ANNUAL KWH/CUST THAT IS PAID BACK DURING OFF-PEAK.

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call)

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)
2006	0	0	0	0	0	0	0	0	0	0
2007	2,508	608	0	3,116	55	0	0	0	0	0
2008	4,703	1,929	0	6,633	65	0	0	0	0	0
2009	5,015	2,968	0	7,983	101	0	Δ.	0	0	0
2010	5,869	3,652	Ô	9,521	124	ň	0	Ô	0	0
2011	5,040	4,010	0	9,050	137	0	0	0	0	Û
2012	3,758	4,010	0	7,768	139	0	0	0	0	Ů
2013	2,490	4,010	0	6,500	141	o o	0	0	0	0
2014	1,763	4,010	0	5,773	142	o o	0	0	0	0
2015	964	4,010	0	4,974	144	0	0	0	0	ō
2016	921	4,010	0	4,931	145	0	0	0	0	0
2017	827	4,010	0	4,837	147	0	0	0	0	0
2018	850	4,010	0	4,860	150	0	0	0	0	0
2019	873	4,010	0	4,883	152	0	0	0	0	0
2020	897	4,010	0	4,907	155	0	0	0	0	0
2021	922	4,010	0	4,932	157	0	0	0	0	0
2022	947	4,010	0	4,957	162	0	0	0	0	0
2023	973	4,010	0	4,983	164	0	0	0	0	0
2024	1,000	4,010	0	5,010	167	0	0	0	0	0
2025	1,028	4,010	0	5,038	170	0	0	0	0	0
2026	1,056	4,010	0	5,066	173	0	0	0	0	0
2027	1,085	4,010	0	5,095	176	0	0	0	0	0
2028	1,114	4,010	0	5,124	179	0	0	0	0	0
2029	1,145	4,010	0	5,155	182	0	0	0	0	0
2030	1,176	4,010	0	5,186	185	0	0	0	0	0
2031	1,209	4,010	0	5,219	189	0	0	0	0	0

NOM	48,137	93,367	0	141,503	3,697	0	0	0	0	0
NPV	27,057	35,498	0	62,555	1,351	0	0	0	0	0
L.				***						

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

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Residential Load Management (On Call)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	81,690	2,536	0	5,279	3,457	0	0	3,207	(15)	14,464	14,464	14,464	80,166
2012	78,499	2,437	0	5,073	2,269	1,475	385	3,207	1,043	15,889	14,662	29,126	80,166
2013	74,249	2,305	0	4,798	2,262	1,411	396	3,207	878	15,257	12,992	42,117	82,571
2014	70,165	2,179	0	4,534	2,248	1,347	408	3,207	726	14,649	11,510	53,627	85,049
2015	66,232	2,057	0	4,280	2,231	1,283	420	3,207	584	14,061	10,195	63,822	87,600
2016	62,442	1,939	0	4,035	2,207	1,219	433	3,207	453	13,493	9,027	72,849	90,228
2017	58,782	1,825	0	3,799	2,180	1,154	446	3,207	332	12,943	7,991	80,840	92,935
2018	55,244	1,715	0	3,570	2,148	1,090	459	3,207	220	12,410	7,070	87,909	95,723
2019	51,817	1,609	0	3,349	2,027	1,026	473	3,207	202	11,893	6,252	94,161	98,595
2020	48,408	1,503	0	3,128	1,889	962	487	3,207	202	11,378	5,519	99,681	101,552
2021	45,000	1,397	0	2,908	1,751	898	502	3,207	202	10,864	4,863	104,544	104,599
2022	41,591	1,291	0	2,688	1,613	834	517	3,207	202	10,351	4,275	108,819	107,737
2023	38,183	1,186	0	2,468	1,474	770	533	3,207	202	9,838	3,750	112,569	110,969
2024	34,775	1,080	0	2,247	1,336	705	549	3,207	202	9,325	3,280	115,849	114,298
2025	31,366	974	0	2,027	1,197	641	565	3,207	202	8,813	2,860	118,709	117,727
2026	27,958	868	0	1,807	1,059	577	582	3,207	202	8,302	2,486	121,195	121,259
2027	24,549	762	0	1,587	921	513	600	3,207	202	7,791	2,153	123,348	124,897
2028	21,141	656	0	1,366	783	449	617	3,207	202	7,280	1,856	125,205	128,644
2029	17,733	551	0	1,146	644	385	636	3,207	202	6,770	1,593	126,798	132,503
2030	14,324	445	0	926	506	321	655	3,207	202	6,260	1,359	128,157	136,478
2031	10,916	339	0	705	1,048	257	675	3,207	(479)	5,752	1,152	129,309	140,572
2032	8,188	254	0	529	1,618	192	695	3,207	(1,159)	5,336	987	130,296	144,789
2033	6,141	191	0	397	1,535	128	716	3,207	(1,159)	5,014	855	131,151	149,133
2034	4,093	127	0	265	1,452	64	737	3,207	(1,159)	4,692	739	131,890	153,607
2035	2,046	64	0	132	1,369	(0)	759	3,207	(1,159)	4,371	635	132,525	158,215

IN SERVICE COST (\$000)	80.166
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38.575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	
DEBT	45%	6.90	%
P/S	0%	0.00	%
C/S	55%	11.75	%
	DEBT P/S	DEBT 45% P/S 0%	DEBT 45% 6.90 P/S 0% 0.00

K-FACTOR = CPWFC / IN-SVC COST =

1.65312

page 4a

PSC FORM CE 1.1A PAGE 2a OF 2

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call

(11) (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (12)(13) (14) (15) BOOK ACCUMULATED DEFERRED ACCUMULATED ACCUMULATED DEPRECIATION BOOK DEPR TAX TOTAL ANNUAL ACCUMULATED TAX TAX TAX BOOK BOOK FOR DUE TO EQUITY BOOK DEPR (10)*(11) SALVAGE DEFERRED TAX DEFERRED FOR DEPRECIATION DEPRECIATION DEPRECIATION DEPRECIATION DEFERRED TAX DEFERRED TAX DEPRECIATION DEPRECIATION AFUDC RATE TAX RATE TAX RATE (9)-(12)+(13) TAX YEAR SCHEDULE \$(000) \$(000) \$(000) MINUS I/LIFE \$(000) \$(000) \$(000) \$(000) 2011 3.75% 2,966 2,966 3,207 3,006 (15) 5,024 (15) (1,539)3.006 1,043 5,710 8.676 3,207 6,413 6,011 5,024 1,043 (496) 2012 7.22% 0 6.68% 5,281 13,957 3,207 9,620 3,006 9,017 878 5,024 878 381 2013 4,888 18,845 3,207 12,827 3,006 12,023 726 5,024 0 726 1,108 6.18% 0 2014 2015 5.71% 4,519 23,363 3,207 16,033 3,006 15,029 584 5,024 0 584 1,691 3,207 4,180 27,543 19,240 3,006 18,034 453 5,024 453 2,144 2016 5.29% 0 2017 4.89% 3,866 31,410 3,207 22,447 3,006 21,040 332 5,024 0 332 2,476 220 4.52% 3,577 34,986 3,207 25,653 3,006 24.046 5.024 0 0 220 2,696 2018 3,006 2019 4.46% 3,529 38,515 3,207 28,860 27,051 202 5,024 0 202 2,898 3,528 42.044 3,207 32.067 3,006 30,057 202 5,024 202 3,100 2020 4.46% 202 4.46% 3,529 45,573 3,207 35,273 3,006 33,063 202 5,024 3,302 2021 3,528 3,207 3,006 36,068 202 5,024 202 4.46% 49,101 38,480 0 3,503 2022 2023 4.46% 3,529 52,630 3,207 41,687 3,006 39,074 202 5,024 0 0 202 3,705 4.46% 3,528 56,159 3,207 44,893 3,006 42,080 202 5,024 202 3,907 2024 3,006 45,086 2025 4.46% 3,529 59,688 3,207 48,100 202 5,024 0 202 4,109 3,528 63,216 3,207 3,006 202 5,024 0 202 4.46% 51,306 48,091 4,310 2026 3,529 66,745 3,207 3,006 51,097 202 5,024 202 2027 4.46% 54,513 0 4,512 2028 4.46% 3,528 70,274 3,207 57,720 3,006 54,103 202 5,024 202 4,714 2029 4.46% 3,529 73,803 3,207 60,926 3,006 57,108 202 5,024 ٥ 202 4,916 3,528 77,331 3,207 64,133 3,006 60,114 202 5,024 0 202 2030 4.46% 0 5,117 3,006 2031 2.23% 1,765 79,096 3,207 67,340 63,120 (479) 5,024 0 0 (479)4,639 2032 0.00% 0 79,096 3,207 70,546 3,006 66,125 (1,159)5,024 0 (1,159)3,479 3,006 79,096 3,207 69,131 (1,159)5,024 0 (1,159)2,320 2033 0.00% 0 73,753 0 0 0.00% 79,096 3,207 76,960 3,006 72,137 (1,159)5,024 0 0 (1,159)1,160 2034 79,096 3,207 80,166 3,006 75,143 (1,159)5,024 (1,159)2035 0.00% 0 1

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(1,524)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	5,024
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call)

(1)	(2)	(3)	(4)	(5) END OF YEAR	(5a)*	(5b)**	(6)	(7)	(8)
				NET			BEGINNING	ENDING OF	
	TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
	DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	2,966	(15)	76,960	3,207	(1,539)	81,690	78,499	80,095
2012	7.22%	5,710	1,043	73,753	6,413	(496)	78,499	74,249	76,374
2013	6.68%	5,281	878	70,546	9,620	381	74,249	70,165	72,207
2014	6.18%	4,888	726	67,340	12,827	1,108	70,165	66,232	68,199
2015	5.71%	4,519	584	64,133	16,033	1,691	66,232	62,442	64,337
2016	5.29%	4,180	453	60,926	19,240	2,144	62,442	58,782	60,612
2017	4.89%	3,866	332	57,720	22,447	2,476	58,782	55,244	57,013
2018	4.52%	3,577	220	54,513	25,653	2,696	55,244	51,817	53,530
2019	4.46%	3,529	202	51,306	28,860	2,898	51,817	48,408	50,113
2020	4.46%	3,528	202	48,100	32,067	3,100	48,408	45,000	46,704
2021	4.46%	3,529	202	44,893	35,273	3,302	45,000	41,591	43,296
2022	4.46%	3,528	202	41,687	38,480	3,503	41,591	38,183	39,887
2023	4.46%	3,529	202	38,480	41,687	3,705	38,183	34,775	36,479
2024	4.46%	3,528	202	35,273	44,893	3,907	34,775	31,366	33,070
2025	4.46%	3,529	202	32,067	48,100	4,109	31,366	27,958	29,662
2026	4.46%	3,528	202	28,860	51,306	4,310	27,958	24,549	26,254
2027	4.46%	3,529	202	25,653	54,513	4,512	24,549	21,141	22,845
2028	4.46%	3,528	202	22,447	57,720	4,714	21,141	17,733	19,437
2029	4.46%	3,529	202	19,240	60,926	4,916	17,733	14,324	16,028
2030	4.46%	3,528	202	16,033	64,133	5,117	14,324	10,916	12,620
2031	2.23%	1,765	(479)	12,827	67,340	4,639	10,916	8,188	9,552
2032	0.00%	0	(1,159)	9,620	70,546	3,479	8,188	6,141	7,164
2033	0.00%	0	(1,159)	6,413	73,753	2,320	6,141	4,093	5,117
2034	0.00%	0	(1,159)	3,207	76,960	1,160	4,093	2,046	3,070
2035	0.00%	0	(1,159)	(0)	80,166	1	2,046	-1	1,023

^{*} Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
	NO.YEARS	PLANT	CUMULATIVE	YEARLY	ANNUAL	AVERAGE
	BEFORE	ESCALATION	ESCALATION	EXPENDITURE	SPENDING	SPENDING
YEAR	IN-SERVICE	RATE	FACTOR	(%)	(\$/kW)	(\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00
2007 2008	-4 -3	3,00% 3,00%	1.030 1.061	0.00% 17.00%	0.00 88.76	0.00 44.38
	-					

				100.00%	538.96	_						
		(8) CUMULATIVE	(8a)*	(8b)* CUMULATIVE	(9) YEARLY	(9a)* CUMULATIVE	(9b)* CONSTRUCTION	(9c)*	(9d)*	(9e)* CUMULATIVE	(10) INCREMENTAL	(11) CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2010	-i	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

		24.71	02		54.55		(11.43)	
				BOOK BASI	BOOK BASIS FOR DEF TAX	TAX BASIS	1	
IN SERVICE YEAR	2011	CON	TRUCTION CASH	71,848	71,848	71,848	1	
PLANT COSTS	492.12	EQUI	TY AFUDC	5,024	1			
AFUDC RATE	7.84%	DEBT	AFUDC	3,294	3,294		į.	
		CPI		J .	1	7,245]	
			TOTAL	80,166	75,143	79,093	1	

[^] Column not specified in workbook

PAGE 6 INPUT DATA -- PART 2 PROGRAM METHOD SELECTED : REV_REQ PAGE 1 OF 1

PROGRAM NAME: Residential Load Management (On Call)

(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
	CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
	TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
	PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
YEA	R CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
200	6 0	0	7.71	10.98	7.71	0.00	1.00	0.33
200	7 27,030	27,030	7.74	9.78	7.78	0.00	1.00	2.67
200	8 58,710	58,710	6.46	9.25	6.46	0.00	1.00	1.00
200	9 73,210	73,210	6.20	8.21	6.20	0.00	1.00	1.00
201	0 89,110	89,110	5.58	7.27	5.58	0.00	1.00	1.00
201	1 89,110	89,110	5.89	7.78	5.89	7.52	1.00	1.00
201	2 89,110	89,110	6.06	8.14	6.06	6.80	1.00	1.00
201	3 89,110	89,110	6.29	8.57	6.29	7.65	1.00	1.00
201	4 89,110	89,110	6.43	9.00	6.43	8.10	1.00	1.00
201	5 89,110	89,110	6.79	9.42	6.79	7.74	1.00	1.00
201	6 89,110	89,110	7.14	10.16	7.14	9.08	1.00	1.00
201	7 89,110	89,110	7.21	11.09	7.21	9.93	1.00	1.00
201	8 89,110	89,110	7.67	12.02	7.67	9.87	1.00	1.00
201	9 89,110	89,110	8.05	12.83	8.05	10.52	1.00	1.00
202	0 89,110	89,110	8.30	13.65	8.30	10.44	1.00	1.00
202	1 89,110	89,110	8.51	14.12	8.51	12.95	1.00	1.00
202	2 89,110	89,110	8.73	14.56	8.73	10.56	1.00	1.00
202	3 89,110	89,110	8.86	14.98	8.86	11.55	1.00	1.00
202	4 89,110	89,110	8.91	15.26	8.91	15.91	1.00	1.00
202	5 89,110	89,110	9.22	15.74	9.22	14.25	1.00	1.00
202	6 89,110	89,110	9.42	16.26	9.42	15.42	1.00	1.00
202	7 89,110	89,110	9.66	16.66	9.66	17.44	1.00	1.00
202	8 89,110	89,110	9.85	17.11	9.85	15.36	1.00	1.00
202	9 89,110	89,110	10.04	17.50	10.04	16.09	1.00	1.00
203	0 89,110	89,110	10.24	17.90	10.24	18.01	1.00	1.00
203	1 89,110	89,110	10.54	18.49	10.54	13.65	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 Load Management (On Cail)

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)
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	Q
2010	0	0	0	0	0	0
2011	14,464	5,123	45	3,115	3,705	19,044
2012	15,889	5,365	71	4,986	5,133	21,178
2013	15,257	5,618	146	10,422	11,453	19,989
2014	14,649	5,873	170	12,204	13,751	19,144
2015	14,061	6,134	271	19,738	20,475	19,730
2016	13,493	6,411	299	22,618	25,785	17,036
2017	12,943	6,705	224	17,684	20,556	16,999
2018	12,410	7,012	220	17,838	19,532	17,948
2019	11,893	7,333	197	16,373	18,140	17,655
2020	11,378	7,668	166	14,097	14,760	18,550
2021	10,864	8,019	168	14,318	18,000	15,369
2022	10,351	8,385	143	12,307	12,233	18,953
2023	9,838	8,758	133	11,490	12,079	18,140
2024	9,325	9,143	103	8,949	12,558	14,963
2025	8,813	9,545	106	9,206	11,195	16,475
2026	8,302	9,963	99	8,654	11,011	16,007
2027	7,791	10,400	93	8,190	11,431	15,043
2028	7,280	10,855	79	6,975	8,300	16,888
2029	6,770	11,330	75	6,702	8,102	16,776
2030	6,260	11,825	66	5,936	7,778	16,311
2031	5,752	12,342	63	5,620	5,399	18,377

NOM	227,782	173,807	2,936	237,422	271,375	370,572
NPV	86,514	51,486	1,063	83,483	94,082	128,463

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call)

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	194	83
2008	1,126	118	1,244	59	31	90	230	82
2009	2,413	268	2,681	127	71	198	305	122
2010	2,939	349	3,288	154	92	247	330	135
2011	3,509	444	3,953	184	117	302	389	156
2012	3,377	465	3,842	177	123	300	410	161
2013	3,247	487	3,734	171	129	299	434	167
2014	3,121	509	3,630	164	135	299	461	171
2015	3,000	532	3,532	158	140	298	481	180
2016	2,883	555	3,438	151	147	298	524	189
2017	2,767	581	3,348	145	154	299	588	191
2018	2,653	608	3,260	139	161	300	641	203
2019	2,539	635	3,174	133	168	301	688	214
2020	2,425	664	3,090	127	176	303	739	220
2021	2,312	695	3,007	121	184	305	767	226
2022	2,198	727	2,925	116	192	308	792	231
2023	2,085	759	2,843	110	201	310	818	235
2024	1,971	792	2,763	104	209	313	837	236
2025	1,856	827	2,684	98	219	316	863	244
2026	1,743	863	2,606	92	228	320	894	250
2027	1,630	901	2,531	86	238	324	916	256
2028	1,520	941	2,460	80	249	328	942	261
2029	1,421	982	2,402	75	259	334	965	266
2030	1,335	1,025	2,359	70	271	341	987	271
2031	1,259	1,069	2,328	66	283	349	1,021	280

NOM.	55,330	15,794	71,124	2,908	4,175	7,082	16,215	5,031
NPV	23,684	5,024	28,709	1,245	1,328	2,573	5,276	1,765

 $^{^{\}star}$ 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 Load Management (On Call)

(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)
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	2,508	0	0	2,508	0	0	111	0	111	(2,397)	(2,212)
2008	0	4,703	0	0	4,703	0	1,334	147	0	1,482	(3,222)	(4,955)
2009	0	5,015	0	0	5,015	0	2,879	183	0	3,062	(1,953)	(6,490)
2010	0	5,869	0	0	5,869	0	3,535	195	0	3,730	(2,139)	(8,041)
2011	0	5,040	0	0	5,040	19,044	4,255	233	0	23,532	18,491	4,331
2012	0	3,758	0	0	3,758	21,178	4,143	249	0	25,570	21,812	17,797
2013	0	2,490	0	0	2,490	19,989	4,033	268	0	24,290	21,800	30,216
2014	0	1,763	0	0	1,763	19,144	3,929	290	0	23,363	21,600	41,571
2015	0	964	0	0	964	19,730	3,830	301	0	23,860	22,896	52,678
2016	0	921	0	0	921	17,036	3,737	334	0	21,107	20,185	61,713
2017	0	827	0	0	827	16,999	3,647	397	0	21,043	20,216	70,063
2018	0	850	0	0	850	17,948	3,560	437	0	21,946	21,096	78,104
2019	0	873	0	0	873	17,655	3,476	474	0	21,604	20,731	85,395
2020	0	897	0	0	897	18,550	3,393	519	0	22,462	21,564	92,394
2021	0	922	0	0	922	15,369	3,312	541	0	19,222	18,300	97,874
2022	0	947	0	0	947	18,953	3,232	561	0	22,746	21,799	103,898
2023	0	973	0	0	973	18,140	3,154	583	0	21,877	20,903	109,228
2024	0	1,000	0	0	1,000	14,963	3,076	601	0	18,639	17,639	113,379
2025	0	1,028	0	0	1,028	16,475	3,000	618	0	20,093	19,065	117,519
2026	0	1,056	0	0	1,056	16,007	2,926	644	0	19,577	18,521	121,230
2027	0	1,085	0	0	1,085	15,043	2,855	660	0	18,557	17,472	124,460
2028	0	1,114	0	0	1,114	16,888	2,788	681	0	20,357	19,243	127,743
2029	0	1,145	0	0	1,145	16,776	2,736	698	0	20,210	19,065	130,744
2030	0	1,176	0	0	1,176	16,311	2,700	716	0	19,727	18,550	133,439
2031	0	1,209	0	0	1,209	18,377	2,677	741	0	21,795	20,586	136,199

NOM	0	48,137	0	0	48,137	370,572	78,206	11,183	0	459,962	411,825
NPV	0	27,057	0	0	27,057	128,463	31,281	3,511	0	163,256	136,199

Discount Rate:

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

8.37

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Residential Load Management (On Call)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILLS \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O&M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	0	0	0	- O	0	0	0	0	0	0	0
2007	91	0	608	0	699	0	0	0	0	699	645
2008	106	0	1,929	0	2,035	0	0	0	0	2,035	2,378
2009	165	0	2,968	0	3,133	0	0	0	0	3,133	4,839
2010	203	0	3,652	0	3,855	0	0	0	0	3,855	7,635
2011	225	0	4,010	0	4,235	0	0	0	0	4,235	10,468
2012	227	0	4,010	0	4,237	0	0	0	0	4,237	13,084
2013	231	0	4,010	0	4,241	0	0	0	0	4,241	15,500
2014	233	0	4,010	0	4,243	0	0	0	0	4,243	17,730
2015	236	0	4,010	0	4,246	0	0	0	0	4,246	19,790
2016	238	0	4,010	0	4,248	0	0	0	0	4,248	21,691
2017	241	0	4,010	0	4,251	0	0	0	0	4,251	23,447
2018	246	0	4,010	0	4,255	0	0	0	0	4,255	25,069
2019	250	0	4,010	0	4,260	0	0	0	0	4,260	26,567
2020	254	0	4,010	0	4,264	0	0	0	0	4,264	27,951
2021	257	0	4,010	0	4,267	0	0	0	0	4,267	29,229
2022	265	0	4,010	0	4,275	0	0	0	0	4,275	30,410
2023	268	0	4,010	0	4,278	0	0	0	0	4,278	31,501
2024	273	0	4,010	0	4,283	0	0	0	0	4,283	32,509
2025	278	0	4,010	0	4,288	0	0	0	0	4,288	33,440
2026	283	0	4,010	0	4,293	0	0	0	0	4,293	34,300
2027	288	0	4,010	0	4,298	0	0	0	0	4,298	35,095
2028	293	0	4,010	0	4,303	0	0	0	0	4,303	35,829
2029	298	0	4,010	0	4,308	0	0	0	0	4,308	36,507
2030	304	0	4,010	0	4,314	0	0	0	0	4,314	37,134
2031	309	0	4,010	0	4,319	0	0	0	0	4,319	37,713

NOM	6,061	0	93,367	0	99,428	0	0	0	0	99,428
NPV	2,215	0	35,498	0	37,713	0	0	0	0	37,713

In Service of Gen Unit: Discount Rate :

Benefit/Cost Ratio (Col(6) / Col(10))

2011 8.37 Infinite

RATE IMPACT TEST PROGRAM METHOD SELECTED; REV_REQ PROGRAM NAME: Residential Load Management (On Cain)

(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)	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)
2006	0	ō	0	0	0	0	0	0	0	0	0	0	0
2007	0	2,508	608	55	0	3,171	111	0	0	0	111	(3,060)	(2,824)
2008	0	4,703	1,929	65	0	6,697	147	1,334	0	0	1,482	(5,215)	(7,265)
2009	0	5,015	2,968	101	0	8,084	183	2,879	0	0	3,062	(5,022)	(11,211)
2010	0	5,869	3,652	124	0	9,645	195	3,535	0	0	3,730	(5,915)	(15,500)
2011	0	5,040	4,010	137	0	9,187	19,276	4,255	0	0	23,532	14,344	(5,903)
2012	0	3,758	4,010	139	0	7,907	21,428	4,143	0	0	25,570	17,664	5,002
2013	0	2,490	4,010	141	. 0	6,641	20,257	4,033	0	0	24,290	17,649	15,057
2014	0	1,763	4,010	142	0	5,915	19,435	3,929	0	0	23,363	17,448	24,229
2015	0	964	4,010	144	0	5,118	20,030	3,830	0	0	23,860	18,743	33,321
2016	0	921	4,010	145	0	5,077	17,370	3,737	0	0	21,107	16,030	40,496
2017	0	827	4,010	147	0	4,984	17,396	3,647	0	0	21,043	16,059	47,129
2018	0	850	4,010	150	0	5,010	18,385	3,560	0	0	21,946	16,936	53,584
2019	0	873	4,010	152	0	5,036	18,129	3,476	0	0	21,604	16,569	59,412
2020	0	897	4,010	155	0	5,062	19,069	3,393	0	0	22,462	17,399	65,058
2021	0	922	4,010	157	0	5,089	15,910	3,312	0	0	19,222	14,133	69,291
2022	0	947	4.010	162	0	5,119	19,514	3,232	0	0	22,746	17,628	74,162
2023	0	973	4,010	164	0	5,147	18,723	3,154	0	0	21,877	16,730	78,428
2024	0	1,000	4,010	167	0	5,177	15,563	3,076	0	0	18,639	13,462	81,596
2025	0	1,028	4,010	170	0	5,207	17,093	3,000	0	0	20,093	14,886	84,828
2026	0	1,056	4,010	173	0	5,238	16,651	2,926	0	0	19,577	14,338	87,701
2027	0	1,085	4,010	176	0	5,270	15,702	2,855	0	0	18,557	13,287	90,158
2028	0	1,114	4,010	179	0	5,303	17,569	2,788	0	0	20,357	15,054	92,726
2029	0	1,145	4,010	182	0	5,337	17,474	2,736	0	0	20,210	14,874	95,068
2030	0	1,176	4,010	185	0	5,372	17,027	2,700	0	0	19,727	14,355	97,153
2031	0	1,209	4,010	189	0	5,407	19,118	2,677	0	0	21,795	16,388	99,350

NOM.	0	48,137	93,367	3,697	0	145,201	381,756	78,206	0	0	459,962	314,761
NPV	0	27,057	35,498	1,351	0	63,906	131,974	31,281	0	0	163,256	99,350

Discount Rate

Benefit/Cost Ratio (Col(12) / Col(7));

8.37 2.55

INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED; REV_REQ PROGRAM NAME: Commercial/Industrial Building Envelope

I.	PROGRAM DEMAND SAVINGS & LINE LOSSES		
	(1) CUSTOMER kW REDUCTION AT METER	0.85	kW
	(2) GENERATOR kW REDUCTION PER CUSTOMER	1.14	kW
	(3) kW LINE LOSS PERCENTAGE	9.03	%
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	2,170.05	kWh
	(5) kWh LINE LOSS PERCENTAGE	7.16	%
	(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	26	YEARS
	(2) GENERATOR ECONOMIC LIFE	25	YEARS
	(3) T&D ECONOMIC LIFE	35	YEARS
	(4) K FACTOR FOR GENERATION	1.65312	
	(5) K FACTOR FOR T & D	1.61194	
111.	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	als als she	%**
			A Low York by the
	(6) CUSTOMER O & M COST		\$/CUST/YR
	(6) CUSTOMER O & M COST	***	%**
٠		***	%** \$/CUST/YR
۰	(7) CUSTOMER O & M COST ESCALATION RATE	***	%**
	(7) CUSTOMER O & M COST ESCALATION RATE	***	%** \$/CUST/YR %**
*	(7) CUSTOMER O & M COST ESCALATION RATE (8) INCREASED SUPPLY COSTS (9) SUPPLY COSTS ESCALATION RATES	*** *** ***	%*** \$/CUST/YR %***
*	(7) CUSTOMER O & M COST ESCALATION RATE	*** *** 8.37 7.84 ***	%** \$/CUST/YR %** % \$ \$/CUST
* * *	(7) CUSTOMER O & M COST ESCALATION RATE (8) INCREASED SUPPLY COSTS (9) SUPPLY COSTS ESCALATION RATES. (10) UTILITY DISCOUNT RATE (11) UTILITY AFUDC RATE.	*** *** 8.37 7.84 ***	%*** \$/CUST/YR %*** % 5/CUST \$/CUST

AVOIDED GENERATOR AND T&D COSTS

v.

(1)	BASE YEAR		
(2)	IN-SERVICE YEAR FOR AVOIDED GENERATING UN		
(3)	IN-SERVICE YEAR FOR AVOIDED T&D		
(4)	BASE YEAR AVOIDED GENERATING COST		
(5)	BASE YEAR AVOIDED TRANSMISSION COST	147.00	\$/kW
(6)	BASE YEAR DISTRIBUTION COST	17.27	\$/kW
(7)	GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
(8)	GENERATOR FIXED O & M COST	30.93	\$/kW/YR
(9)	GENERATOR FIXED O&M ESCALATION RATE	4.35	%**
(10	TRANSMISSION FIXED O & M COST	2.68	\$/kW
(11	DISTRIBUTION FIXED O & M COST	0.95	\$/kW
(12	T&D FIXED O&M ESCALATION RATE	4.35	%**
(13	AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14	GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99	%**
(15	GENERATOR CAPACITY FACTOR	4%	** (In-service year)
(16	AVOIDED GENERATING UNIT FUEL COST	6.33	CENTS PER kWh** (In-service year)
(17	AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44	%++
NO	n-fuel energy and demand charges		
/1)	NON FUEL COST IN CUSTOMER BILL	Mit samp	CENTS/kWh
٠,	NON-FUEL COST ESCALATION RATE	***	
	DEMAND CHARGE IN CUSTOMER BILL		\$/kW/MO
٠,	DEMAND CHARGE IN COSTONER BILL	***	***************************************
(4)	DEMAND CHARGE ESCALATION KATE		79

^{*} 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

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercia/Industrial Building Envelope

	(1) UTILITY	(2)	(3)	(4) TOTAL	(5) ENERGY	(6) DEMAND	(7)	(8)	(9)	(10)
	PROGRAM COSTS		OTHER	UTILITY	CHARGE	CHARGE	PARTICIPANT	PARTICIPANT	OTHER	TOTAL
	WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
	INCENTIVES	INCENTIVES	COSTS	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	Ö	0	0	0
2007	643	3,875	0	4,517	412	215	7,792	0	0	7,792
2008	713	4,216	0	4,929	1,244	646	8,656	0	0	8,656
2009	784	4,542	0	5,326	2,196	1,109	9,530	0	0	9,530
2010	857	4,853	0	5,710	3,262	1,501	10,427	0	0	10,427
2011	0	0	0	0	3,889	1,633	0	0	0	0
2012	0	0	0	0	3,950	1,633	0	0	0	0
2013	0	0	0	0	4,046	1,608	0	0	0	0
2014	0	0	0	0	4,106	1,596	0	0	0	0
2015	0	0	0	0	4,185	1,573	0	0	0	0
2016	0	0	0	0	4,264	1,534	0	0	0	0
2017	24	85	0	108	4,344	1,531	371	0	0	371
2018	28	97	0	124	4,443	1,531	436	0	0	436
2019	32	108	0	140	4,544	1,524	501	0	0	501
2020	36	119	0	155	4,650	1,522	566	0	0	566
2021	0	0	0	0	4,726	1,515	0	0	0	0
2022	888	3,744	0	4,632	4,883	1,552	10,788	0	0	10,788
2023	993	4,074	0	5,066	4,965	1,554	12,060	0	0	12,060
2024	1,099	4,389	0	5,488	5,076	1,557	13,350	0	0	13,350
2025	1,206	4,690	0	5,896	5,189	1,559	14,656	0	0	14,656
2026	0	0	0	0	5,305	1,561	0	0	0	0
2027	68	130	0	198	5,424	1,564	795	0	0	795
2028	74	142	0	216	5,545	1,566	885	0	0	885
2029	80	153	0	233	5,669	1,568	975	0	0	975
2030	86	163	0	249	5,796	1,571	1,064	0	0	1,064
2031	0	0	0	0	5,926	1,573	0	0	0	0

NOM	7,607	35,380	0	42,987	108,039	36,298	92,852	0	0	92,852
NPV	3,549	18,622	0	22,171	37,460	13,799	43,274	0	0	43,274

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

page 3

PSC FORM CE 1.1A PAGE 1 OF 2

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Commercial/Industrial Building Envelope

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	21,742	675	0	1,405	920	0	Ö	853	(4)	3,850	3,850	3,850	21,336
2012	20,892	649	0	1,350	604	393	102	853	278	4,229	3,902	7,752	21,336
2013	19,761	614	0	1,277	602	376	105	853	234	4,061	3,458	11,209	21,976
2014	18,674	580	0	1,207	598	358	109	853	193	3,899	3,063	14,273	22,635
2015	17,627	547	0	1,139	594	341	112	853	155	3,742	2,713	16,986	23,314
2016	16,619	516	0	1,074	587	324	115	853	121	3,591	2,403	19,389	24,014
2017	15,645	486	0	1,011	580	307	119	853	88	3,445	2,127	21,515	24,734
2018	14,703	457	0	950	572	290	122	853	59	3,303	1,882	23,397	25,476
2019	13,791	428	0	891	540	273	126	853	54	3,165	1,664	25,061	26,241
2020	12,884	400	0	833	503	256	130	853	54	3,028	1,469	26,530	27,028
2021	11,977	372	0	774	466	239	134	853	54	2,892	1,294	27,824	27,839
2022	11,069	344	0	715	429	222	138	853	54	2,755	1,138	28,962	28,674
2023	10,162	316	0	657	392	205	142	853	54	2,618	998	29,960	29,534
2024	9,255	287	0	598	356	188	146	853	54	2,482	873	30,833	30,420
2025	8,348	259	0	539	319	171	150	853	54	2,346	761	31,594	31,333
2026	7,441	231	0	481	282	154	155	853	54	2,209	662	32,256	32,273
2027	6,534	203	0	422	245	137	160	853	54	2,073	573	32,829	33,241
2028	5,627	175	0	364	208	119	164	853	54	1,938	494	33,323	34,238
2029	4,719	147	0	305	171	102	169	853	54	1,802	424	33,747	35,265
2030	3,812	118	0	246	135	85	174	853	54	1,666	362	34,109	36,323
2031	2,905	90	0	188	279	68	180	853	(127)	1,531	307	34,415	37,413
2032	2,179	68	0	141	431	51	185	853	(309)	1,420	263	34,678	38,535
2033	1,634	51	0	106	408	34	191	853	(309)	1,334	228	34,905	39,691
2034	1,089	34	0	70	386	17	196	853	(309)	1,249	197	35,102	40,882
2035	545	17	0	35	364	0	202	853	(309)	1,163	169	35,271	42,108

21,336
2011
25
38.575
8.4%
2.00%
0.48%

CAPITAL STRUCTURE

CALITAL STRUC	IURE		
SOURCE	WEIGHT	COST	7
DEBT	45%	6.90	%
P/S	0%	0.00	%
C/S	55%	11.75	%

K-FACTOR = CPWFC / IN-SVC COST =

1.65312

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ

PROGRAM NAME: Commercial/Industrial Building Envelor

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
						воок	ACCUMULATED	DEFERRED						
			ACCUMULATED		ACCUMULATED	DEPRECIATION	BOOK DEPR	TAX	TOTAL				ANNUAL	ACCUMULATED
	TAX	TAX	TAX	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(11)*(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEFERRED TAX	DEFERRED TAX	DEPRECIATION	AFUDC	RATE	TAX RATE	TAX RATE	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	MINUS 1/LIFE	\$(000)	\$ (000)	\$(000)	\$(000)
2011	3.75%	789	789	853	853	800	800	(4)	1,337	0	0	0	(4)	(410)
2012	7.22%	1,520	2,309	853	1,707	800	1,600	278	1,337	0	0	0	278	(132)
2013	6.68%	1,406	3,715	853	2,560	800	2,400	234	1,337	0	0	0	234	102
2014	6.18%	1,301	5,015	853	3,414	800	3,200	193	1,337	0	0	0	193	295
2015	5.71%	1,203	6,218	853	4,267	800	4,000	155	1,337	0	0	0	155	450
2016	5.29%	1,113	7,331	853	5,121	800	4,800	121	1,337	0	0	0	121	571
2017	4.89%	1,029	8,360	853	5,974	800	5,600	88	1,337	0	0	0	88	659
2018	4.52%	952	9,311	853	6,828	800	6,400	59	1,337	0	0	0	59	718
2019	4.46%	939	10,251	853	7,681	800	7,200	54	1,337	0	0	0	54	<i>7</i> 71
2020	4.46%	939	11,190	853	8,534	800	8,000	54	1,337	0	0	0	54	825
2021	4.46%	939	12,129	853	9,388	800	8,800	54	1,337	0	0	0	54	879
2022	4.46%	939	13,068	853	10,241	800	9,599	54	1,337	0	0	0	54	932
2023	4.46%	939	14,007	853	11,095	800	10,399	54	1,337	0	0	0	54	986
2024	4.46%	939	14,946	853	11,948	800	11,199	54	1,337	0	0	0	54	1,040
2025	4.46%	939	15,886	853	12,802	800	11,999	54	1,337	0	0	0	54	1,094
2026	4.46%	939	16,825	853	13,655	800	12,799	54	1,337	0	0	0	54	1,147
2027	4.46%	939	17,764	853	14,508	800	13,599	54	1,337	0	0	0	54	1,201
2028	4.46%	939	18,703	853	15,362	800	14,399	54	1,337	0	0	0	54	1,255
2029	4.46%	939	19,642	853	16,215	800	15,199	54	1,337	0	0	0	54	1,308
2030	4.46%	939	20,581	853	17,069	800	15,999	54	1,337	0	0	0	54	1,362
2031	2.23%	470	21,051	853	17,922	800	16,799	(127)	1,337	0	0	0	(127)	1,235
2032	0.00%	0	21,051	853	18,776	800	17,599	(309)	1,337	0	0	0	(309)	926
2033	0.00%	0	21,051	853	19,629	800	18,399	(309)	1,337	0	0	0	(309)	617
2034	0.00%	0	21,051	853	20,483	800	19,199	(309)	1,337	0	0	0	(309)	309
2035	0.00%	0	21,051	853	21,336	800	19,999	(309)	1,337	0	0	0	(309)	0

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(406)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	1,337
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: CommerciaVindustrial Building Envelope

(1)	(2)	(3)	(4)	(5) END OF YEAR	(5a)*	(5b)*	(6)	(7)	(8)
				NET			BEGINNING	ENDING OF	
	TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
	DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	789	(4)	20,483	853	(410)	21,742	20,892	21,317
2012	7.22%	1,520	278	19,629	1,707	(132)	20,892	19,761	20,327
2013	6.68%	1,406	234	18,776	2,560	102	19,761	18,674	19,218
2014	6.18%	1,301	193	17,922	3,414	295	18,674	17,627	18,151
2015	5.71%	1,203	155	17,069	4,267	450	17,627	16,619	17,123
2016	5.29%	1,113	121	16,215	5,121	571	16,619	15,645	16,132
2017	4.89%	1,029	88	15,362	5,974	659	15,645	14,703	15,174
2018	4.52%	952	59	14,508	6,828	718	14,703	13,791	14,247
2019	4.46%	939	54	13,655	7,681	771	13,791	12,884	13,337
2020	4.46%	939	54	12,802	8,534	825	12,884	11,977	12,430
2021	4.46%	939	54	11,948	9,388	879	11,977	11,069	11,523
2022	4.46%	939	54	11,095	10,241	932	11,069	10,162	10,616
2023	4.46%	939	54	10,241	11,095	986	10,162	9,255	9,709
2024	4.46%	939	54	9,388	11,948	1,040	9,255	8,348	8,802
2025	4.46%	939	54	8,534	12,802	1,094	8,348	7,441	7,894
2026	4.46%	939	54	7,681	13,655	1,147	7,441	6,534	6,987
2027	4,46%	939	54	6,828	14,508	1,201	6,534	5,627	6,080
2028	4.46%	939	54	5,974	15,362	1,255	5,627	4,719	5,173
2029	4.46%	939	54	5,121	16,215	1,308	4,719	3,812	4,266
2030	4.46%	939	54	4,267	17,069	1,362	3,812	2,905	3,359
2031	2.23%	470	(127)	3,414	17,922	1,235	2,905	2,179	2,542
2032	0.00%	0	(309)	2,560	18,776	926	2,179	1,634	1,907
2033	0.00%	0	(309)	1,707	19,629	617	1,634	1,089	1,362
2034	0.00%	0	(309)	853	20,483	309	1,089	545	817
2035	0.00%	0	(309)	0	21,336	0	545	0	272
			,		* -				_

[^] Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
	NO.YEARS	PLANT	CUMULATIVE	YEARLY	ANNUAL	AVERAGE
	BEFORE	ESCALATION	ESCALATION	EXPENDITURE	SPENDING	SPENDING
YEAR	IN-SERVICE	RATE	FACTOR	(%)	(\$/kW)	(\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2006 2007	-5 -4	0.00% 3.00%	1.000 1.030	0.00% 0.00%	0.00 0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00

				100.00%	538.96	-						
		(8) CUMULATIVE	(8a)*	(8b)* CUMULATIVE	(9) YEARLY	(9a)* CUMULATIVE	(9b)* CONSTRUCTION	(9c)*	(9d)*	(9e)* CUMULATIVE	(10) INCREMENTAL	(11) CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0,00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336,99	429.23
2010	-1	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

		24.71	62.40		54.35		(11.43)	601.36
				BOOK BASIS	BOOK BASIS FOR DEF TAX	TAX BASIS		
IN SERVICE YEAR	2011		CONSTRUCTION CASH	19,122	19,122	19,122		
PLANT COSTS	492.12		EQUITY AFUDC	1,337				
AFUDC RATE	7.84%		DEBT AFUDC	877	877			
			CPI	1		1,928		
			TOTAL	21,336	19,999	21,050		

^{*} Column not specified in workbook

INPUT DATA -- PART 2 PROGRAM METHOD SELECTED : REV_REQ PROGRAM NAME: Commercial/Industrial Building Envelope

	(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
		CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
		TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
		PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
	YEAR	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
•	2006	0	0	7.71	9.50	8.58	0.00	1.00	1.00
	2007	6,898	6,898	7.74	9.44	8.34	0.00	1.00	1.00
	2008	14,390	14,390	6.46	8.27	7.05	0.00	1.00	1.00
	2009	22,450	22,450	6.20	7.86	6.79	0.00	1.00	1.00
	2010	31,052	31,052	5.58	7.09	6.11	0.00	1.00	1.00
	2011	31,052	31,052	5.89	7.54	6.46	7.52	1.00	1.00
	2012	31,052	31,052	6.06	7.77	6.65	6.80	1.00	1.00
	2013	31,052	31,052	6.29	8.20	6.96	7.65	1.00	1.00
	2014	31,052	31,052	6.43	8.55	7.12	8.10	1.00	1.00
	2015	31,052	31,052	6.79	8.90	7.52	7.74	1.00	1.00
	2016	31,052	31,052	7.14	9.61	7.88	9.08	1.00	1.00
	2017	31,052	31.052	7.21	10.31	7.88	9.93	1.00	1.00
	2018	31,052	31,052	7.67	11.09	8.37	9.87	1.00	1.00
	2019	31,052	31,052	8.05	11,67	8.76	10.52	1.00	1.00
	2020	31,052	31,052	8.30	12,07	8.98	10,44	1.00	1.00
	2021	31,052	31,052	8.51	12.39	9.18	12.95	1.00	1.00
	2022	31,052	31,052	8.73	12.45	9.37	10,56	1.00	1.00
	2023	31,052	31,052	8.86	12.46	9.47	11.55	1.00	1.00
	2024	31,052	31,052	8.91	12.02	9.41	15.91	1.00	1.00
	2025	31,052	31.052	9.22	12.36	9.71	14.25	1.00	1.00
	2026	31,052	31.052	9.42	12.41	9.88	15.42	1.00	1.00
	2027	31,052	31,052	9.66	12.56	10.09	17,44	1.00	1.00
	2028	31,052	31,052	9.85	12.43	10.22	15.36	1.00	1.00
	2029	31,052	31,052	10.04	12.38	10.38	16.09	1.00	1.00
	2030	31,052	31,052	10.24	12.38	10.55	18.01	1.00	1.00
	2031	31,052	31,052	10.54	12,57	10.84	13.65	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: Commercial/Industrial Building Envelope

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)
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	3,850	1,364	12	829	986	5,068
2012	4,229	1,428	19	1,327	1,366	5,637
2013	4,061	1,495	39	2,774	3,048	5,320
2014	3,899	1,563	45	3,248	3,660	5,095
2015	3,742	1,633	72	5,253	5,449	5,251
2016	3,591	1,706	80	6,020	6,863	4,534
2017	3,445	1,784	60	4,706	5,471	4,524
2018	3,303	1,866	59	4,748	5,198	4,777
2019	3,165	1,952	52	4,358	4,828	4,699
2020	3,028	2,041	44	3,752	3,928	4,937
2021	2,892	2,134	45	3,811	4,791	4,090
2022	2,755	2,232	38	3,275	3,256	5,044
2023	2,618	2,331	35	3,058	3,215	4,828
2024	2,482	2,433	27	2,382	3,342	3,982
2025	2,346	2,540	28	2,450	2,980	4,385
2026	2,209	2,652	26	2,303	2,930	4,260
2027	2,073	2,768	25	2,180	3,042	4,004
2028	1,938	2,889	21	1,856	2,209	4,495
2029	1,802	3,015	20	1,784	2,156	4,465
2030	1,666	3,147	18	1,580	2,070	4,341
2031	1,531	3,285	17	1,496	1,437	4,891

NOM	60,624	46,258	781	63,189	72,225	98,627
NPV	23,025	13.703	283	22,219	25,040	34,190

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Building Envelope

	(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
		AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
		TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
		CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
	YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
_	2006	0	0	0	0	0	0	0	0
	2007	0	0	0	0	0	0	751	0
	2008	219	23	242	19	6	25	2,058	0
	2009	451	50	502	40	13	53	3,373	0
	2010	695	82	777	61	22	82	4,424	0
	2011	951	118	1,069	83	31	115	5,474	0
	2012	916	124	1,039	80	33	113	5,642	0
	2013	880	130	1,010	77	34	111	5,978	0
	2014	846	135	982	74	36	110	6,260	0
	2015	813	141	955	7 i	37	109	6,500	0
	2016	782	148	929	68	39	108	7,063	0
	2017	751	155	905	66	41	107	7,685	0
	2018	720	162	882	63	43	106	8,283	0
	2019	690	169	859	60	45	105	8,721	0
	2020	659	177	836	58	47	104	9,023	0
	2021	629	185	814	55	49	104	9,271	0
	2022	599	193	792	52	51	104	9,273	0
	2023	568	202	770	50	53	103	9,246	0
	2024	538	211	749	47	56	103	8,831	0
	2025	507	220	727	44	58	103	9,069	0
	2026	477	230	707	42	61	103	9,068	0
	2027	447	240	686	39	63	103	9,148	0
	2028	417	250	667	37	66	103	8,987	0
	2029	390	261	651	34	69	103	8,896	0
	2030	365	273	637	32	72	104	8,846	0
	2031	343	285	628	30	75	105	8,954	0

NOM.	14,652	4,163	18,815	1,284	1,100	2,384	180,824	0
NPV	6,124	1,305	7,429	536	345	881	61,458	0

 $^{^{\}star}$ 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: Commercial/Industrial Building Envelope

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	INCREASED	UTILITY	PARTICIPANT			AVOIDED	AVOIDED					CUMULATIVE
	SUPPLY	PROGRAM	PROGRAM	OTHER	TOTAL	GEN UNIT	T&D	PROGRAM	OTHER	TOTAL	NET	DISCOUNTED
	COSTS	COSTS	COSTS	COSTS	COSTS	BENEFITS	BENEFITS	FUEL SAVINGS	BENEFITS	BENEFITS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	643	7,792	0	8,434	0	0	751	0	751	(7,683)	(7,090)
2008	0	713	8,656	0	9,369	0	268	2,058	0	2,326	(7,043)	(13,087)
2009	0	784	9,530	0	10,314	0	554	3,373	0	3,927	(6,387)	(18,105)
2010	0	857	10,427	0	11,284	0	859	4,424	0	5,283	(6,001)	(22,456)
2011	0	0	0	0	0	5,068	1,184	5,474	0	11,726	11,726	(14,610)
2012	0	0	0	0	0	5,637	1,152	5,642	0	12,430	12,430	(6,936)
2013	0	0	0	0	0	5,320	1,121	5,978	0	12,419	12,419	139
2014	0	0	0	0	0	5,095	1,092	6,260	0	12,447	12,447	6,682
2015	0	0	0	0	0	5,251	1,063	6,500	0	12,814	12,814	12,898
2016	0	0	0	0	0	4,534	1,037	7,063	0	12,634	12,634	18,553
2017	0	24	371	0	394	4,524	1,012	7,685	0	13,221	12,827	23,851
2018	0	28	436	0	463	4,777	988	8,283	0	14,047	13,584	29,029
2019	0	32	501	0	533	4,699	964	8,721	0	14,383	13,851	33,900
2020	0	36	566	0	602	4,937	941	9,023	0	14,900	14,299	38,541
2021	0	0	0	0	0	4,090	918	9,271	0	14,280	14,280	42,817
2022	0	888	10,788	0	11,676	5,044	895	9,273	0	15,212	3,536	43,794
2023	0	993	12,060	0	13,053	4,828	873	9,246	0	14,947	1,895	44,277
2024	0	1,099	13,350	0	14,449	3,982	851	8,831	0	13,665	(785)	44,093
2025	0	1,206	14,656	0	15,862	4,385	830	9,069	0	14,284	(1,579)	43,750
2026	0	0	0	0	0	4,260	809	9,068	0	14,137	14,137	46,582
2027	0	68	795	0	863	4,004	789	9,148	0	13,941	13,078	49,000
2028	0	74	885	0	958	4,495	770	8,987	0	14,251	13,293	51,268
2029	0	80	975	0	1,054	4,465	754	8,896	0	14,115	13,061	53,324
2030	0	86	1,064	0	1,150	4,341	742	8,846	0	13,929	12,779	55,181
2031	0	0	0	0	0	4,891	733	8,954	0	14,578	14,578	57,135

NOM	0	7,607	92,852	0	100,459	98,627	21,199	180,824	0	300,649	200,190
NPV	0	3,549	43,274	0	46,824	34,190	8,311	61,458	0	103,959	57,135

Discount Rate: Benefit/Cost Ratio (Col(11) / Col(6)) : 8.37 2.22

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Building Envelope

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN	m. 37	UTILITY	OTHER	TOTAL	CUSTOMER EQUIPMENT	CUSTOMER	OTHER	TOTAL	NET	CUMULATIVE DISCOUNTED
	PARTICIPANTS	TAX CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	O&M COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	BILLS \$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
	0	4(000)	0	0	0	0	0	0	0	0	0
2006 2007	772	0	3,875	0	4,646	7,792	0	0	7,792	(3,146)	(2,903)
	2,328	0	4,216	0	6,544	8,656	0	0	8,656	(2,113)	(4,702)
2008	4,077	0	4,542	0	8,619	9,530	0	0	9,530	(911)	(5,417)
2009	•	0	4,853	0	10,762	10,427	0	ο .	10,427	335	(5,174)
2010	5,909	0	4,833	0	6,889	10,427	0	0	0,427	6,889	(565)
2011	6,889 6,971	0	0	0	6,971	0	0	0	0	6,971	3,739
2012	7,075	0	0	0	7,075	0	0	0	0	7,075	7,769
2013		0	0	0	7,145	0	n n	^	0	7,145	11,525
2014	7,145	0	0	0	7,229	0	0	0	0	7,229	15,032
2015	7,229	0	0	0	7,225	0	0	٥	٥	7,295	18,298
2016	7,295	0	85	0	7,486	371	0	0	371	7,115	21,236
2017	7,401	0		0	7,460	436	0	0	436	7,113	23,979
2018	7,535	0	97	0	7,773	501	0	0	501	7,272	26,537
2019	7,664	0	108	0	7,773	566	0	0	566	7,359	28,925
2020	7,806	U	119	0		300	0	0	0	7,902	
2021	7,902	0	0	U	7,902	0	0	Ü			31,291 31,597
2022	8,151	0	3,744	Ů	11,895	10,788	U	0	10,788	1,107 277	31,668
2023	8,263	U	4,074	u	12,337	12,060	0	0	12,060		31,539
2024	8,416	0	4,389	0	12,805	13,350	0	0	13,350	(546) (1,395)	31,236
2025	8,571	0	4,690	0	13,261	14,656	U	0	14,656		•
2026	8,731	0	0	U	8,731	U 	0	U	0	8,731	32,986
2027	8,893	0	130	0	9,024	795	0	0	795	8,229	34,507
2028	9,060	0	142	0	9,202	885	0	0	885	8,317	35,926
2029	9,230	0	153	0	9,383	975	0	0	975	8,408	37,250
2030	9,404	0	163	0	9,567	1,064	0	0	1,064	8,502	38,485
2031	9,581	0	0	0	9,581	0	0	0	0	9,581	39,769

NOM	182,297	0	35,380	0	217,677	92,852	0	0	92,852	124,825
NPV	64,421	0	18,622	0	83,044	43,274	0	0	43,274	39,769

In Service of Gen Unit: Discount Rate :

Benefit/Cost Ratio (Col(6) / Col(10))

2011 8.37 1.92

PROGRAM NAME: Commercial/Industrial Building Envelope

(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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	643	3,875	627	0	5, 144	751	0	0	0	751	(4,393)	(4,054)
2008	0	713	4,216	1,891	0	6,820	2,058	268	0	0	2,326	(4,493)	(7,880)
2009	0	784	4,542	3,306	0	8,632	3,373	554	0	0	3,927	(4,704)	(11,576)
2010	0	857	4,853	4,763	0	10,473	4,424	859	0	0	5,283	(5,189)	(15,339)
2011	0	0	0	5,522	0	5,522	10,543	1,184	0	0	11,726	6,204	(11,188)
2012	0	0	0	5,584	0	5,584	11,278	1,152	0	0	12,430	6,847	(6,961)
2013	0	0	0	5,654	0	5,654	11,298	1,121	0	0	12,419	6,765	(3,107)
2014	0	0	0	5,702	0	5,702	11,355	1,092	0	0	12,447	6,744	439
2015	0	0	0	5,758	0	5,758	11,751	1,063	0	0	12,814	7,056	3,861
2016	0	0	0	5,797	0	5,797	11,597	1,037	0	0	12,634	6,837	6,922
2017	0	24	85	5,875	0	5,983	12,209	1,012	0	0	13,221	7,238	9,911
2018	0	28	97	5,974	0	6,098	13,060	988	0	0	14,047	7,949	12,941
2019	0	32	108	6,068	0	6,208	13,420	964	0	0	14,383	8,175	15,816
2020	0	36	119	6,172	0	6,327	13,960	941	0	0	14,900	8,574	18,599
2021	0	0	0	6,241	0	6,241	13,362	918	0	0	14,280	8,038	21,006
2022	0	888	3,744	6,435	0	11,067	14,317	895	0	0	15,212	4,145	22,152
2023	0 .	993	4,074	6,519	0	11,585	14,074	873	0	0	14,947	3,362	23,009
2024	O	1,099	4,389	6,632	0	12,120	12,813	851	0	0	13,665	1,544	23,372
2025	0	1,206	4,690	6,748	0	12,644	13,454	830	0	0	14,284	1,640	23,728
2026	0	0	0	6,867	0	6,867	13,328	809	0	0	14,137	7,271	25,185
2027	0	68	130	6,988	0	7,186	13,152	789	0	0	13,941	6,755	26,434
2028	0	74	142	7,111	0	7,327	13,481	770	0	0	14,251	6,924	27,615
2029	0	80	153	7,238	0	7,470	13,361	754	0	0	14,115	6,645	28,662
2030	0	86	163	7,367	0	7,616	13,187	742	0	0	13,929	6,313	29,579
2031	0	0	0	7,499	0	7,499	13,845	733	0	0	14,578	7,079	30,528

NOM. 0 7,607 35,380 144,337 0 187,324 279,450 21,199 0 0 300,649 113,325 NPV 0 3,549 18,622 51,260 0 73,431 95,648 8,311 0 0 103,959 30,528													
	NOM.	0	7,607	35,380	144,337	0	187,324	279,450	21,199	0	0	300,649	113,325
	NPV	0	3,549	18,622	51,260	0	73,431	95,648		0	. 0	103,959	30,528

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

8.37 1.42

INPUT DATA -- PART I CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

I.	PROGRAM DEMAND SAVINGS & LINE LOSSES		
	(1) CUSTOMER kW REDUCTION AT METER	0.95	kW
	(2) GENERATOR kW REDUCTION PER CUSTOMER	1.27	kW
	(3) kW LINE LOSS PERCENTAGE	9.03	%
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	5,254.24	kWh
	(5) kWh LINE LOSS PERCENTAGE	7.16	%
	(6) GROUP LINE LOSS MULTIPLIER	1.00	
	(7) CUSTOMER kWh INCREASE AT METER	0.00	kWh
II.	RCONOMIC LIFE & K FACTORS		
	(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM	26	YEARS
	(2) GENERATOR ECONOMIC LIFE	25	YEARS
	(3) T&D ECONOMIC LIFE	35	YEARS
	(4) K FACTOR FOR GENERATION	1.65312	
	(5) K FACTOR FOR T & D	1.61194	
III.	UTILITY & CUSTOMER COSTS		
	(1) UTILITY NON RECURRING COST PER CUSTOMER	***	\$/CUST
	(2) UTILITY RECURRING COST PER CUSTOMER		\$/CUST
	(a) FIRST WAY GOOD FOOLT ADJOURD ATE		
	(3) UTILITY COST ESCALATION RATE		%**
	(4) CUSTOMER EQUIPMENT COST	***	\$/CUST
		***	\$/CUST
	(4) CUSTOMER EQUIPMENT COST	100 at 100 100 at 100 100 at 100	\$/CUST %** \$/CUST/YR
	(4) CUSTOMER EQUIPMENT COST	40 40 40 40 40 40 40 40 40	\$/CUST %** \$/CUST/YR %**
4	(4) CUSTOMER EQUIPMENT COST	*** *** *** ***	\$/CUST %++ \$/CUST/YR %++ \$/CUST/YR
ø 8	(4) CUSTOMER EQUIPMENT COST (5) CUSTOMER EQUIPMENT ESCALATION RATE (6) CUSTOMER O & M COST (7) CUSTOMER O & M COST ESCALATION RATE	*** *** *** ***	\$/CUST %** \$/CUST/YR %** \$/CUST/YR %**
*	(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	*** *** *** *** 8.37	\$/CUST %** \$/CUST/YR %** \$/CUST/YR %** %
	(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.	*** *** *** *** *** 8.37 7.84	\$/CUST %** \$/CUST/YR %** \$/CUST/YR %** %
* * *	(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	8.37 7.84	\$/CUST %++ \$/CUST/YR %++ \$/CUST/YR %++ % % \$/CUST/YR
0 0 4 0	(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	8.37 7.84	\$/CUST %** \$/CUST/YR %** \$/CUST/YR %** % % \$/CUST/YR %** % \$/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

AVOIDED GENERATOR AND T&D COSTS IV.

(4) DEMAND CHARGE ESCALATION RATE

V.

(1) BASE YEAR	2006	
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2011	
(3) IN-SERVICE YEAR FOR AVOIDED T&D	2009-2011	
(4) BASE YEAR AVOIDED GENERATING COST	492.12	\$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST	147.00	\$/kW
(6) BASE YEAR DISTRIBUTION COST	17.27	\$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
(8) GENERATOR FIXED O & M COST	30.93	\$/kW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE	4.35	%**
(10) TRANSMISSION FIXED O & M COST	2.68	\$/kW
(11) DISTRIBUTION FIXED O & M COST	0.95	\$/kW
(12) T&D FIXED O&M ESCALATION RATE	4.35	%**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99	%**
(15) GENERATOR CAPACITY FACTOR	4%	** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST	6.33	CENTS PER kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44	%**
NON-FUEL ENERGY AND DEMAND CHARGES		
(1) NON FUEL COST IN CUSTOMER BILL	Remarks	CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE	444	%
(3) DEMAND CHARGE IN CUSTOMER BILL	***	\$/kW/MO

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

		(1) UTILITY PROGRAM COSTS	(2)	(3) OTHER	(4) TOTAL UTILITY	(5) ENERGY CHARGE	(6) DEMAND CHARGE	(7) PARTICIPANT	(8) PARTICIPANT	(9) OTHER	(10) TOTAL
		WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
		INCENTIVES	INCENTIVES	COSTS	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
	YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
•	2006	0	Ó	0	ő	0	0	0	0	0	0
	2007	76	142	0	218	155	52	1,419	0	0	1,419
	2008	88	161	0	249	477	163	1,648	0	0	1,648
	2009	101	179	0	280	861	287	1,878	0	0	1,878
	2010	113	197	0	310	1,305	397	2,111	0	0	2,111
	2011	0	0	0	0	1,571	438	0	0	0	0
	2012	0	0	0	0	1,596	438	0	0	0	0
	2013	0	0	0	0	1,637	431	0	0	0	0
	2014	0	0	0	0	1,662	428	0	0	0	0
	2015	0	0	0	0	1,695	422	0	0	0	0
	2016	0	0	0	0	1,729	411	0	0	0	0
	2017	0	0	0	0	1,762	411	0	0	0	0
	2018	0	0	0	0	1,803	411	0	0	G	0
	2019	0	0	0	0	1,845	409	0	0	0	0
	2020	0	0	0	0	1,889	408	0	0	0	0
	2021	0	0	0	0	1,921	407	0	0	0	0
	2022	0	0	0	0	1,986	416	0	0	0	0
	2023	0	0	0	0	2,020	417	0	0	0	0
	2024	0	0	0	0	2,066	418	0	0	0	0
	2025	0	0	0	0	2,113	418	0	0	0	0
	2026	0	0	0	0	2,161	419	0	0	0	0
	2027	0	0	0	0	2,210	420	0	0	0	0
	2028	0	0	0	0	2,261	420	0	0	0	0
	2029	0	0	0	0	2,313	421	0	0	0	0
	2030	0	0	0	0	2,365	421	0	0	0	0
	2031	0	0	0	0	2,419	422	0	0	O	0

NOM	378	679	0	1,057	43,823	9,707	7,056	0	0	7,056
NPV	306	551	0	858	15.132	3.676	5.719	0	0	5.719
										

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

page 3

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3,999	124	0	258	169	0	0	157	(1)	708	708	708	3,924
2012	3,842	119	0	248	111	72	19	157	51	778	718	1,426	3,924
2013	3,634	113	0	235	111	69	19	157	43	747	636	2,062	4,042
2014	3,434	107	0	222	110	66	20	157	36	717	563	2,625	4,163
2015	3,242	101	0	210	109	63	21	157	29	688	499	3,124	4,288
2016	3,056	95	0	198	108	60	21	157	22	660	442	3,566	4,416
2017	2,877	89	0	186	107	57	22	157	16	634	391	3,957	4,549
2018	2,704	84	0	175	105	53	22	157	11	607	346	4,303	4,685
2019	2,536	79	0	164	99	50	23	157	10	582	306	4,609	4,826
2020	2,369	74	0	153	92	47	24	157	10	557	270	4,879	4,971
2021	2,203	68	0	142	86	44	25	157	10	532	238	5,117	5,120
2022	2,036	63	0	132	79	41	25	157	10	507	209	5,327	5,274
2023	1,869	58	0	121	72	38	26	157	10	482	184	5,510	5,432
2024	1,702	53	0	110	65	35	27	157	10	456	161	5,671	5,595
2025	1,535	48	0	99	59	31	28	157	10	431	140	5,811	5,763
2026	1,368	42	0	88	52	28	28	157	10	406	122	5,932	5,935
2027	1,202	37	0	78	45	25	29	157	10	381	105	6,038	6,113
2028	1,035	32	0	67	38	22	30	157	10	356	91	6,129	6,297
2029	868	27	0	56	32	19	31	157	10	331	78	6,207	6,486
2030	701	22	0	45	25	16	32	157	10	306	67	6,273	6,680
2031	534	17	0	35	51	13	33	157	(23)	282	56	6,329	6,881
2032	401	12	0	26	79	9	34	157	(57)	261	48	6,378	7,087
2033	301	9	0	19	75	6	35	157	(57)	245	42	6,420	7,300
2034	200	6	0	13	71	3	36	157	(57)	230	36	6,456	7,519
2035	100	3	0	6	67	0	37	157	(57)	214	31	6,487	7,744

IN SERVICE COST (\$000)	3,924
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38.575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	7
DEBT	45%	6.90	%
P/S	0%	0.00	%
C/S	55%	11.75	%

K-FACTOR = CPWFC / IN-SVC COST =

1.65312

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
						воок	ACCUMULATED	DEFERRED						
			ACCUMULATED		ACCUMULATED		BOOK DEPR	TAX	TOTAL				ANNUAL	ACCUMULATED
	TAX	TAX	TAX	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(10)*(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEFERRED TAX	DEFERRED TAX	DEPRECIATION	AFUDC	RATE	TAX RATE	TAX RATE	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	MINUS I/LIFE	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	145	145	157	157	147	147	(1)	246	0	0	0	(1)	(75)
2012	7.22%	279	425	157	314	147	294	51	246	0	0	0	51	(24)
2013	6.68%	258	683	157	471	147	441	43	246	0	0	a	43	19
2014	6.18%	239	922	157	628	147	588	36	246	0	0	0	36	54
2015	5.71%	221	1,144	157	785	147	736	29	246	0	0	0	29	83
2016	5.29%	205	1,348	157	942	147	883	22	246	0	0	0	22	105
2017	4.89%	189	1,537	157	1,099	147	1,030	16	246	0	0	0	16	121
2018	4.52%	175	1,713	157	1,256	147	1,177	11	246	0	0	0	11	132
2019	4.46%	173	1,885	157	1,413	147	1,324	10	246	0	0	0	10	142
2020	4.46%	173	2,058	157	1,570	147	1,471	10	246	0	0	0	10	152
2021	4.46%	173	2,231	157	1,727	147	1,618	10	246	0	0	0	10	162
2022	4.46%	173	2,403	157	1,884	147	1,765	10	246	0	0	0	10	171
2023	4.46%	173	2,576	157	2,040	147	1,913	10	246	0	0	0	10	181
2024	4.46%	173	2,749	157	2,197	147	2,060	10	246	0	0	0	10	191
2025	4.46%	173	2,922	157	2,354	147	2,207	10	246	0	0	0	10	201
2026	4.46%	173	3,094	157	2,511	147	2,354	10	246	0	0	0	10	211
2027	4.46%	173	3,267	157	2,668	147	2,501	10	246	0	0	0	10	221
2028	4.46%	173	3,440	157	2,825	147	2,648	10	246	0	0	0	10	231
2029	4.46%	173	3,613	157	2,982	147	2,795	10	246	0	0	0	10	241
2030	4.46%	173	3,785	157	3,139	147	2,942	10	246	0	0	0	10	250
2031	2.23%	86	3,872	157	3,296	147	3,090	(23)	246	0	0	0	(23)	227
2032	0.00%	0	3,872	157	3,453	147	3,237	(57)	246	0	0	0	(57)	170
2033	0.00%	0	3,872	157	3,610	147	3,384	(57)	246	0	0	0	(57)	114
2034	0.00%	0	3,872	157	3,767	147	3,531	(57)	246	0	0	0	(57)	57
2035	0.00%	0	3,872	157	3,924	147	3,678	(57)	246	0	0	0	(57)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(75)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	246
BOOK DEPR RATE - I/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

YEAR DEPRECIATION SCHIDULE DEPRECIATION \$(000) \$(000	(1)	(2)	(3)	(4)	(5) END OF YEAR	(5a)*	(5b)*	(6)	(7)	(8)
YEAR DEPRECIATION SCHIDULE DEPRECIATION \$(000) \$(000					NET			BEGINNING	ENDING OF	
YEAR SCHEDULE \$(000)<		TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
2011 3.75% 145 (1) 3.767 157 (75) 3,999 3,842 3,920 2012 7.22% 279 51 3,610 314 (24) 3,842 3,634 3,738 2013 6,68% 258 43 3,453 471 19 3,634 3,434 3,534 2014 6,18% 239 36 3,296 628 54 3,434 3,242 3,056 3,149 2015 5,71% 221 29 3,139 785 83 3,242 3,056 3,149 2016 5,29% 205 22 2,982 942 105 3,056 2,877 2,967 2017 4,89% 189 16 2,825 1,099 121 2,877 2,704 2,536 2,620 2018 4,52% 175 11 2,668 1,256 132 2,704 2,536 2,369 2,433 2019 4,46%		DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
2012 7,22% 279 51 3,610 314 (24) 3,842 3,634 3,738 2013 6,68% 258 43 3,453 471 19 3,634 3,434 3,534 2014 6,18% 239 36 3,296 628 54 3,434 3,242 3,056 3,388 2015 5,71% 221 29 3,139 785 83 3,242 3,056 3,149 2016 5,29% 205 22 2,982 942 105 3,056 2,877 2,967 2017 4,89% 189 16 2,825 1,099 121 2,877 2,704 2,536 2,620 2018 4,52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4,46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4,46% 173	YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2013 6.68% 258 43 3,453 471 19 3,634 3,434 3,534 2014 6.18% 239 36 3,296 628 54 3,434 3,242 3,536 2015 5.71% 221 29 3,139 785 83 3,242 3,056 3,149 2016 5.29% 205 22 2,982 942 105 3,056 2,877 2,967 2017 4,89% 189 16 2,825 1,099 121 2,877 2,704 2,791 2018 4,52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4,46% 173 10 2,511 1,413 142 2,536 2,369 2,233 2,286 2020 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4,46% 173 10 <	2011	3.75%	145	(1)	3,767	157	(75)	3,999	3,842	3,920
2014 6.18% 239 36 3,296 628 54 3,434 3,242 3,338 2015 5.71% 221 29 3,139 785 83 3,242 3,056 2,877 2,967 2016 5.29% 205 22 2,982 942 105 3,056 2,877 2,967 2017 4,89% 189 16 2,825 1,099 121 2,877 2,704 2,536 2,620 2018 4,52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4,46% 173 10 2,511 1,413 142 2,536 2,369 2,453 2020 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2021 4,46% 173 10 2,940 1,884 171 2,036 1,869 1,952 2023 4,46% 173	2012	7.22%	279	51	3,610	314	(24)	3,842	3,634	3,738
2015 5.71% 221 29 3,139 785 83 3,242 3,056 3,149 2016 5.29% 205 22 2,982 942 105 3,056 2,877 2,967 2017 4.89% 189 16 2,825 1,099 121 2,877 2,704 2,791 2018 4.52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4.46% 173 10 2,511 1,413 142 2,536 2,369 2,453 2020 4.46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4.46% 173 10 2,354 1,570 152 2,269 2,203 2,286 2021 4.46% 173 10 2,940 1,884 171 2,036 1,869 1,952 2023 4,46% 173 10 1,727	2013	6.68%	258	43	3,453	471	19	3,634	3,434	3,534
2016 5.29% 205 22 2.982 942 105 3,056 2,877 2,967 2017 4,89% 189 16 2,825 1,099 121 2,877 2,704 2,794 2018 4,52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4,46% 173 10 2,511 1,413 142 2,536 2,369 2,453 2020 4,46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4,46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4,46% 173 10 1,727	2014	6.18%	239	36	3,296	628	54	3,434	3,242	3,338
2017 4.89% 189 16 2,825 1,099 121 2,877 2,704 2,791 2018 4.52% 175 11 2,668 1,256 132 2,704 2,536 2,609 2,639 2019 4,46% 173 10 2,511 1,413 142 2,536 2,236 2,269 2,203 2,286 2020 4,46% 173 10 2,197 1,570 152 2,369 2,203 2,286 2021 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4,46% 173 10 2,940 1,884 171 2,036 1,869 1,952 2023 4,46% 173 10 2,940 1,884 171 2,036 1,869 1,702 1,786 2024 4,46% 173 10 1,727 2,197 191 1,702 1,535 1,619 202	2015	5.71%	221	29	3,139	785	83	3,242	3,056	3,149
2018 4.52% 175 11 2,668 1,256 132 2,704 2,536 2,620 2019 4,46% 173 10 2,511 1,413 142 2,536 2,369 2,453 2020 4,46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4,46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4,46% 173 10 2,040 1,884 171 2,036 1,869 1,952 2023 4,46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2023 4,46% 173 10 1,772 2,197 191 1,702 1,535 1,619 2025 4,46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4,46% 173 10 1,413 <td>2016</td> <td>5.29%</td> <td>205</td> <td>22</td> <td>2,982</td> <td>942</td> <td>105</td> <td>3,056</td> <td>2,877</td> <td>2,967</td>	2016	5.29%	205	22	2,982	942	105	3,056	2,877	2,967
2019 4.46% 173 10 2,511 1,413 142 2,536 2,369 2,453 2020 4.46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4.46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4.46% 173 10 2,040 1,884 171 2,036 1,869 1,952 2023 4.46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4.46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4.46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4.46% 173 10 1,787 2,354 201 1,535 1,368 1,452 2026 4.46% 173 10 1,413 <td>2017</td> <td>4.89%</td> <td>189</td> <td>16</td> <td>2,825</td> <td>1,099</td> <td>121</td> <td>2,877</td> <td>2,704</td> <td>2,791</td>	2017	4.89%	189	16	2,825	1,099	121	2,877	2,704	2,791
2020 4.46% 173 10 2,354 1,570 152 2,369 2,203 2,286 2021 4.46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4.46% 173 10 2,040 1,884 171 2,036 1,869 1,952 2023 4.46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4,46% 173 10 1,570 2,354 201 1,535 1,355 1,619 2025 4,46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4,46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4,46% 173 10 1,256 2,668 221 1,035 868 951 2028 4,46% 173 10 1,099	2018	4.52%	175	11	2,668	1,256	132	2,704	2,536	2,620
2021 4.46% 173 10 2,197 1,727 162 2,203 2,036 2,119 2022 4.46% 173 10 2,040 1,884 171 2,036 1,869 1,952 2023 4.46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4,46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4,46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4,46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4,46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4,46% 173 10 1,256 2,668 221 1,035 868 951 2029 4,46% 173 10 1,999	2019	4.46%	173	10	2,511	1,413	142	2,536	2,369	2,453
2022 4.46% 173 10 2,040 1,884 171 2,036 1,869 1,952 2023 4,46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4,46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4,46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4,46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4,46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4,46% 173 10 1,099 2,825 231 1,035 868 951 2029 4,46% 173 10 942 2,982 241 868 701 785 2030 4,46% 173 10 785	2020	4.46%	173	10	2,354	1,570	152	2,369	2,203	2,286
2023 4.46% 173 10 1,884 2,040 181 1,869 1,702 1,786 2024 4.46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4.46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4.46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4.46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4.46% 173 10 1,099 2,825 231 1,035 868 951 2029 4.46% 173 10 1,099 2,825 231 1,035 868 951 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2,23% 86 (23) 628 3,2	2021	4.46%	173	10	2,197	1,727	162	2,203	2,036	2,119
2024 4,46% 173 10 1,727 2,197 191 1,702 1,535 1,619 2025 4,46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4,46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4,46% 173 10 1,256 2,668 221 1,202 1,035 868 951 2028 4,46% 173 10 1,099 2,825 231 1,035 868 951 2029 4,46% 173 10 942 2,982 241 868 701 785 2030 4,46% 173 10 785 3,139 250 701 534 618 2031 2,23% 86 (23) 628 3,296 227 534 401 468 2032 0,00% 0 (57) 471	2022	4.46%	173	10	2,040	1,884	171	2,036	1,869	1,952
2025 4.46% 173 10 1,570 2,354 201 1,535 1,368 1,452 2026 4.46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4.46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4.46% 173 10 1,099 2,825 231 1,035 868 951 2029 4.46% 173 10 942 2,982 241 868 701 785 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,433 170 401 301 351 2033 0.00% 0 (57) 314 3,610	2023	4.46%	173	10	1,884	2,040	181	1,869	1,702	1,786
2026 4.46% 173 10 1,413 2,511 211 1,368 1,202 1,285 2027 4.46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4.46% 173 10 1,099 2,825 231 1,035 868 951 2029 4.46% 173 10 942 2,982 241 868 701 785 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2024	4.46%	173	10	1,727	2,197	191	1,702	1,535	1,619
2027 4.46% 173 10 1,256 2,668 221 1,202 1,035 1,118 2028 4.46% 173 10 1,099 2,825 231 1,035 868 951 2029 4.46% 173 10 942 2,982 241 868 701 785 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2025	4.46%	173	10	1,570	2,354	201	1,535	1,368	1,452
2028 4.46% 173 10 1,099 2,825 231 1,035 868 951 2029 4.46% 173 10 942 2,982 241 868 701 785 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2026	4.46%	173	10	1,413	2,511	211	1,368	1,202	1,285
2029 4.46% 173 10 942 2,982 241 868 701 785 2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2027	4.46%	173	10	1,256	2,668	221	1,202	1,035	1,118
2030 4.46% 173 10 785 3,139 250 701 534 618 2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2028	4.46%	173	10	1,099	2,825	231	1,035	868	951
2031 2.23% 86 (23) 628 3,296 227 534 401 468 2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2029	4.46%	173	10	942	2,982	241	868	701	785
2032 0.00% 0 (57) 471 3,453 170 401 301 351 2033 0.00% 0 (57) 314 3,610 114 301 200 250	2030	4.46%	173	10	785	3,139	250	701	534	618
2033 0.00% 0 (\$7) 314 3,610 114 301 200 250	2031	2.23%	86	(23)	628	3,296	227	534	401	468
	2032	0.00%	0	(57)	471	3,453	170	401	301	351
	2033	0.00%	0	(57)	314	3,610	114	301	200	250
2034 0.00% 0 (57) 157 3,767 57 200 100 150	2034	0.00%	0	(57)	157	3,767	57	200	100	150
2035 0.00% 0 (57) 0 3,924 0 100 0 50	2035	0.00%	0	(57)	0	3,924	0	100	0	50

^{*} Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
	NO.YEARS	PLANT	CUMULATIVE	YEARLY	ANNUAL	AVERAGE
	BEFORE	ESCALATION	ESCALATION	EXPENDITURE	SPENDING	SPENDING
YEAR	IN-SERVICE	RATE	FACTOR	(%)	(\$/kW)	(\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2006 2007	-5 -4	0.00% 3.00%	1.000 1.030	0.00% 0.00%	0.00 0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00

				100.00%	538.96	-						
		(8)	(8a)*	(8b)*	(9)	(9a)*	(9b)*	(9c)*	(9d)*	(9e)*	(10)	(11)
		CUMULATIVE		CUMULATIVE	YEARLY	CUMULATIVE	CONSTRUCTION			CUMULATIVE	INCREMENTAL	CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3,06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2010	-l	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

		24.71	62.40		54.35		(11.43)	
				BOOK BASIS	BOOK BASIS FOR DEF TAX	TAX BASIS		
IN SERVICE YEAR	2011		CONSTRUCTION CASH	3,517	3,517	3,517	7.	
PLANT COSTS	492.12		EQUITY AFUDC	246	i i		İ	
AFUDC RATE	7.84%		DEBT AFUDC	161	161			
			CPI			355		
			TOTAL	3,924	3,678	3,871		

^{*} Column not specified in workbook

PSC FORM CE 1.2

PAGE 1 OF 1

PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

	(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
		CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
		TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
		PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
Y	ÆAR.	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
	2006	0	0	7.71	9.00	9.18	0.00	1.00	1.00
- 2	2007	1,070	1,070	7.74	8.80	9.05	0.00	1.00	1.00
2	2008	2,287	2,287	6.46	7.60	7.93	0.00	1.00	1.00
2	2009	3,644	3,644	6.20	7.31	7.56	0.00	1.00	1.00
2	2010	5,133	5,133	5,58	6.58	6.81	0.00	1.00	1.00
2	2011	5,133	5,133	5.89	6.95	7.21	7.52	1.00	1.00
2	2012	5,133	5,133	6.06	7.15	7.43	6.80	1.00	1.00
2	2013	5,133	5,133	6.29	7.49	7.77	7.65	1.00	1.00
2	2014	5,133	5,133	6.43	7.71	8.06	8.10	1.00	1.00
2	2015	5,133	5,133	6.79	8.14	8.45	7.74	1.00	1.00
2	2016	5,133	5,133	7.14	8.58	8.95	9.08	1.00	1.00
2	2017	5,133	5,133	7.21	8.59	9.07	9.93	1.00	1.00
- 1	2018	5,133	5,133	7.67	9.15	9.69	9.87	1.00	1.00
2	2019	5,133	5,133	8.05	9.55	10.13	10.52	1.00	1.00
2	2020	5,133	5,133	8.30	9.75	10.35	10.44	1.00	00.1
2	2021	5,133	5,133	8.51	9.94	10.52	12.95	1.00	1.00
- 2	2022	5,133	5,133	8.73	10.11	10.65	10.56	1.00	1.00
2	2023	5,133	5,133	8.86	10.16	10.66	11.55	1.00	1.00
2	2024	5,133	5,133	8.91	10.02	10.44	15.91	1.00	1.00
2	2025	5,133	5,133	9.22	10.31	10.74	14.25	1.00	1.00
2	2026	5,133	5,133	9.42	10.45	10.86	15.42	1.00	1.00
2	2027	5,133	5,133	9.66	10.65	11.05	17.44	1.00	1.00
2	2028	5,133	5,133	9.85	10.72	11.09	15.36	1.00	1.00
2	2029	5,133	5,133	10.04	10.85	11.17	16.09	1.00	1.00
2	2030	5,133	5,133	10.24	10.97	11.27	18.01	1.00	1.00
2	2031	5,133	5,133	10.54	11.25	11.53	13.65	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 I OF 1 PSC FORM CE 2.1

PROGRAM METHOD SELECTED: REV REQ VAOIDED GENEKVLING BENEELLS

(S) VAOIDED VAOIDED **VAOIDED** (**†**) (ç) (£) PROGRAM NAME: CommercialIndustrial Efficient Lighting

page 7

	006	764	\$75	ε	* 09	787	2031
	864	18€	167	ε	645	90€	2030
	178	26€	328	Þ	222	331	2029
	LZ8	901	341	t t	168	986	2028
	9£L	099	101	ς	605	381	7027
	€87	662	424	ç	488	901	2026
	908	848	154	ç	L94	1£¢	2025
	ZEL	\$19	438	ς	811	954	2024
	888	169	795	L	6₹₽	482	2023
	876	665	709	L	011	LOS	2022
	75 <i>L</i>	188	104	8	€6€	232	2021
	806	777	069	8	375	455	2020
	1/98	888	108	01	6SE	285	2019
	648	9\$6	€78	11	EVE	L09	2018
	832	1,006	998	11	328	₽ €9	2017
	₽£8	1,262	701,1	SI	ME	099	2016
	996	1,002	996	EI	300	889	2015
	LE6	€19	L6S	8	787	LIL	2014
	876	199	015	L	\$75	LVL	2013
	£60°1	721	244	٤	263	844	2012
	256	181	125	7	251	807	2011
	0	0	0	0	0	0	2010
	0	0	0	0	0	0	2009
	0	0	0	0	0	0	2008
	0	0	0	0	0	0	2007
_	0	0	0	0	0	0	7000
_	\$(000)	2(000)	(000)\$	\$(000)	2(000)	(000)\$	YEAR
	BENELLS	FUEL COST	LOEF COST	VARIABLE O&M	FIXED O&M	CAPACITY COST	
	CEN UNIT	KEPLACEMENT	CEN UNIT	CEN DAIL	CEN DAIL	GEN DAIL	
	GEOLONA		VAOIDED	VAOIDED	VAOIDED	AVOIDED	
	(L)	(9)	(ç)	(4)	(£)	(z)	

6£1,81	£82,E1	179'11	ttl	805,8	11,150	MON
882,8	₹09'₽	980'1	25	2,520	4,235	ΛdN

PSC FORM CE 2.2 PAGE 1 OF 1

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	258	0
2008	38	4	42	3	1	4	706	0
2009	80	9	89	7	2	9	1,200	0
2010	126	15	140	11	4	15	1,597	0
2011	175	22	197	15	6	21	1,975	0
2012	169	23	191	15	6	21	2,031	0
2013	162	24	186	14	6	21	2,135	0
2014	156	25	181	14	7	20	2,202	0
2015	150	26	176	13	7	20	2,323	0
2016	144	27	171	13	7	20	2,452	0
2017	138	28	167	12	8	20	2,449	0
2018	133	30	162	12	8	19	2,608	0
2019	127	31	158	11	8	19	2,719	0
2020	122	33	154	11	9	19	2,766	0
2021	116	34	150	10	9	19	2,817	0
2022	110	36	146	10	9	19	2,860	0
2023	105	37	142	9	10	19	2,862	0
2024	99	39	138	9	10	19	2,807	0
2025	94	40	134	8	11	19	2,885	0
2026	88	42	130	8	11	19	2,914	0
2027	82	44	127	7	12	19	2,967	0
2028	77	46	123	7	12	19	2,975	0
2029	72	48	120	6	13	19	3,002	0
2030	67	50	117	6	13	19	3,028	0
2031	63	52	116	6	14	19	3,101	0

					45 40 00			
NOM.	2,693	765	3,458	236	202	438	59,637	0
NPV	1,122	239	1,362	98	63	162	20,592	0

 $[\]bullet$ 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: Commercial/Industrial Efficient 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)
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	76	1,419	0	1,495	ő	o	258	0	258	(1,237)	(1,141)
2008	0	88	1,648	0	1,736	0	46	706	0	752	(984)	(1,979)
2009	0	101	1,878	0	1,979	0	98	1,200	0	1,298	(680)	(2,513)
2010	0	113	2,111	0	2,224	0	155	1,597	0	1,752	(472)	(2,856)
2011	0	0	0	0	0	932	218	1,975	0	3,125	3,125	(765)
2012	0	0	0	0	0	1,037	212	2,031	0	3,280	3,280	1,260
2013	0	0	0	0	0	978	207	2,135	0	3,320	3,320	3,152
2014	0	0	0	0	0	937	201	2,202	0	3,340	3,340	4,907
2015	0	0	0	0	0	966	196	2,323	0	3,485	3,485	6,598
2016	0	0	0	0	0	834	191	2,452	0	3,477	3,477	8,154
2017	0	0	0	0	0	832	186	2,449	0	3,468	3,468	9,587
2018	0	0	0	0	0	879	182	2,608	0	3,668	3,668	10,985
2019	0	0	0	0	0	864	178	2,719	0	3,760	3,760	12,307
2020	0	0	0	0	0	908	173	2,766	0	3,847	3,847	13,556
2021	0	0	0	0	0	752	169	2,817	0	3,739	3,739	14,675
2022	0	0	0	0	0	928	165	2,860	0	3,952	3,952	15,767
2023	0	0	0	0	0	888	161	2,862	0	3,910	3,910	16,765
2024	0	0	0	ø	0	732	157	2,807	0	3,696	3,696	17,634
2025	0	0	0	0	0	806	153	2,885	0	3,844	3,844	18,469
2026	0	0	0	0	0	783	149	2,914	0	3,847	3,847	19,240
2027	0	0	0	0	0	736	145	2,967	0	3,848	3,848	19,951
2028	0	0	0	0	0	827	142	2,975	0	3,943	3,943	20,624
2029	0	0	0	0	0	821	139	3,002	0	3,962	3,962	21,248
2030	0	0	0	0	0	798	137	3,028	0	3,962	3,962	21,823
2031	0	0	0	0	0	900	135	3,101	0	4,136	4,136	22,378

NOM	0	378	7,056	0	7,434	18,139	3,896	59,637	0	81,672	74,238
NPV	0	306	5,719	0	6,025	6,288	1,523	20,592	0	28,403	22,378

Discount Rate:

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

8.37 4.71

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient Lighting

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILLS \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O&M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	0	0	0	0	0	0	0	0	0	0	0
2007	262	0	142	0	404	1,419	0	0	1,419	(1,015)	(937)
2008	808	0	161	0	969	1,648	0	0	1,648	(679)	(1,515)
2009	1,450	0	179	0	1,630	1,878	0	0	1,878	(248)	(1,710)
2010	2,160	0	197	0	2,357	2,111	0	0	2,111	246	(1,532)
2011	2,561	0	0	0	2,561	0	0	0	0	2,561	182
2012	2,596	0	0	0	2,596	0	0	0	0	2,596	1,784
2013	2,643	0	0	0	2,643	0	0	0	0	2,643	3,290
2014	2,674	0	0	0	2,674	0	0	0	0	2,674	4,696
2015	2,713	0	0	0	2,713	0	0	0	0	2,713	6,012
2016	2,747	0	0	0	2,747	0	0	0	0	2,747	7,242
2017	2,792	0	0	0	2,792	0	0	0	0	2,792	8,395
2018	2,847	0	0	0	2,847	0	0	0	0	2,847	9,480
2019	2,903	0	0	0	2,903	0	0	0	0	2,903	10,501
2020	2,962	0	0	0	2,962	0	0	0	0	2,962	11,462
2021	3,003	0	0	0	3,003	0	0	0	0	3,003	12,362
2022	3,100	0	0	0	3,100	0	0	0	0	3,100	13,218
2023	3,146	0	0	0	3,146	0	0	0	0	3,146	14,020
2024	3,209	0	0	0	3,209	0	0	0	0	3,209	14,776
2025	3,273	0	0	0	3,273	0	0	0	0	3,273	15,486
2026	3,339	0	0	0	3,339	0	0	0	0	3,339	16,155
2027	3,407	0	0	0	3,407	0	0	0	0	3,407	16,785
2028	3,475	0	0	0	3,475	0	0	0	0	3,475	17,378
2029	3,546	0	0	0	3,546	0	0	0	0	3,546	17,936
2030	3,618	0	0	0	3,618	0	0	0	0	3,618	18,462
2031	3,692	0	0	0	3,692	0	0	0	0	3,692	18,957

NOM	68,927	0	679		69,605	7,056	0	0	7,056	62,550
NPV	24,124	0	551	0	24,676	5,719	0	0	5,719	18,957

In Service of Gen Unit: Discount Rate:

2011 8.37

Benefit/Cost Ratio (Col(6) / Col(10))

RATE IMPACT TEST PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Efficient 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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	76	142	207	0	425	258	0	0	0	258	(167)	(154)
2008	0	88	161	640	0	890	706	46	0	0	752	(137)	(271)
2009	0	101	179	1,148	0	1,428	1,200	98	0	0	1,298	(129)	(373)
2010	0	113	197	1,702	0	2,012	1,597	155	0	0	1,752	(260)	(561)
2011	0	0	0	2,009	0	2,009	2,907	218	0	0	3,125	1,116	186
2012	0	0	0	2,035	0	2,035	3,068	212	0	0	3,280	1,245	955
2013	0	0	0	2,068	0	2,068	3,114	207	0	0	3,320	1,252	1,668
2014	0	0	0	2,090	0	2,090	3,139	201	0	0	3,340	1,249	2,325
2015	0	0	0	2,117	0	2,117	3,289	196	0	0	3,485	1,367	2,988
2016	0	0	0	2,140	0	2,140	3,286	191	0	0	3,477	1,337	3,587
2017	0	0	0	2,173	0	2,173	3,281	186	0	0	3,468	1,295	4,122
2018	0	0	0	2,214	0	2,214	3,486	182	0	0	3,668	1,454	4,676
2019	0	0	0	2,254	0	2,254	3,583	178	0	0	3,760	1,506	5,205
2020	0	0	0	2,298	0	2,298	3,674	173	0	0	3,847	1,549	5,708
2021	0	0	0	2,328	0	2,328	3,569	169	0	0	3,739	1,411	6,131
2022	0	0	0	2,402	0	2,402	3,787	165	0	0	3,952	1,550	6,559
2023	0	0	0	2,437	0	2,437	3,749	161	0	0	3,910	1,474	6,935
2024	0	0	0	2,483	0	2,483	3,539	157	0	0	3,696	1,213	7,220
2025	0	0	0	2,531	0	2,531	3,691	153	0	0	3,844	1,313	7,505
2026	0	0	0	2,580	0	2,580	3,698	149	0	0	3,847	1,267	7,759
2027	0	0	0	2,630	0	2,630	3,703	145	0	0	3,848	1,218	7,985
2028	0	0	0	2,681	0	2,681	3,801	142	0	0	3,943	1,262	8,200
2029	0	0	0	2,733	0	2,733	3,823	139	0	0	3,962	1,229	8,393
2030	0	0	0	2,787	0	2,787	3,826	137	0	0	3,962	1,176	8,564
2031	0	0	0	2,842	0	2,842	4,001	135	0	0	4,136	1,294	8,738

NOM.	0	378	679	53,529	0	54,586	77,776	3,896	0	0	81,672	27,086
NPV	0	306	551	18,807	0	19,665	26,880	1,523	0	0	28,403	8,738

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

The second contract of the second contract of

INPUT DATA -- PART 1 CONTINUED PROGRAM MRITHOD SELECTED; REV_REQ PROGRAM NAME: Business On Cuit

1.	PROGRAM DEMAND SAVINGS & LINE LOSSES		ıv.	AVOIDED GENERATOR AND T&D COSTS	
	(1) CUSTOMER KW REDUCTION AT METER	0.85 kW		(1) BASB YEAR	2006
	(2) GENERATOR LW REDUCTION PER CUSTOMER	1.14 kW		(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2011
	(3) kW LINE LOSS PERCENTAGE	9.03 %		(3) IN-SERVICE YEAR FOR AVOIDED T&D	2069-2011
	(4) GENERATOR IN REDUCTION PER CUSTOMER	11,41 kWh ****		(4) BASE YEAR AVOIDED GENERATING COST	492.12 \$/kW
	(5) kWh LINE LOSS PERCENTAGE	7.16 %		(5) HASE YEAR AVOIDED TRANSMISSION COST	147.00 S/kW
	(6) GROUP LINE LOSS MULTIPLIER	1.00		(6) BASE YEAR DISTRIBUTION COST	10.36 S/kW
	(7) CUSTOMER KWA INCREASE AT METER	6.25 kWi ****		(7) GEN, TRAN & DIST COST ESCALATION RATE	3.00 %***
				(8) GENERATOR FIXED O & M COST	30.93 \$/kW/YR
11,	ECONOMIC LIFE & K FACTORS			(9) GENERATOR FIXED O&MESCALATION RATE	4.35 %**
				(10) TRANSMISSION FIXED O & M COST	2.68 3/kW
	(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM	26 YEARS		(11) DISTRIBUTION FIXED O & M COST	0.95 S/kW
	(2) GENERATOR ECONOMIC LIFE	25 YEARS		(12) T&D FIXED O&M ESCALATION RATE	4.35 %**
	(3) T&D ECONOMIC LIFE	35 YEARS		(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082 CENTS/kWh
	(4) K FACTOR FOR GENERATION	1.65312		(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99 %**
	(5) K FACTOR FOR T & D	1.61194		(15) GENERATOR CAPACITY FACTOR	4% ** (ln-service vear)
				(16) AVOIDED GENERATING UNIT FUEL COST	6 32 CENTS PER kWhee (In-service year)
m.	UTILITY & CUSTOMER COSTS			(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44 %4+
	(1) UTILITY NON RECURRING COST PER CUSTOMER	+++ \$/CUST	V,	NON-FUEL ENERGY AND DEMAND CHARGES	
	(2) UTILITY RECURRING COST PER CUSTOMER	*** \$/CUST			
	(3) UTILITY COST ESCALATION RATE	**+ %**		(1) NON FUEL COST IN COSTOMER BILL	**** CENTS/kWh
	(4) CUSTOMER EQUIPMENT COST	*** \$/CUST		(2) NON-FUEL COST BSCALATION RATE	*** %
	(5) CUSTOMER EQUIPMENT ESCALATION RATE	*** ***		(3) DEMAND CHARGE IN CUSTOMER BILL	**** \$/kW/MO
	(6) CUSTOMER O & M COST	*** \$/CUST/YR		(4) DEMAND CHARGE ESCALATION RATE	*** %
	(7) CUSTOMER O & M COST ESCALATION RATE	*** ***			
•	(8) INCREASED SUPPLY COSTS	*** \$/CUST/YR			
•	(9) SUPPLY COSTS ESCALATION RATES	*** %**			
*	(10) UTILITY DISCOUNT RATE	8,37 %			
•	(11) UTILITY AFUDC RATE	7.84 %			
+	(12) UTILITY NON RECURRING REBATE/INCENTIVE	*** \$/CUST			
•	(13) UTILITY RECURRING REBATE/INCENTIVE	*** \$/CUST		•	
•	(14) UTILITY REBATE/INCENTIVE ESCALATION RATE	424 %			

^{*} 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

**** THIS IS A LOAD SHIFTING PROGRAM. VALUE SHOWN IN ITEM (4) IS ANNUAL KWH/CUST SHIFTED AWAY FROM PEAK HRS. VALUE SHOWN IN ITEM (7) IS ANNUAL KWH/CUST THAT IS PAID BACK DURING OFF-PEAK.

"INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SHLECTED: REV_REQ PROGRAM NAME: Business On Call

	(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7)	(8)	(9)	(10)
	UTILITY		OTHER	UTILITY	ENERGY	DEMAND	D A D DYCTO A D MD	TO A DOMESTIC A NUMBER	comment.	momar
	PROGRAM COSTS	There sense			CHARGE	CHARGE	PARTICIPANT	PARTICIPANT	OTHER	TOTAL
	WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
707.470	INCENTIVES	INCENTIVES	COSTS \$(000)	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
YEAR	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0	0	0
2007	294	135	Ů.	429	•	Ü	U	U .	0	0
2008	565	406	ų.	971	1	0	0	ď	0	0
2009	811	672	0	1,484	<u>.</u>	0	0	0	0	0
2010	1,047	933	0	1,980	2	0	0	0	0	Ō.
2011	963	1,064	0	2,027	0	0	0	0	0	0
2012	753	1,064	0	1.817	•	0	0	0	a	0
2013	571	1,064	0	1,635		0	0	0	0	0
2014	382	1,064	0	1.446	2	0	0	0	O	0
2015	207	1,064	0	1,271	2	0	0	0	0	0
2016	193	1,064	0	1,257	2	0	0	0	0	0
2017	168	1,064	0	1,232	2	0	0	0	0	0
2018	173	1,064	0	1,237	2	0	0	0	0	0
2019	178	1,064	0	1,241	2	0	0	0	0	0
2020	183	L.064	0	1,246	2	0	0	0	0	0
2021	188	1,064	0	1,251	2	0	0	0	0	0
2022	193	1,064	0	1,256	2	0	0	0	0	0
2023	198	1,064	0	1,262	2	0	0	0	0	0
2024	204	1,064	0	1,267	2	0	0	0	0	0
2025	209	1,064	0	1,273	2	0	0	0	0	0
2026	215	1,064	0	1,279	2	0	0	0	0	0
2027	221	1,064	0	1,284	2	0	0	0	a	0
2028	227	1,064	C	1,290	2	0	0	0	0	Ö
2029	233	1,064	0	1,297	2	0	0	0	0	0
2030	240	1,064	ō	1,303	1	Ď	0	ń	D	
2031	246	1,064	ň	1,310	-	Ô	Ď	Ô	0	å
4034	274	1,004	•	14210	•		v	v	v	•

NOM	8,863	24,481	0	33,344	45	0	0	8	0	o o
NPV	4,709	9,185	0	13,894	15	0	0	9	0	0

^{*} SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
** NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE PENEFITS FOR TRC AND RIM TESTS

page 3

rSC FORM CE 1.1A PAGE 1 OF 2

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Business On Call

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
											PRESENT		REPLACEMENT
							***			TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
*****	RATE BASE	DEBT	STOCK.	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	2(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	18,573	577	Q	1,200	786	0	0	729	(3)	3,289	3,289	3,289	18,227
2012	17,848	554	Ð	1,153	516	335	87	729	237	3,613	3,333	6,622	18,227
2013	16,881	524	0	1,091	S14	321	90	729	200	3,469	2,954	9,576	18,773
2014	15,953	495	0	1,031	511	306	93	729	165	3,330	2,617	12,193	19,337
2015	15,059	468	0	973	507	292	96	729	133	3,197	2,318	14,510	19,917
2016	14.197	441	0	917	502	277	98	729	103	3,068	2,052	16,563	20,514
2017	13,365	415	0	864	496	262	101	729	75	2,943	1,817	18,380	21,130
2018	12,560	390	0	812	488	248	104	729	.50	2,822	1,607	19,987	21,763
2019	11,781	366	O	761	461	233	108	729	46	2,704	1,421	21,408	22,416
2020	11,006	342	0	7L1	430	219	111	729	46	2,587	1,255	22,663	23,089
2021	10,231	318	0	661	398	204	114	729	46	2,470	1,106	23,769	23,782
2022	9,456	294	0	611	367	190	118	729	46	2,353	972	24,741	24,495
2023	8,661	270	0	561	335	175	121	729	46	2,237	853	25,594	25,230
2024	7,906	245	0	511	304	160	125	729	46	2,120	746	26,339	25,987
2025	7,131	221	0	461	272	146	128	729	46	2,004	650	26,990	26,766
2026	6,356	197	0	411	241	131	132	729	46	1,887	565	27,555	27,569
2027	5,582	173	0	361	209	117	136	729	46	1,771	489	28,044	28,396
2028	4,807	149	0	311	178	102	140	729	46	1,655	422	28,466	29,248
2029	4,032	125	0	261	146	87	145	729	46	1,539	362	28,829	30,126
2030	3,257	101	0	210	115	73	149	729	46	1,423	309	29,138	31,030
2031	2,482	77	o,	160	238	58	153	729	(109)	1,308	262	29,400	31,960
2032	1,862	58	0	120	368	44	158	729	(264)	1,213	224	29,624	32,919
2033	1,396	43	U	90	349	29	163	729	(264)	1,140	194	29,818	33,907
2034	931	29	0	60	330	15	168	729	(264)	1,067	168	29,986	34,924
2035	465	14	0	30	311	(0)	173	729	(264)	994	144	30,131	35,972

18,227
2011
25
38.575
8.4%
2.00%
0.48%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	7
DRBT	45%	6.90	%
P/S	0%	0.00	9/
C/S	55%	11.75	%

K-FACTOR # CPWFC/IN-SVC COST =

page 4a

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ

PAGE 2a OF 2

PROGRAM NAME: Business On Call

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(iii)	(12)	(13)	(14)	(15)
			ACCUMULATED			BOOK DEPRECIATION	ACCUMULATED BOOK DEPR	DEFERRED TAX	TOTAL.	*****	(1011/11)	A.775.07	ANNUAL	ACCUMULATED
	TAX	TAX	XAT	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(10)+(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DHPRECIATION	DEPRECIATION	DEPRECIATION	DEFERRED TAX		DEPRECIATION	AFUDC	RATE MINUS 1/LIFE	TAX RATB \$(000)	TAX RATE \$(000)	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	MINUS I/LIFE	2(000)	3(000)	\$(000)	\$(000)
2011	3.75%	674	674	729	729	683	683	(3)	1,142	U	0	0	(3)	(350)
2012	7.22%	1,298	1,973	729	1,458	683	1,367	237	1,142	0	0	0	237	(113)
2013	6.68%	1,201	3,173	729	2,187	683	2,050	200	1,142	8	0	0	200	87
2014	6.18%	1,111	4,285	729	2,916	683	2,733	165	1,142	0	0	0	165	252
2015	5.71%	1,027	5,312	729	3,645	683	3,417	133	1,142	0	0	0	133	384
2016	5.29%	950	6,262	729	4,374	683	4,100	103	1,142	0	0	0	103	487
2017	4.89%	879	7,141	729	5,103	683	4,784	75	1,142	0	0	0	75	563
2018	4.52%	813	7,954	729	5,833	683	5,467	50	1,142	0	0	0	50	613
2019	4.46%	802	8,757	729	6,562	683	6,150	46	1,142	0	0	0	46	659
2020	4.46%	B02	9,559	729	7,291	683	6,834	46	1,142	0	0	0	46	705
2021	4.46%	602	10,361	729	8,020	683	7,517	46	1,142	0	0	0	46	751
2022	4.46%	802	11,164	729	8,749	683	8,200	46	l,142	0	0	0	46	797
2023	4.46%	802	11,966	729	9,478	683	8,884	46	1,142	0	0	0	46	842
2024	4.46%	802	12,768	729	10,207	683	9,567	46	1,142	0	0	G.	46	888
2025	4.46%	602	13,571	729	10,936	683	10,251	46	1,142	0	0	0	46	934
2026	4.46%	802	14,373	729	11,665	683	10,934	46	1,142	0	0	0	46	980
2027	4.46%	802	15,175	729	12,394	683	11,617	46	1,142	0	0	0	46	1,026
2028	4.46%	802	15,977	729	13,123	683	12,301	46	1,142	0	0	0	46	1,072
2029	4.46%	802	16,780	729	13,852	683	12,984	46	1,142	0	0	0	46	1,118
2030	4.46%	802	17,562	729	14,581	683	13,667	46	1,142	0	0	0	46	1,164
2031	2.23%	401	17,983	729	15,310	683	14,351	(109)	1,142	0	0	0	(109)	1.055
2032	0.00%	0	17,983	729	16,039	683	15,034	(264)	1,142	0	0	0	(264)	791
2033	0.00%	0	17,983	729	16,768	683	15,718	(264)	1,142	0	0	0	(264)	527
2034	0.00%	0	17,983	729	17,498	683	16,401	(264)	1,142	0	0	0	(264)	264
2035	0.00%	0	17,983	729	18,227	683	17,084	(264)	1,142	0	0	0	(264)	0

SALVAGE/REMOVAL COST	0.00
YEAR SALVAGE/COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(347)
TOTAL EQUITY APUDC CAPITALIZED (SEE PAGE 5)	1,142
BOOK DEPR RATE - I/USHFUL LIFE	4.60%

FYGE 3P OE 3 ° ℃, ŁOKW GE FIV

PROCRAM NAME: Business On Call DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION

qp a3ed

233	0	462	0	18,227	(0)	(197)	0	%00'0	2032
869	594	166	364	864,TI	67L	(594)	0	%00 D	\$602
1,163	166	96E'T	LTS	89L*91	854°T	(594)	0	%00.0	2033
1'629	96E'T	T98'T	167	6E0'9T	2,187	(264)	0	%00.0	2032
2,172	Z98'ĭ	2,482	1,055	15,310	5'676	(601)	401	2,23%	TEOZ
7869	2482	722,E	1,164	14'281	\$\$9E	9≱	208	%9VV	2030
₩9 ° E	3,257	4'033	1,118	13,852	ቱረ ፍ'ቱ	9₽	208	%9V'V	5056
614,4	4,032	4'801	1,072	£21,E1	2'103	94	208	%9V V	2028
161'S	708,₽	285,2	1,026	12,394	££8'\$	94	802	%9V V	3033
696'\$	Z82,2	956,3	086	599*11	295'9	94	208	%97'V	5056
644'9	95£,3	TEL'L	PC6	966'01	1,291	94	208	%91°b	3052
615'L	7,131	906°L	888	10,207	8,020	94	803	%9F b	2024
8,294	906°L	189'8	843	841.6	8,749	94	802	94911	2023
690'6	189'8	9546	L6L	6 1 749	844.6	97	Z08	%9b.h	2022
9,844	9516	162,01	152	8,020	10,207	9\$	892	%9b*b	2021
619'01	10,231	11,006	20£	7,291	986'01	91	803	%9b'b	3050
11,394	11'006	187,11	689	292'9	11'992	94	802	%9 b *b	2019
12,171	11,781	12,560	£19	EE8,2	12,394	05	EIS	4.52%	SOIB
15,962	15.560	73°392	€9⊊	EDT'S	13,123	SL	836	%68°V	2017
187,51	13'363	<i>L</i> 61'11	L8 *	የ ሬፎ' የ	13,852	€01	056	%67°S	5016
14'958	161 PT	650'51	78€	3'645	185,41	EEI	1,027	%16.2	2015
905'5 T	12 026	E\$6'\$1	252	5916	12'310	\$91	1,11,1	%81'9	PIOZ
∠1 1₽′91	12,953	18B ' 9T	Z8	7.81,2	16,039	300	1,201	%89 ⁻ 9	2013
17,364	188'91	81/8,7.1	(EIT)	1"428	B9L*91	LEZ	86Z*I	%ZT.7	2012
18,210	848'LT	£45,81	(05E)	67.L	867'LF	(£)	\$4.9	%\$L°C	5013
\$(000)	(000)\$	2(000)	2(000)	2(000)	\$(000)	(000)\$	(000)\$	SCHROUTE	YEAR
H2AG BTAA	BASE	HZAH	DEF TAXES	DEPRECIATION	SEKAICE	XAT	DEPRECIATION	DEPRECIATION	
MID-YEAR	KEAK KATH	YEAR RATE	ACCUMULATED	GETTAJUMUDDA	NI TWAJ9	DEFERRED	XAT	XAT	
	ENDING OB	BEGINNING			Jan				
					HAHY TO				
					CINE				
(8)	(()	(9)	+(qc)	⊕(\$ \$)	(2)	(F)	(£)	(2)	(1)

[&]quot; Сојпин пој гресијеса ји жогуроор

(1)	(2) NO.YEARS	(3) PLANT	(4) CUMULATIVE	(5) YBARLY	(6) ANNUAL	(7) CUMULATIVE AVERAGE
YEAR	BEFORE IN-SERVICE	ESCALATION RATE	ESCALATION FACTOR	EXPENDITURE (%)	SPENDING (\$/kW)	SPENDING (\$/kW)
2006	-j	0.00%	1,000	0.00%	0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00
2008	-3	3.00%	1,061	17.00%	88.76	44.38
2009	-2	3.00%	1.093	59.00%	317.27	247.39
2010	-1	3.00%	1.126	24.00%	132,93	472.50

					100.00%	538.96	•						
			(8)	(8a)*	(8b)*	(9)	(9a)*	(9b)+	(9c)*	(9d)*	(9a)+	(10)	an
			CUMULATIVE		CUMULATIVE	YEARLY	CUMULATIVE	CONSTRUCTION			CUMULATIVE	INCREMENTAL	COMULATIVE
		NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
		BRFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
	YEAR	IN-SERVICE	(\$/kW)	(3/kW)	(5/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(S/k:W)
-	2006	-3	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00
	2007	-4	0.00	0.00	6.00	0.00	0.00	0.00	0.00	00,0	0.00	0.00	0.00
	2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
	2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
	2010	-1	495,69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

	24.71	D2.40		34.55		(23.43)	001.30
			BOOK BASIS	BOOK BASIS FOR DBF TAX	TAXBASIS		
IN SERVICE YEAR 2011		CONSTRUCTION CASH	16,335	16,335	16,335		
PLANT COSTS 492.12		EQUITY AFUDC	1.142	1		1	
AFUDC RATE 7.84%		DEBT AFUDC	749	749			
		CPI			1,647		
		TOTAL	18,227	17,084	17,963		

^{*} Column not specified in workbook

INPUT DATA -- PART 2 PROGRAM METHOD SELECTED : REV_REQ PROGRAM NAME: Business On Call

(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
	CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
	TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
	PARTICIPATING	PARTICIPATING	FUEL COST	FURL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
YEAR	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
2006	0	0	7.71	10.98	7.71	0.00	1.00	0.28
2007	6,770	6,770	7.74	9.78	7.74	0.00	1.00	3.00
2008	13,540	13,540	6,46	9.25	6.46	0.00	1.00	1,00
2009	20,064	20,064	6.20	8.21	6.20	0.00	1.00	1.00
2010	26,588	26,588	5.58	7.27	5.58	0.00	1.00	1.00
2011	26,588	26,588	5.89	7.78	5.89	7.52	1.00	0.28
2012	26,588	26,588	6.06	8.14	6.06	6,80	1.00	1,00
2013	26,588	26,588	6.29	8.57	6.29	7.65	1.00	1.00
2014	26,588	26,588	6.43	9.00	6.43	8,10	1.00	1.00
2015	26,588	26,588	6.79	9.42	6.79	7.74	1.00	1.00
2016	26,586	26,588	7.14	10,16	7.14	9.08	1.00	1.00
2017	26,588	26,588	7.21	11.09	7.21	9.93	1.00	1.00
2018	26,588	26,588	7.67	12.02	7.67	9.87	1,00	1.00
2019	26,588	26,588	8.05	12.83	8,05	10.52	1.00	1.00
2020	26,588	26,588	8.30	13.65	8.30	10.44	1.00	1.00
2021	26,588	26,588	8,51	14.12	8,51	12.95	1.00	1.00
2022	26,588	26,588	8.73	14.56	8,73	10.56	1.00	1.00
2023	26,588	26,588	8.86	14,98	8,86	11.55	1.00	1.00
2024	26,588	26,588	8.91	15.26	8.91	15.91	1.00	1.00
2025	26,588	26,588	9.22	15.74	9.22	14.25	1.00	1,00
2026	26,588	26,588	9.42	16.26	9.42	15.42	1.00	1.00
2027	26,588	26,588	9.66	16,66	9.66	17.44	1.00	1.00
2028	26,588	26,588	9.85	17.11	9.85	15.36	1.00	1.00
2029	26,588	26,588	10.04	17.50	10.04	16.09	1.00	1.00
2030	26,588	26,588	10.24	17.90	10.24	18.01	1.00	1.00
2031	26,588	26,588	10.54	18.49	10.54	13.65	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 BUEL COSTS.

AVOIDED GENERATING BENEFITS PROGRAM METHOD SRLECTED; REV_REQ PROGRAM NAME: Business On Call

YBAR	(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 GBN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
2006	0	0	0	0	<u>0</u>	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	n	0
2010	0	0	0	0	0	0
2011	3,289	1,165	10	708	842	4,330
2012	3,613	1,220	16	1,134	1,167	4,815
2013	3,469	1,277	33	2,369	2,604	4,545
2014	3,330	1,335	39	2,775	3,126	4,353
2015	3,197	1,395	62	4.488	4,655	4,486
2016	3,068	1,458	68	5,142	5,863	3,873
2017	2,943	1,524	51	4,021	4,674	3,865
2018	2,822	1,594	50	4,056	4,441	4,081
2019	2,704	1,667	45	3,722	4,124	4,014
2020	2,587	1,743	38	3,205	3,356	4,217
2021	2,470	1,823	38	3,255	4,093	3,494
2022	2,353	1,906	33	2,798	2,781	4,309
2023	2,237	1,991	30	2,612	2,746	4,124
2024	2,120	2,079	23	2,035	2,855	3,402
2025	2,004	2,170	24	2,093	2,545	3,746
2026	1,887	2,265	22	1,968	2,503	3,639
2027	1,771	2,364	21	1,862	2,599	3,420
2028	1,655	2,468	18	1,586	1,987	3,840
2029	1,539	2,576	17	1,524	1,842	3,814
2030	1,423	2,689	15	1,350	1,768	3,708
2031	1,308	2,806	14	1,278	1,227	4,178

NOM	51,788	39,517	668	53,980	61,700	84,253
NPV	19,670	11,706	242	18,981	21,390	29,207

PAGE LOF 1 LORM CE 2.2

PROGRAM NAME: Business On Call AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ

bete 8

715 336	175 11011	₽72 1,601	Z6Z	LLZ	001,01	1,123 3,566	712.2	Mon
OCE	1101	109 1	E†6	659	701'91	995 E	13,536	MOM.
61	59	08	†9	ST	PES	243	361	2031
81	Z9	87	79	91	242	Sez	60€	2030
81	19	91.	65	Δī	ESS	ezz	330	6Z0Z
gr	09	SL	LS	61	195	214	253	2028
41	85	b/.	HS	Z0	EB2.	502	87C	2027
Lī	LS	EL	ZS	12	009	961	404	2026
71	SS	7.L	05	53	919	881	430	5052
91	£5 70	7.5	87	54	9E9	081	957	305¢
91	75	17	97	572	922	££1	482	2023
16	os ch	0 <i>L</i>	**	27	£29	\$91	805	2022
\$1 \$1	64	30	7 7	8Z	Z69	128	PES	3031
ST ÞT	4 7	69	01/	53	A11	151	095	2020
ÞĪ	b b	69	8£	IE 70	730	144	985	5076
FI EI	1¢ 38	69 89	SE SE	35	05 <i>L</i>	8ET	Z19	2018 2017
ET ET	₽E	89 89	EE SF	₽€ SE		7£[889	210Z 910Z
۶۱ اع	re re	89 89	2£	9E	218 067	921	199 169	2012
13	0E	89	IE GE	9E	268 218	१८१ १८६	67 <i>L</i>	2012
11	28	6 9	6Z	9t. 6C	688	911 111	81 <i>L</i>	2013
11	4Z	69	28	DE lv	988 188	901	844	2013
٠٠, د	<i>L</i>	69	LT 8C	42	606	101	808	2013
6	ız	25	61	Σ¢	169	£L.	819	2010
4	41	SE	21	22	146	££ £\$	61.9 453	2009
 b	71	LI LI	9	11	752	22	215	2008
ş	12	0	ó	0	0	0	0	490Z
0	0	o o	ō	ō	0	0	ő	2002
2(000)	2(000)	(000)\$	2(000)	2(000)	(000)\$	2(000)	2(000)	YEAR
PAYBACK	FUEL SAYINGS	COST	OÆM COST	CVP COST	COSL	O&M COST	CAP COST	
OFF-PBAK	PROGRAM	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	MOISSIMEMART	TRANSMISSION	VOISEIMENAST	
MANDON		VAOIDED	GHOIOVA	AVOIDED	AVOIDED	VAOIDED	AVOIDED	
		TATOT			TATOT	***		
-(n8)	(8)	(L)	(9)	(s)	(4)	(E)	(z)	(1)

KNEECA DEVOET DEED LOS FOYD SHIELING EKOCHVING ONLY. • IHERE APPRES BEBEREE'M LHK CO2L OF THE INCREVED FUEL CONSUMPTION DUE TO CREATER OFF-PEAK

TOTAL RESOURCE COST TEST PROGRAM METHOD SBLECTED: REV_REQ PROGRAM NAME: Business On Call

(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 RENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER RENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	0	0	0	Ò	0	0	Ó	0	0	0	0	ņ
2007	0	294	0	0	294	G G	0	7	0	7	(287)	(265)
2008	0	565	e	0	565	0	255	7	0	262	(303)	(523)
2009	0	811	0	0	811	0	505	10	0	515	(296)	(755)
2010	0	1,047	a	0	1,047	n	743	12	0	755	(292)	(967)
2011	0	963	0	0	963	4,330	978	4	0	5,312	4,349	1,943
2012	0	753	a	0	753	4,815	952	16	0	5,784	5,030	5,048
2013	0	571	0	0	571	4,545	927	17	0	5,489	4,918	7,850
2014	0	382	a	0	382	4,353	903	18	0	5,274	4,892	10,422
2015	0	207	0	0	207	4,486	880	19	0	5,385	5,178	12,933
2016	0	193	0	0	193	3,873	859	21	U	4,753	4,560	14.975
2017	0	168	0	0	168	3,865	838	25	0	4,728	4,560	16,858
2018	0	173	0	0	173	4,081	818	27	0	4,926	4,753	18,670
2019	0	178	0	0	178	4,014	799	30	0	4,843	4,665	20,310
2020	0	183	0	0	183	4,217	780	32	0	5,030	4,847	21,883
2021	0	788	0	0	188	3,494	762	34	0	4,289	4,102	23,112
2022	0	193	0	0	193	4,309	744	35	0	5,087	4,895	24,464
2023	0	198	0	0	198	4,124	726	36	0	4,886	4,688	25,660
2024	0	204	0	0	204	3,402	708	37	0	4,147	3,943	26,587
2025	0	209	0	0	209	3,746	690	38	0	4,474	4,265	27,514
2026	0	215	0	0	215	3,639	674	40	0	4,353	4,138	28,343
2027	ý	221	0	0	221	3,420	657	41	0	4,118	3,897	29,063
2028	0	227	0	0	227	3,840	642	42	0	4,524	4,297	29,796
2029	U	233	0	G.	233	3,814	629	43	0	4,487	4,253	30,466
2030	0	240	0	0	240	3,708	620	44	0	4,373	4,133	31,066
2031	0	246	0	Q	246	4,178	614	46	0	4,838	4,592	31,682

NOM	0	B.863	0	0	8,863	84,253	17,704	682	0	102,638	93,775
	_								-		
NPV	0	4,709	0	0	4,709	29,207	6.974	210	0	36,391	31.682

Discount Rate:

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

8.37 7,73

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Business On Call

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	SAVINGS IN PARTICIPANTS BILLS \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O&M COSTS \$(000)	OTHER COSTS S(000)	TOTAL COSTS \$(000)	NET BENEFITS 3(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	0	0	0	0	0	0	0	. 0	0	0	0
2007	•	0	135	0	136	0	0	0	0	136	126
2008	4	0	406	ð.	407	0	0	O	0	407	472
2009	•	0	672	U	674	0	0	0	0	674	1,002
2010	2	0	933	0	935	0	0	0	0	935	1,680
2011	•	0	1,064	0	1,064	0	0	0	0	1,064	2,392
2012	•	0	1,064	0	1,064	0	0	0	0	1,064	3,049
2013	•	0	1,064	0	1,064	0	0	0	0	1,064	3,655
2014	ن	0	1,064	D	1,066	0	0	0	0	1,066	4,215
2015	j	0	1,064	0	1,066	0	0	0	0	1,066	4,732
2016	j	0	1,064	0	1,066	0	0	Ð	0	1,066	5,210
2017	.3	0	1,064	ð	1,066	0	0	0	0	1,066	5,650
2018	3	0	1,064	0	1,066	0	0	0	0	1,066	6.056
2019	3	a	1,064	0	1,066	0	0	0	0	1,066	6,432
2020	3	p	1,064	0	1,066	0	0	0	0	1,066	6,778
2021	3	Ð	1,064	0	1,066	0	U	0	0	1,066	7,097
2022	3	0	1,064	0	1,066	0	0	0	0	1,066	7,392
2023	3	0	1,064	0	1,067	0	0	0	0	1,067	7,664
2024	3	0	1,064	0	1,067	0	0	0	0	1,067	7,915
2025	3	0	1,064	0	1,067	0	0	0	0	1,067	8,146
2026	3	D	1,064	0	1,067	0	0	0	0	1,067	8,360
2027	3	0	1,064	0	1,067	0	0	0	0	1,067	8,557
2028	3	0	1,064	0	1,067	0	0	0	0	1,067	8,739
2029	3	0	1,064	Ó	1,067	0	D	0	0	1,067	8,907
2030	3	0	1,064	0	1,067	0	0	0	0	1,067	9,062
2031	4	0	1,064	0	1,067	0	0	0	0	1.067	9.205

NOM	61	6	24,481	Λ.	24 542		 		24 642
	• • • • • • • • • • • • • • • • • • • •	•		.,	24,342	U	U	v	24,342
NPV	20	0	9.185	0	0.205	Δ.		•	4.005
146.7	20	· ·		U	9.203	U	 U	U	9,205

in Service of Gen Unit: Discount Rate :

Discount Rate: Benefit/Cost Ratio (Col(6) / Col(10)) 2011 8,37 % Infinite

RATE IMPACT TEST PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Business On Call

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YBAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVANUB LOSSES 3(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED TAD BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BBNEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
2006	Ö	Ō	0	0	0	0	0	0	0	0	0	0	0
2007	0	294	135		0	430	7	0	0	0	7	(423)	(390)
2008	0	565	406	1	0	972	7	255	0	0	262	(716)	(995)
2009	0	811	672	1	a	1,485	10	505	0	0	515	(969)	(1.756)
2010	0	1,047	933	2	0	1,982	12	743	0	0	755	(1,227)	(2,646)
2011	0	963	1,064	0	0	2,027	4,334	978	0	0	5,312	3,285	(448)
2012	0	753	1,064	1	0	1,817	4.831	952	0	0	5,784	3,966	2,001
2013	0	571	1,064		0	1,635	4,562	927	0	0	5,489	3,854	4,197
2014	0	382	1,064	2	0	1,448	4,371	903	0	0	5,274	3,827	6,208
2015	0	207	1,064	2	0	1,273	4,505	880	0	0	5,365	4,112	8,203
2016	0	193	1,064	2	ū	1,259	3,894	859	0	0	4,753	3,495	9,767
2017	0	168	1,064	2	0	1,234	3,890	838	0	0	4,728	3,494	11,211
2018	0	173	1,064	2	0	1,239	4,108	818	0	0	4,926	3,668	12,616
2019	0	178	1,064	2	0	1,243	4,044	799	0	0	4,843	3,599	13,882
2020	0	183	1,064	2	0	1,248	4,250	780	0	Ü	5,030	3,781	15,109
2021	0	188	1,064	2	0	1,253	3,528	762	0	0	4,289	3,036	16,018
2022	0	193	1,064	2	0	1,259	4,344	744	0	0	5,087	3,829	17,076
2023	0	198	1,064	2	0	1,264	4,160	726	0	0	4,886	3,622	18,000
2024	0	204	1,064	2	0	1,269	3,439	708	0	0	4,147	2,877	18,677
2025	0	209	1,064	2	0	1,275	3,784	690	0	0	4,474	3,199	19,372
2026	0	215	1,064	2	0	1,281	3,679	674	0	0	4,353	3,072	19,987
2027	0	221	1,064	2	0	1,287	3,461	657	0	0	4,118	2,831	20,511
2028	Ü	227	1,064	3	0	1,293	3,882	642	0	D	4,524	3,231	21,062
2029	0	233	1,064	2	0	1,299	3,857	629	0	0	4,487	3,187	21,564
2030	0	240	1,064	3	0	1,306	3,752	620	0	0	4,373	3,067	22,009
2031	0	246	1,064	3	0	1,312	4,224	614	0	O	4,838	3,525	22,482

MOM.	0	8,863	24,481	45	Ō	33,389	84,935	17,704	0	0	102,638	69,249
NPV	0	4,709	9,185	15	0	13,909	29,417	6,974	0	0	36,391	22,482

Discount Rate Benefit/Cost Ratio (Col(12) / Col(7)) ; 8.37

INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV REQ PROGRAM NAME: Commericial/Industrial Water Heating

I.	PROGRAM DEMAND SAVINGS & LINE LOSSES		
	(1) CUSTOMER kW REDUCTION AT METER	1.02	kW
	(2) GENERATOR KW REDUCTION PER CUSTOMER	1.37	kW
	(3) kW LINE LOSS PERCENTAGE	9.03	%
	(4) GENERATOR kWh REDUCTION PER CUSTOMER	8,173.56	kWh
	(5) kWh LINE LOSS PERCENTAGE	7.16	%
	(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	26	YEARS
	(2) GENERATOR ECONOMIC LIFE	25	YEARS
	(3) T&D ECONOMIC LIFE	35	YEARS
	(4) K FACTOR FOR GENERATION	1.65312	
	(5) K FACTOR FOR T & D	1.61194	
HY.	UTILITY & CUSTOMER COSTS		
IIY.	UTILITY & CUSTOMER COSTS (1) UTILITY NON RECURRING COST PER CUSTOMER	Mje sale nje	\$/CUST
III.			\$/CUST \$/CUST
III.	(1) UTILITY NON RECURRING COST PER CUSTOMER	the sign also	\$/CUST %**
HT.	(1) UTILITY NON RECURRING COST PER CUSTOMER	tija nje sje Nje nje sje Nje nje sje	\$/CUST %** \$/CUST
ш	(1) UTILITY NON RECURRING COST PER CUSTOMER (2) UTILITY RECURRING COST PER CUSTOMER (3) UTILITY COST ESCALATION RATE	tipa agin agin 'Agin agin agin 'Agin agin agin 'Agin agin agin	\$/CUST %** \$/CUST %**
IIY.	(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.	14 14 14 14 14 14 14 14 14 14 14 14	\$/CUST %** \$/CUST %** \$/CUST/YR
IIY.	(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	100 miles (100 miles) 100 miles (100 miles) 100 miles (100 miles) 100 miles (100 miles) 100 miles (100 miles)	\$/CUST %** \$/CUST %** \$/CUST/YR %**
III.	(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.	*** *** *** *** ***	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR
III.	(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.	***** **** **** **** **** **** **** ****	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %**
III.	(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.	**** *** *** *** *** 8.37	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %** %**
HI.	(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.	*** *** *** *** *** 8.37 7.84	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %** %/** %/** %/**
III.	(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 AFUDC RATE. (12) UTILITY NON RECURRING REBATE/INCENTIVE	*** *** *** *** 8.37 7.84	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %** % % % % % % \$/CUST/YR
III.	(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.	*** *** *** *** 8.37 7.84	\$/CUST %** \$/CUST %** \$/CUST/YR %** \$/CUST/YR %** \$/CUST/YR %** \$/CUST/YR %** % \$/CUST/YR

- 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

v.

(2)	BASE YEAR	2006 2011 2009-2011	
(3) (4)	IN-SERVICE YEAR FOR AVOIDED T&D BASE YEAR AVOIDED GENERATING COST	492.12	\$/kW
(5)	BASE YEAR AVOIDED TRANSMISSION COST	147.00	\$/kW
(6)	BASE YEAR DISTRIBUTION COST	17.27	
(7)	GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
(8)	GENERATOR FIXED O & M COST		\$/kW/YR
(9)	GENERATOR FIXED O&M ESCALATION RATE	4.35	%**
(10	TRANSMISSION FIXED O & M COST	2.68	\$/kW
(11	DISTRIBUTION FIXED O & M COST	0.95	\$/kW
(12	T&D FIXED O&M ESCALATION RATE	4.35	%**
(13	AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14	GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99	%**
À15	GENERATOR CAPACITY FACTOR	4%	** (In-service year)
(16	AVOIDED GENERATING UNIT FUEL COST	6.32	CENTS PER kWh** (In-service year)
	AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44	%**
NC	N-FUEL ENERGY AND DEMAND CHARGES		
(1)	NON FUEL COST IN CUSTOMER BILL	Mitherale	CENTS/kWh
(2)	NON-FUEL COST ESCALATION RATE	444	%
(3)	DEMAND CHARGE IN CUSTOMER BILL	***	\$/kW/MO
(4)	DEMAND CHARGE ESCALATION RATE	040	%

* INPUT DATA -- PART I CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Heating

		(1) UTI LIT Y	(2)	(3)	(4) TOTAL	(5) ENERGY	(6) DEMAND	(7)	(8)	(9)	(10)
		PROGRAM COSTS		OTHER	UTILITY	CHARGE	CHARGE	PARTICIPANT	PARTICIPANT	OTHER	TOTAL
		WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
		INCENTIVES	INCENTIVES	COSTS	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
	YEAR	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
_	2006	0	0	0	0	0	0	0	0	. 0	0
	2007	11	134	0	145	34	6	497	0	0	497
	2008	12	145	0	158	103	18	550	0	0	550
	2009	14	155	0	169	182	30	601	0	0	601
	2010	15	165	0	179	269	41	653	0	0	653
	2011	0	0	0	0	321	45	0	0	0	0
	2012	0	0	0	0	326	45	0	0	0	0
	2013	0	0	0	0	334	44	0	0	0	0
	2014	0	0	0	0	338	44	0	0	0	0
	2015	0	0	0	0	345	43	0	0	0	0
	2016	0	0	0	0	351	42	0	0	0	0
	2017	14	134	0	149	358	42	640	0	0	640
	2018	16	145	0	161	366	42	712	0	0	712
	2019	18	155	0	173	374	42	783	0	0	783
	2020	19	165	0	184	383	42	853	0	O	853
	2021	0	0	0	0	389	42	0	0	0	0
	2022	0	0	0	0	402	43	0	0	0	0
	2023	0	0	0	0	409	43	0	0	0	0
	2024	0	0	0	0	418	43	0	0	0	0
	2025	0	0	G	0	427	43	0	0	0	0
	2026	0	0	0	0	437	43	0	0	0	0
	2027	19	134	0	153	447	43	839	0	0	839
	2028	21	145	0	166	456	43	933	0	0	933
	2029	23	155	0	178	467	43	1,026	0	0	1,026
	2030	25	165	0	190	477	43	1,118	0	0	1,118
	2031	0	0	0	0	488	43	0	0	0	0

NOM	208	1,798	- 0 -	2,006	8,902	995	9,205	0	0	9,205
NPV	81	806	0	887	3.089	378	3.599	0	0	3,599
					-,					2,327

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

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Commericia/Industrial Water Heating

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	572	18	0	37	24	0	0	22	(0)	101	101	101	561
2012	550	17	0	36	16	10	3	22	7	111	103	204	561
2013	520	16	0	34	16	10	3	22	6	107	91	295	578
2014	491	15	0	32	16	9	3	22	5	103	81	376	596
2015	464	14	0	30	16	9	3	22	4	98	71	447	614
2016	437	14	0	28	15	9	3	22	3	95	63	510	632
2017	412	13	0	27	15	8	3	22	2	91	56	566	651
2018	387	12	0	25	15	8	3	22	2	87	50	616	670
2019	363	11	0	23	14	7	3	22	l	83	44	660	691
2020	339	11	0	22	13	7	3	22	1	80	39	698	711
2021	315	10	0	20	12	6	4	22	1	76	34	732	733
2022	291	9	0	19	11	6	4	22	1	72	30	762	755
2023	267	8	0	17	10	5	4	22	1	69	26	788	777
2024	244	8	0	16	9	5	4	22	1	65	23	811	801
2025	220	7	0	14	8	4	4	22	1	62	20	831	825
2026	196	6	0	13	7	4	4	22	1	58	17	849	849
2027	172	5	0	11	6	4	4	22	1	55	15	864	875
2028	148	5	0	10	5	3	4	22	1	51	13	877	901
2029	124	4	0	8	5	3	4	22	1	47	11	888	928
2030	100	3	0	6	4	2	5	22	1	44	10	898	956
2031	76	2	0	5	7	2	5	22	(3)	40	8	906	985
2032	57	2	0	4	11	1	5	22	(8)	37	7	913	1,014
2033	43	1	0	3	11	1	5	22	(8)	35	6	919	1,045
2034	29	1	0	2	10	0	5	22	(8)	33	5	924	1,076
2035	14	0	0	ı	10	(0)	5	22	(8)	31	4	928	1,108

IN SERVICE COST (\$000)	561
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38.575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	7
DEBT	45%	6.90	7
P/S	0%	0.00	%
C/S	55%	11.75	%

K-FACTOR = CPWFC / IN-SVC COST =

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Heating

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
							ACCUMULATED	DEFERRED						
			ACCUMULATED		ACCUMULATED		BOOK DEPR	TAX	TOTAL				ANNUAL	ACCUMULATED
	TAX	TAX	TAX	BOOK	BOOK	FOR	FOR	DUE TO	EQUITY	BOOK DEPR	(10)*(11)	SALVAGE	DEFERRED TAX	DEFERRED
	DEPRECIATION	DEPRECIATION	DEPRECIATION	DEPRECIATION				DEPRECIATION	AFUDC	RATE	TAX RATE	TAX RATE	(9)-(12)+(13)	TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	MINUS I/LIFE	\$ (000)	\$(000)	\$(000)	\$(000)
2011	3.75%	21	21	22	22	21	21	(0)	35	0	0	0	(0)	(11)
2012	7.22%	40	61	22	45	21	42	7	35	0	0	0	7	(3)
2013	6.68%	37	98	22	67	21	63	6	35	0	0	0	6	3
2014	6.18%	34	132	22	90	21	84	5	35	0	0	0	5	8
2015	5.71%	32	164	22	112	21	105	4	35	0	0	0	4	12
2016	5.29%	29	193	22	135	21	126	3	35	0	0	0	3	15
2017	4.89%	27	220	22	157	21	147	2	35	0	0	0	2	17
2018	4.52%	25	245	22	180	21	168	2	35	0	0	0	2	19
2019	4.46%	25	270	22	202	21	189	1	35	0	0	0	1	20
2020	4.46%	25	294	22	225	21	211	1	35	0	0	0	1	22
2021	4.46%	25	319	22	247	21	232	1	35	0	0	0	1	23
2022	4.46%	25	344	22	270	21	253	1	35	0	0	0	1	25
2023	4.46%	25	369	22	292	21	274	1	35	0	0	0	1	26
2024	4.46%	25	393	22	314	21	295	1	35	0	0	0	1	27
2025	4,46%	25	418	22	337	21	316	1	35	0	0	0	1	29
2026	4.46%	25	443	22	359	21	337	1	35	0	0	0	1	30
2027	4.46%	25	467	22	382	21	358	1	35	0	0	0	1	32
2028	4.46%	25	492	22	404	21	379	1	35	0	0	0	1	33
2029	4.46%	25	517	22	427	21	400	1	35	0	0	0	1	34
2030	4.46%	25	542	22	449	21	421	1	35	0	0	0	1	36
2031	2.23%	12	554	22	472	21	442	(3)	- 35	0	0	0	(3)	32
2032	0.00%	0	554	22	494	21	463	(8)	35	0	0	0	(8)	24
2033	0.00%	0	554	22	517	21	484	(8)	35	0	0	0	(8)	16
2034	0.00%	0	554	22	539	21	505	(8)	35	0	0	0	(8)	8
2035	0.00%	0	554	22	561	21	526	(8)	35	0	0	0	(8)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(11)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	35
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Healing

(1)	(2)	(3)	(4)	(5) END OF YEAR	(5a)*	(5b)*	(6)	(7)	(8)
				NET			BEGINNING	ENDING OF	
	TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
	DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	21	(0)	539	22	(11)	572	550	561
2012	7.22%	40	7	517	45	(3)	550	520	535
2013	6.68%	37	6	494	67	3	520	491	506
2014	6.18%	34	5	472	90	8	491	464	478
2015	5.71%	32	4	449	112	12	464	437	451
2016	5.29%	29	3	427	135	15	437	412	425
2017	4.89%	27	2	404	157	17	412	387	399
2018	4.52%	25	2	382	180	19	387	363	375
2019	4.46%	25	1	359	202	20	363	339	351
2020	4.46%	25	1	337	225	22	339	315	327
2021	4.46%	25	1	314	247	23	315	291	303
2022	4.46%	25	1	292	270	25	291	267	279
2023	4.46%	25	1	270	292	26	267	244	256
2024	4.46%	25	i	247	314	27	244	220	232
2025	4.46%	25	l	225	337	29	220	196	208
2026	4.46%	25	ł	202	359	30	196	172	184
2027	4.46%	25	1	180	382	32	172	148	160
2028	4.46%	25	1	157	404	33	148	124	136
2029	4.46%	25	1	135	427	34	124	100	112
2030	4.46%	25	1	112	449	36	100	76	88
2031	2.23%	12	(3)	90	472	32	76	57	67
2032	0.00%	0	(8)	67	494	24	57	43	50
2033	0.00%	0	(8)	45	517	16	43	29	36
2034	0,00%	0	(8)	22	539	8	29	14	22
2035	0.00%	0	(8)	(0)	561	0	14	0	7

^{*} Column not specified in workbook

(1)	(2) NO.YEARS BEFORE	(3) PLANT ESCALATION	(4) CUMULATIVE ESCALATION	(5) YEARLY EXPENDITURE	(6) ANNUAL SPENDING	(7) CUMULATIVE AVERAGE SPENDING
YEAR	IN-SERVICE	RATE	FACTOR	(%)	(\$/kW)	(\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2007	-4	3.00%	1.030	0.00%	0.00	0.00
2008	-3	3.00%	1.061	17.00%	88.76	44.38
2009	-2	3.00%	1.093	59.00%	317.27	247.39
2010	-1	3.00%	1.126	24.00%	132.93	472.50

				100.00%	538.96	-						
		(8) CUMULATIVE	(8a)*	(8b)* CUMULATIVE	(9) YEARLY	(9a)* CUMULATIVE	(9b)* CONSTRUCTION	(9c)*	(9d)*	(9e)* CUMULATIVE	(10) INCREMENTAL	(11) CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0.00	0,00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2010	-1	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

	24.71	62.40		54.35		(11.43)	601.36
						1	
			BOOK BASIS	FOR DEF TAX	TAX BASIS		
2011		CONSTRUCTION CASH	503	503	503		
492.12		EQUITY AFUDC	35				
7.84%		DEBT AFUDC	23	23			
		СРІ			51		
		TOTAL	561	526	554		
	492.12	492.12	492.12 EQUITY AFUDC 7.84% DEBT AFUDC CPI	2011 CONSTRUCTION CASH 503 492.12 EQUITY AFUDC 35 7.84% DEBT AFUDC 23 CPI	2011 CONSTRUCTION CASH 503 503 492.12 EQUITY AFUDC 35 7.84% DEBT AFUDC 23 23 CPI	BOOK BASIS FOR DEF TAX TAX BASIS	BOOK BASIS FOR DEF TAX TAX BASIS

^{*} Column not specified in workbook

INPUT DATA — PART 2 PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Heating

(1)	(2)	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
	CUMULATIVE	ADJUSTED	AVERAGE	AVOIDED	INCREASED			
	TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
	PARTICIPATING	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
YEAR	CUSTOMERS	CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
2006	0	0	7.71	8.23	9.66	0.00	1.00	1.00
2007	152	152	7.74	8.04	9.57	0.00	1.00	1.00
2008	317	317	6.46	6.78	8.39	0.00	1.00	1.00
2009	493	493	6.20	6.52	8.04	0.00	1.00	1.00
2010	680	680	5,58	5.87	7.27	0.00	1.00	1.00
2011	680	680	5.89	6.19	7.73	7.52	1.00	1.00
2012	680	680	6.06	6.37	7.94	6.80	1.00	1.00
2013	680	680	6.29	6.64	8.37	7.65	1.00	1.00
2014	680	680	6.43	6.80	8.72	8.10	1.00	1.00
2015	680	680	6.79	7.17	9.07	7.74	1.00	1.00
2016	680	680	7.14	7.53	9.80	9.08	1.00	1.00
2017	680	680	7.21	7.57	10.61	9.93	1.00	1.00
2018	680	680	7.67	8.04	11.48	9.87	1.00	1.00
2019	680	680	8.05	8.43	12.23	10.52	1.00	1.00
2020	680	680	8.30	8.65	12.93	10.44	1.00	1.00
2021	680	680	8.51	8,86	13.41	12.95	1.00	1.00
2022	680	680	8.73	9.06	13.64	10.56	1.00	1.00
2023	680	680	8.86	9.18	13.82	11.55	1.00	1.00
2024	680	680	8.91	9.17	13.58	15.91	1.00	1.00
2025	680	680	9.22	9.48	14.00	14.25	1.00	1.00
2026	680	680	9.42	9.66	14.10	15.42	1.00	1.00
2027	680	680	9.66	9.88	14.30	17.44	1.00	1.00
2028	680	680	9,85	10.03	14.10	15.36	1.00	1.00
2029	680	680	10.04	10.21	14.02	16.09	1.00	1.00
2030	680	680	10.24	10.39	13.91	18.01	1.00	1.00
2031	680	680	10.54	10.69	14.08	13.65	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.

006	659	282	L	19€	909	ΛdN
2,596	106'1	£99'I	21	712,1 T	565°T	MON

	159	8€	6E	0	98	40	2031
	ÞΙΙ	₽Ş	45	0	€8	*	2030
	411	۷5	LÞ	ī	64	LÞ	5059
	811	89	6Þ	ĭ	94	ις	2028
	SOT	08	۷S	Ĭ	€L	SS	2027
	711	LL	19	ī	۵۲	85	2026
	112	84	19	t	L9	79	2025
	501	88	69	τ	179	59	2024
	121	\$8	08	ī	19	69	2023
	EET	98	98	t	69	ZL	2022
	108	156	100	I	99	94	2021
	130	103	66	ī	1/5	08	2020
	154	LZI	511	I	15	€8	2019
	136	LEI	172	7	64	LR	2018
	611	144	154	7	LV	16	2017
	611	181	158	7	54	\$6	5016
	861	143	138	7	43	86	2015
	ÞEI	96	58	ī	11	103	2014
	0⊅ī	08	£L.	ī	6E	L01	2013
	8 † I	98	SE	Ī	8€	111	2012
	133	56	77	0	9€	101	2011
	0	0	0	0	0	0	2010
	0	0	0	0	0	0	5005
	0	0	o o	0	0	0	2008
	0	0	0	0	0	0	4002
	0	0	0	0	0	0	2002
-	(000)\$	2(000)	2(000)	2(000)	2(000)	(000)\$	ХEVК
	HENELLS	FUEL COST	FUEL COST	VARIABLE O&M	FIXED O&M	CAPACITY COST	

BKOGKYM NAVIE: Commeticialinguritial Water Heading AVOIDED GENEKTING BENEKTIS AVOIDED GENEKTING BENEKTIS

GEN DNIL

VAOIDED

(t)

GEN UNIT

(3)

CEN UNIT

AVOIDED

CEN DALL

(7)

REPLACEMENT

(9)

GEN DNIL

(ç)

AVOIDED

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Heating

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	51	0
2008	6	1	6	1	0	1	132	0
2009	12	l	13	1	0	1	220	0
2010	18	2	21	2	i	2	286	0
2011	25	3	28	2	1	3	350	0
2012	24	3	27	2	1	3	360	0
2013	23	3	27	2	1	3	376	0
2014	22	4	26	2	1	3	385	0
2015	21	4	25	2	1	3	406	0
2016	21	4	24	2	1	3	426	0
2017	20	4	24	2	1	3	428	0
2018	19	4	23	2	1	3	454	0
2019	18	4	23	2	1	3	476	0
2020	17	5	22	2	1	3	488	0
2021	17	5	21	1	1	3	499	0
2022	16	5	21	1	1	3	510	0
2023	15	5	20	1	1	3	516	0
2024	14	6	20	1	1	3	515	0
2025	13	6	19	1	2	3	532	0
2026	13	6	19	1	2	3	541	0
2027	12	6	18	1	2	3	553	0
2028	11	7	18	1	2	3	561	0
2029	10	7	17	1	2	3	571	0
2030	10	7	17	1	2	3	581	0
2031	9	7	17	1	2	3	597	0

NOM.	386	110	495	34	29	63	10,813	0
NPV	161	34	196	14	9	23	3,694	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: Commericia/Industrial Water Heatin

PROGRAM METHOD SELECTED: REV_REQ	
ROGRAM NAME: Commericial/Industrial Water Heating	

(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)
2006	0	0	0	0	0	0	Ö	0	0	0	0	0
2007	0	11	497	0	509	0	0	51	0	51	(458)	(423)
2008	0	12	550	0	562	0	7	132	0	139	(423)	(783)
2009	0	14	601	0	615	0	15	220	0	234	(381)	(1,082)
2010	0	15	653	0	668	0	23	286	0	309	(359)	(1,343)
2011	0	0	0	0	0	133	31	350	0	515	515	(998)
2012	0	0	0	0	0	148	30	360	0	538	538	(666)
2013	0	0	0	0	0	140	29	376	0	545	545	(355)
2014	0	0	0	0	0	134	29	385	0	548	548	(67)
2015	0	0	0	0	0	138	28	406	0	572	572	210
2016	0	0	0	0	0	119	27	426	0	573	573	467
2017	0	14	640	0	654	119	27	428	0	573	(81)	433
2018	0	16	712	0	728	126	26	454	0	606	(122)	387
2019	0	18	783	0	800	124	25	476	0	625	(176)	325
2020	0	19	853	0	872	130	25	488	0	642	(230)	251
2021	0	0	0	0	0	108	24	499	0	631	631	440
2022	0	0	0	0	0	133	24	510	0	667	667	624
2023	0	0	0	0	0	127	23	516	0	666	666	794
2024	0	0	0	0	0	105	22	515	0	642	642	945
2025	0	0	0	0	0	115	22	532	0	669	669	1,090
2026	0	0	0	0	0	112	21	541	0	675	675	1,225
2027	0	19	839	0	858	105	21	553	0	680	(179)	1,192
2028	0	21	933	0	954	118	20	561	0	700	(254)	1,149
2029	0	23	1,026	0	1,049	117	20	571	0	708	(341)	1,095
2030	0	25	1,118	0	1,143	114	20	581	0	714	(429)	1,033
2031	0	0	0	0	0	129	19	597	0	745	745	1,133

NOM 0 208 9,205 0 9,413 2,596 558 10,813 0								 			
	NOM	0	208	9,205	0	9,413	2,596	10,813	0	13,967	4,554
NPV 0 81 3,599 0 3,680 900 219 3,694 0		0		3,599	0	3,680	900		0	4,813	1,133

Discount Rate:

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

8.37 1.31

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericia/Industrial Water Heating

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN				mom.r	CUSTOMER	CHINDON CITY	0000	momus) W7000	CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	CUSTOMER	OTHER	TOTAL	NET	DISCOUNTED
****	BILLS	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	O&M COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0	0	0	0
2007	52	0	134	0	186	497	0	0	497	(311)	(287)
2008	157	0	145	0	302	550	0	0	550	(247)	(498)
2009	276	0	155	0	432	601	0	0	601	(170)	(631)
2010	405	0	165	0	570	653	0	0	653	(84)	(692)
2011	478	0	0	0	478	0	0	0	0	478	(372)
2012	485	0	0	0	485	0	0	0	0	485	(73)
2013	495	0	0	0	495	0	0	0	0	495	209
2014	501	0	0	0	501	0	0	0	0	501	473
2015	509	0	0	0	509	0	0	0	0	509	720
2016	517	0	0	0	517	0	0	0	0	517	951
2017	526	0	134	0	660	640	0	0	640	20	959
2018	537	0	145	0	682	712	0	0	712	(30)	948
2019	548	0	155	0	703	783	0	0	783	(80)	920
2020	559	0	165	0	724	853	0	0	853	(129)	878
2021	568	0	0	0	568	0	0	0	0	568	1,048
2022	586	0	0	0	586	0	0	0	0	586	1,210
2023	595	0	0	0	595	0	0	0	0	595	1,362
2024	607	0	0	0	607	0	0	0	0	607	1,505
2025	620	0	0	0	620	0	0	0	0	620	1,639
2026	633	0	0	0	633	0	0	0	0	633	1,766
2027	646	0	134	0	780	839	0	0	839	(59)	1,755
2028	660	0	145	0	805	933	0	0	933	(128)	1,733
2029	674	0	155	0	829	1,026	0	0	1,026	(197)	1,702
2030	688	0	165	0	852	1,118	0	0	1,118	(265)	1,664
2031	702	0	0	0	702	0	0	0	0	702	1,758

NOM	13,024	0	1,798	0	14,822	9,205	0	0	9,205	5,617
NPV	4,552	0	806	0	5,357	3,599	0	0	3,599	1,758

In Service of Gen Unit: Discount Rate :

Discount Rate :
Benefit/Cost Ratio (Col(6) / Col(10))

2011 8.37 1.49

RATE IMPACT TEST PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Water Heating

(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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	11	134	40	0	185	51	0	0	0	51	(135)	(124)
2008	0	12	145	121	0	278	132	7	0	0	139	(139)	(243)
2009	0	14	155	212	0	381	220	15	0	0	234	(147)	(358)
2010	0	15	165	310	0	490	286	23	0	0	309	(181)	(490)
2011	0	0	0	365	0	365	483	31	0	0	515	149	(390)
2012	0	0	0	370	0	370	508	30	0	0	538	168	(286)
2013	0	0	0	378	0	378	516	29	0	0	545	168	(191)
2014	0	0	0	382	0	382	519	29	0	0	548	166	(104)
2015	0	0	0	388	0	388	544	28	0	0	572	184	(14)
2016	0	0	0	393	0	393	546	27	0	0	573	180	66
2017	0	14	134	400	0	548	547	27	0	0	573	25	76
2018	0	16	145	408	0	569	580	26	0	0	606	37	90
2019	0	18	155	416	0	589	599	25	0	0	625	36	103
2020	0	19	165	425	0	609	618	25	0	0	642	34	114
2021	0	0	0	431	0	431	607	24	0	0	631	200	174
2022	0	0	0	445	0	445	643	24	0	0	667	222	235
2023	0	0	0	451	0	451	643	23	0	0	666	215	290
2024	0	0	0	461	0	461	620	22	0	0	642	182	332
2025	0	0	0	470	0	470	647	22	0	0	669	199	376
2026	0	0	0	480	0	480	654	21	0	0	675	195	415
2027	0	19	134	489	0	642	659	21	0	0	680	37	422
2028	0	21	145	499	0	666	680	20	0	0	700	34	427
2029	0	23	155	510	0	688	688	20	0	0	708	20	431
2030	0	25	165	520	0	710	695	20	0	0	714	4	431
2031	0	0	0	531	0	531	726	19	0	0	745	214	460

NOM.	0	208	1,798	9,896	0	11,902	13,409	558	0	0	13,967	2,065
NPV	0	81	806	3,466	0	4,353	4,594	219	0	0	4,813	460

Discount Rate

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

PROGRAM DEMAND SAVINGS & LINE LOSSES (1) CUSTOMER kW REDUCTION AT METER 0.98 kW (2) GENERATOR kW REDUCTION PER CUSTOMER 1.32 kW (3) kW LINE LOSS PERCENTAGE (4) GENERATOR kWh REDUCTION PER CUSTOMER 9.03 % 6,432.36 kWh (5) kWh LINE LOSS PERCENTAGE 7.16 % (6) GROUP LINE LOSS MULTIPLIER..... 1.00 0.00 kWh (7) CUSTOMER kWh INCREASE AT METER ECONOMIC LIFE & K FACTORS (1) STUDY PERIOD FOR THE CONSERVATION PROGRAM 26 YEARS (2) GENERATOR ECONOMIC LIFE 25 YEARS (3) T&D ECONOMIC LIFE 35 YEARS (4) K FACTOR FOR GENERATION 1.65312 (5) K FACTOR FOR T & D..... 1.61194 UTILITY & CUSTOMER COSTS (1) UTILITY NON RECURRING COST PER CUSTOMER *** \$/CUST (2) UTILITY RECURRING COST PER CUSTOMER *** \$/CUST +++ %++ *** \$/CUST (5) CUSTOMER EQUIPMENT ESCALATION RATE (6) CUSTOMER O & M COST (7) CUSTOMER O & M COST ESCALATION RATE *** %** *** \$/CUST/YR ^ \$/CUST/YR (8) INCREASED SUPPLY COSTS *** %** (9) SUPPLY COSTS ESCALATION RATES..... 8.37 % 7.84 % (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

v.

(1)	BASE YEAR	2006	
(2)	IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2011	
(3)	IN-SERVICE YEAR FOR AVOIDED T&D	2009-2011	
(4)	BASE YEAR AVOIDED GENERATING COST	492.12	\$/kW
(5)	BASE YEAR AVOIDED TRANSMISSION COST	147.00	\$/kW
(6)	BASE YEAR DISTRIBUTION COST	17.27	\$/kW
(7)	GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
(8)	GENERATOR FIXED O & M COST	30.93	\$/kW/YR
(9)	GENERATOR FIXED O&M ESCALATION RATE	4.35	%**
(10)	TRANSMISSION FIXED O & M COST	2.68	\$/kW
(11)	DISTRIBUTION FIXED O & M COST	0.95	\$/kW
(12)	T&D FIXED O&M ESCALATION RATE	4.35	%**
(13)	AVOIDED GEN UNIT VARIABLE O & M COSTS	0.082	CENTS/kWh
(14)	GENERATOR VARIABLE O&M COST ESCALATION RATE	1.99	%**
(15)	GENERATOR CAPACITY FACTOR	4%	** (In-service year)
(16)	AVOIDED GENERATING UNIT FUEL COST	6 32	CENTS PER kWh** (In-service year)
(17	AVOIDED GEN UNIT FUEL COST ESCALATION RATE	4.44	%**
NO	N-FUEL ENERGY AND DEMAND CHARGES		
(1)	NON FUEL COST IN CUSTOMER BILL	No let Ma	CENTS/kWh
(2)	NON-FUEL COST ESCALATION RATE	***	%
(3)	DEMAND CHARGE IN CUSTOMER BILL	***	\$/kW/MO

(4) DEMAND CHARGE ESCALATION RATE

* INPUT DATA -- PART 1 CONTINUED PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Refrigeration

	(1) UTILITY	(2)	(3)	(4) TOTAL	(5) ENERGY	(6) DEMAND	(7)	(8)	(9)	(10)
	PROGRAM COSTS		OTHER	UTILITY	CHARGE	CHARGE	PARTICIPANT	PARTICIPANT	OTHER	TOTAL
	WITHOUT	UTILITY	UTILITY	PROGRAM	REVENUE	REVENUE	EQUIPMENT	O&M	PARTICIPANT	PARTICIPANT
	INCENTIVES	INCENTIVES	COSTS	COSTS	LOSSES	LOSSES	COSTS	COSTS	COSTS	COSTS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	Ö	0	0	0	Ô	0	0
2007	20	22	0	42	47	13	0	392	0	392
2008	22	23	0	45	141	40	0	421	0	421
2009	23	24	0	47	244	68	0	445	0	445
2010	24	24	0	48	357	91	0	463	0	463
2011	0	0	0	0	423	98	0	0	0	0
2012	0	0	0	0	430	98	0	0	0	0
2013	0	0	0	0	442	97	0	0	0	0
2014	0	0	0	0	449	96	0	0	0	0
2015	0	0	0	0	458	95	0	0	0	0
2016	0	0	0	0	468	92	0	0	0	0
2017	26	22	0	48	477	92	0	504	0	504
2018	28	23	0	51	488	92	0	546	0	546
2019	30	24	0	54	500	92	0	580	0	580
2020	31	24	0	56	512	92	0	605	0	605
2021	0	0	0	0	521	91	0	0	0	0
2022	0	0	0	0	539	94	0	0	0	0
2023	0	0	0	0	548	94	0	0	0	0
2024	0	0	0	0	561	94	0	0	0	0
2025	0	0	0	0	574	94	0	0	0	0
2026	0	0	0	0	588	94	0	0	0	0
2027	34	22	0	56	601	94	0	661	0	661
2028	37	23	0	60	615	94	0	715	0	715
2029	39	24	0	63	630	95	0	760	0	760
2030	41	24	0	65	645	95	0	793	0	793
2031	0	0	0	0	660	95	0	0	0	0

NOM	356	279	0	635	11,919	2,191	0	6,885	0	6,885
NPV	140	126	0	265	4,124	834	0	2,701	0 .	2,701

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

CALCULATION OF GEN K-FACTOR PROGRAM METHOD SELECTED REV_REQ PROGRAM NAME: Commericial/Industrial Refrigeration

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) PRESENT	(13)	(14) REPLACEMENT
										TOTAL	WORTH	CUMULATIVE	COST BASIS
	BEG-YEAR		PREFERRED	COMMON	INCOME	PROPERTY	PROPERTY		DEFERRED	FIXED	FIXED	PW FIXED	FOR
	RATE BASE	DEBT	STOCK	EQUITY	TAXES	TAX	INSURANCE	DEPREC.	TAXES	CHARGES	CHARGES	CHARGES	PROPERTY INSURANCE
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$ (000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	942	29	0	61	40	0	0	37	(0)	167	167	167	925
2012	905	28	0	59	26	17	4	37	12	183	169	336	925
2013	856	27	0	55	26	16	5	37	10	176	150	486	952
2014	809	25	0	52	26	16	5	37	8	169	133	618	981
2015	764	24	0	49	26	15	5	37	7	162	118	736	1,010
2016	720	22	0	47	25	14	5	37	5	156	104	840	1,041
2017	678	21	0	44	25	13	5	37	4	149	92	932	1,072
2018	637	20	0	41	25	13	5	37	3	143	82	1,014	1,104
2019	598	19	0	39	23	12	5	37	2	137	72	1,086	1,137
2020	558	17	0	36	22	11	6	37	2	131	64	1,150	1,171
2021	519	16	0	34	20	10	6	37	2	125	56	1,206	1,206
2022	480	15	0	31	19	10	6	37	2	119	49	1,255	1,242
2023	440	14	0	28	17	9	6	37	2	113	43	1,298	1,280
2024	401	12	0	26	15	8	6	37	2	108	38	1,336	1,318
2025	362	11	0	23	14	7	7	37	2	102	33	1,369	1,358
2026	322	10	0	21	12	7	7	37	2	96	29	1,398	1,398
2027	283	9	0	18	11	6	7	37	2	90	25	1,423	1,440
2028	244	8	0	16	9	5	7	37	2	84	21	1,444	1,484
2029	205	6	0	13	7	4	7	37	2	78	18	1,462	1,528
2030	165	5	0	11	6	4	8	37	2	72	16	1,478	1,574
2031	126	4	0	8	12	3	8	37	(6)	66	13	1,491	1,621
2032	94	3	0	6	19	2	8	37	(13)	62	11	1,503	1,670
2033	71	2	0	5	18	1	8	37	(13)	58	10	1,513	1,720
2034	47	1	0	3	17	1	9	37	(13)	54	9	1,521	1,771
2035	24	1	0	2	16	(0)	9	37	(13)	50	7	1,528	1,825

IN SERVICE COST (\$000)	925
IN SERVICE YEAR	2011
BOOK LIFE (YRS)	25
EFFEC. TAX RATE	38.575
DISCOUNT RATE	8.4%
PROPERTY TAX	2.00%
PROPERTY INSURANCE	0.48%

CAPITAL STRUCTURE

CAFITALSTRUCTURE									
SOURCE	WEIGHT	COST							
DEBT	45%	6.90	%						
P/S	0%	0.00	%						
C/S	55%	11.75	%						

K-FACTOR = CPWFC / IN-SVC COST =

PSC FORM CE 1.1A PAGE 2a OF 2

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ

PROGRAM NAME: Commericial/Industrial Refrigeration

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	TAX DEPRECIATION	TAX DEPRECIATION	ACCUMULATED TAX DEPRECIATION	BOOK DEPRECIATION	BOOK	BOOK DEPRECIATION FOR DEFERRED TAX	ACCUMULATED BOOK DEPR FOR DEFERRED TAX	DEFERRED TAX DUE TO DEPRECIATION	TOTAL EQUITY AFUDC	BOOK DEPR RATE	(10)*(11) TAX RATE	SALVAGE TAX RATE	ANNUAL DEFERRED TAX (9)-(12)+(13)	ACCUMULATED DEFERRED TAX
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	MINUS I/LIFE	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	34	34	37	37	35	35	(0)	58	0	0	0	(0)	(18)
2012	7.22%	66	100	37	74	35	69	12	58	0	0	0	12	(6)
2013	6.68%	61	161	37	111	35	104	10	58	0	0	0	10	4
2014	6.18%	56	217	37	148	35	139	8	58	0	0	0	8	13
2015	5.71%	52	269	37	185	35	173	7	58	0	0	0	7	20
2016	5.29%	48	318	37	222	35	208	5	58	0	0	0	5	25
2017	4.89%	45	362	37	259	35	243	4	58	0	0	0	4	29
2018	4.52%	41	403	37	296	35	277	3	58	0	0	0	3	31
2019	4.46%	41	444	37	333	35	312	2	58	0	0	0	2	33
2020	4.46%	41	485	37	370	35	347	2	58	0	0	0	2	36
2021	4.46%	41	526	37	407	35	381	2	58	0	0	0	2	38
2022	4.46%	41	566	37	444	35	416	2	58	0	0	0	2	40
2023	4.46%	41	607	37	481	35	451	2	58	0	0	0	2	43
2024	4.46%	41	648	37	518	35	485	2	58	0	0	0	2	45
2025	4.46%	41	688	37	555	35	520	2	58	0	0	0	2	47
2026	4.46%	41	729	37	592	35	555	2	58	0	0	0	2	50
2027	4.46%	41	770	37	629	35	589	2	58	0	0	0	2	52
2028	4.46%	41	810	37	666	35	624	2	58	0	0	0	2	54
2029	4.46%	41	851	37	703	35	659	2	58	0	0	0	2	57
2030	4.46%	41	892	37	740	35	693	2	58	0	0	0	2	59
2031	2.23%	20	912	37	777	35	728	(6)	58	0	0	0	(6)	53
2032	0.00%	0	912	37	814	35	763	(13)	58	0	0	0	(13)	40
2033	0.00%	0	912	37	851	35	797	(13)	58	0	0	0	(13)	27
2034	0.00%	0	912	37	888	35	832	(13)	58	0	0	0	(13)	13
2035	0.00%	0	912	37	925	35	867	(13)	58	0	0	0	(13)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(18)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	58
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commercial/Industrial Refrigeration

(1)	(2)	(3)	(4)	(5) END OF YEAR NET	(5a)*	(5b)*	(6) BEGINNING	(7) ENDING OF	(8)
	TAX	TAX	DEFERRED	PLANT IN	ACCUMULATED	ACCUMULATED	YEAR RATE	YEAR RATE	MID-YEAR
	DEPRECIATION	DEPRECIATION	TAX	SERVICE	DEPRECIATION	DEF TAXES	BASE	BASE	RATE BASE
YEAR	SCHEDULE	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2011	3.75%	34	(0)	888	37	(18)	942	905	924
2012	7.22%	66	12	851	74	(6)	905	856	881
2013	6.68%	61	10	814	111	4	856	809	833
2014	6.18%	56	8	777	148	13	809	764	787
2015	5.71%	52	7	740	185	20	764	720	742
2016	5.29%	48	5	703	222	25	720	678	699
2017	4.89%	45	4	666	259	29	678	637	658
2018	4.52%	41	3	629	296	31	637	598	617
2019	4.46%	41	2	592	333	33	598	558	578
2020	4.46%	41	2	555	370	36	558	519	539
2021	4.46%	41	2	518	407	38	519	480	499
2022	4.46%	41	2	481	444	40	480	440	460
2023	4.46%	41	2	444	481	43	440	401	421
2024	4.46%	41	2	407	518	45	401	362	381
2025	4.46%	41	2	370	555	47	362	322	342
2026	4.46%	41	2	333	592	50	322	283	303
2027	4.46%	41	2	296	629	52	283	244	263
2028	4.46%	41	2	259	666	54	244	205	224
2029	4.46%	41	2	222	703	57	205	165	185
2030	4.46%	41	2	185	740	59	165	126	146
2031	2.23%	20	(6)	148	777	53	126	94	110
2032	0.00%	0	(13)	111	814	40	94	71	83
2033	0.00%	0	(13)	74	851	27	71	47	59
2034	0.00%	0	(13)	37	888	13	47	24	35
2035	0.00%	0	(13)	(0)	925	0	24	0	12

^{*} Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7) CUMULATIVE
	NO.YEARS	PLANT	CUMULATIVE	YEARLY	ANNUAL	AVERAGE
	BEFORE	ESCALATION	ESCALATION	EXPENDITURE	SPENDING	SPENDING
YEAR	IN-SERVICE	RATE	FACTOR	(%)	(\$/kW)	(\$/kW)
2006	-5	0.00%	1.000	0.00%	0.00	0.00
2006 2007	-5 -4	0.00% 3.00%	1.000 1.030	0.00% 0.00%	0.00 0.00	0,00 0.00
	-					
2007	-4	3.00%	1.030	0.00%	0.00	0.00

				100.00%	538.96	-						
		(8)	(8a)*	(8b)*	(9)	(9a)*	(9b)*	(9c)*	(9d)*	(9e)*	(10)	(11)
		CUMULATIVE		CUMULATIVE	YEARLY	CUMULATIVE	CONSTRUCTION			CUMULATIVE	INCREMENTAL	. CUMULATIVE
	NO.YEARS	SPENDING	DEBT	DEBT	TOTAL	TOTAL	PERIOD	CUMULATIVE	DEFERRED	DEFERRED	YEAR-END	YEAR-END
	BEFORE	WITH AFUDC	AFUDC	AFUDC	AFUDC	AFUDC	INTEREST	CPI	TAXES	TAXES	BOOK VALUE	BOOK VALUE
YEAR	IN-SERVICE	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)
2006	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00
2007	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	-3	44.38	1.38	1.38	3.48	3.48	3.06	3.06	(0.65)	(0.65)	92.23	92.23
2009	-2	250.87	7.81	9.19	19.72	23.20	17.28	20.34	(3.65)	(4.30)	336.99	429.23
2010	-1	495.69	15.52	24.71	39.20	62.40	34.01	54.35	(7.13)	(11.43)	172.13	601.36

		24.71	62.40	_	54.35		(11.43)	601.36
							-	
		_		BOOK BASIS	BOOK BASIS FOR DEF TAX	TAX BASIS		
IN SERVICE YEAR PLANT COSTS	2011 492.12	l	CONSTRUCTION CASH EQUITY AFUDC	829 58	829	829	1	
AFUDC RATE	7.84%	J.	DEBT AFUDC CPI	38	38	84		
			TOTAL	925	867	912	1	

^{*} Column not specified in workbook

PSC FORM CE 1.2 PAGE 1 OF 1

PROGRAM NAME: Commercial/Industrial Refrigeration

(1)	(2) CUMULATIVE	(3)	(4) UTILITY	(5)	(6)*	(7)	(8)	(9)
			AVERAGE	AVOIDED	INCREASED			
	TOTAL	CUMULATIVE	SYSTEM	MARGINAL	MARGINAL	REPLACEMENT	PROGRAM kW	PROGRAM kWh
YEAR	PARTICIPATING CUSTOMERS	PARTICIPATING	FUEL COST	FUEL COST	FUEL COST	FUEL COST	EFFECTIVENESS	EFFECTIVENESS
		CUSTOMERS	(C/kWh)	(C/kWh)	(C/kWh)	(C/kWh)	FACTOR	FACTOR
2006	0	0	7.71	8.76	9.37	0.00	1.00	1.00
2007	274	274	7.74	8.54	9.30	0.00	1.00	1.00
2008	563	563	6.46	7.26	8.16	0.00	1.00	1.00
2009	862	862	6.20	7.00	7.75	0.00	1.00	1.00
2010	1,166	1,166	5.58	6.29	7.00	0.00	1.00	1.00
2011	1,166	1,166	5.89	6.66	7.44	7.52	1.00	1.00
2012	1,166	1,166	6.06	6.85	7.67	6.80	1.00	1.00
2013	1,166	1,166	6.29	7.19	8.07	7.65	1.00	1.00
2014	1,166	1,166	6.43	7.36	8.40	8.10	1.00	1.00
2015	1,166	1,166	6.79	7.77	8.76	7.74	1.00	1.00
2016	1,166	1,166	7.14	8.16	9.36	9.08	1.00	1.00
2017	1,166	1,166	7.21	8.14	9.82	9.93	1.00	1.00
2018	1,166	1,166	7.67	8.65	10.52	9.87	1.00	1.00
2019	1,166	1,166	8.05	9.05	11.00	10.52	1.00	1.00
2020	1,166	1,166	8.30	9.26	11.25	10.44	1.00	1.00
2021	1,166	1,166	8.51	9.46	11.48	12.95	1.00	1.00
2022	1,166	1,166	8.73	9.64	11.57	10.56	1.00	1.00
2023	1,166	1,166	8.86	9.72	11.55	11.55	1.00	1.00
2024	1,166	1,166	8.91	9.63	11.19	15.91	1.00	1.00
2025	1,166	1,166	9.22	9.93	11.50	14.25	1.00	1.00
2026	1,166	1,166	9.42	10.08	11.58	15.42	1.00	1.00
2027	1,166	1,166	9.66	10.29	11.73	17.44	1.00	1.00
2028	1,166	1,166	9.85	10.40	11.70	15.36	1.00	1.00
2029	1,166	1,166	10.04	10.55	11.74	16.09	1.00	1.00
2030	1,166	1,166	10.24	10.70	11.78	18.01	1.00	1.00
2031	1,166	1,166	10.54	10.98	12.00	13.65	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: Commerical/Industrial Refrigeration

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)
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	o	0	0
2009	0	ŏ	0	Ö	0	o
2010	0	Õ	0	Õ	0	0
2011	167	59	1	36	43	220
2012	183	62	1	58	59	244
2013	176	65	2	120	132	231
2014	169	68	2	141	159	221
2015	162	71	3	228	236	228
2016	156	74	3	261	297	196
2017	149	<i>7</i> 7	3	204	237	196
2018	143	81	3	206	225	207
2019	137	85	2	189	209	204
2020	131	88	2	163	170	214
2021	125	92	2	165	208	177
2022	119	97	2	142	141	219
2023	113	101	2	133	139	209
2024	108	105	1	103	145	173
2025	102	110	1	106	129	190
2026	96	115	i	100	127	185
2027	90	120	1	94	132	173
2028	84	125	1	80	96	195
2029	78	131	1	77	93	193
2030	72	136	1	68	90	188
2031	66	142	1	65	62	212

NOM	2.627	2.004	34	2,738	3.130	4,274
NPV	998	594	12	963	1,085	1,482
					·	

AVOIDED T&D AND PROGRAM FUEL SAVINGS PROGRAM METHOD SELECTED: REV_REQ PROGRAM NAME: Commericial/Industrial Refrigeration

(1)	(2)	(3)	(4) TOTAL	(5)	(6)	(7) TOTAL	(8)	(8a)*
	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED	AVOIDED		PROGRAM
	TRANSMISSION	TRANSMISSION	TRANSMISSION	DISTRIBUTION	DISTRIBUTION	DISTRIBUTION	PROGRAM	OFF-PEAK
	CAP COST	O&M COST	COST	CAP COST	O&M COST	COST	FUEL SAVINGS	PAYBACK
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	78	0
2008	10	1	11	1	0	1	203	0
2009	20	2	23	2	1	2	334	0
2010	31	4	34	3	1	4	427	0
2011	41	5	46	4	1	5	519	0
2012	40	5	45	3	.1	5	534	0
2013	38	6	44	3	1	5	562	0
2014	37	6	42	3	2	5	576	0
2015	35	6	41	3	2	5	608	0
2016	34	6	40	3	2	5	639	0
2017	32	7	39	3	2	5	634	0
2018	31	7	38	3	2	5	675	0
2019	30	7	37	3	2	5	705	0
2020	28	8	36	2	2	5	719	0
2021	27	8	35	2	2	4	734	0
2022	26	8	34	2	2	4	747	0
2023	25	9	33	2	2	4	751	0
2024	23	9	32	2	2	4	741	0
2025	22	10	31	2	3	4	764	0
2026	21	10	31	2	3	4	773	0
2027	19	10	30	2	3	4	788	0
2028	18	11	29	2	3	4	794	0
2029	17	11	28	1	3	4	804	0
2030	16	12	28	1	3	5	814	0
2031	15	12	27	1	3	5	835	0

NOM.	635	181	816	56	48	103	15,761	0
NPV	266	57	323	23	15	38	5,450	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: Commericia/Industrial Refrigeration

(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)
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	20	392	0	412	0	0	78	0	78	(334)	(308)
2008	0	22	421	0	443	0	12	203	0	216	(228)	(502)
2009	0	23	445	0	468	0	25	334	0	359	(110)	(588)
2010	0	24	463	0	487	0	38	427	0	465	(22)	(605)
2011	0	0	0	0	0	220	51	519	0	790	790	(76)
2012	0	0	0	0	0	244	50	534	0	828	828	436
2013	0	0	0	0	0	231	48	562	0	842	842	915
2014	0	0	0	0	0	221	47	576	0	844	844	1,359
2015	0	0	0	0	0	228	46	608	0	882	882	1,786
2016	0	0	0	0	0	196	45	639	0	880	880	2,180
2017	0	26	504	0	530	196	44	634	0	874	344	2,323
2018	0	28	546	0	574	207	43	675	0	924	351	2,456
2019	0	30	580	0	610	204	42	705	0	950	341	2,576
2020	0	31	605	0	636	214	41	719	0	974	337	2,686
2021	0	0	0	0	0	177	40	734	0	951	951	2,970
2022	0	0	0	0	0	219	39	747	0	1,005	1,005	3,248
2023	0	0	0	0	0	209	38	751	0	998	998	3,503
2024	0	0	0	0	0	173	37	741	0	951	951	3,726
2025	0	0	0	0	0	190	36	764	0	989	989	3,941
2026	0	0	0	0	0	185	35	773	0	993	993	4,140
2027	0	34	661	0	695	173	34	788	0	996	301	4,196
2028	0	37	715	0	752	195	33	794	0	1,022	270	4,242
2029	0	39	760	0	799	193	33	804	0	1,031	232	4,278
2030	0	41	793	0	834	188	32	814	0	1,034	200	4,307
2031	0	0	0	0	0	212	32	835	0	1,079	1,079	4,452

NOM	0	356	6,885	0	7,240	4,274	919	15,761	0	20,954	13,714
NPV	0	140	2,701	0	2,841	1,482	361	5,450	0	7,293	4,452

Discount Rate: Benefit/Cost Ratio (Col(11) / Col(6)) : 8.37 2.57

PARTICIPANT COSTS AND BENEFITS PROGRAM METHOD SELECTED; REV_REQ PROGRAM NAME: Commerical/Industrial Refrigeration

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SAVINGS IN					CUSTOMER					CUMULATIVE
	PARTICIPANTS	TAX	UTILITY	OTHER	TOTAL	EQUIPMENT	CUSTOMER	OTHER	TOTAL	NET	DISCOUNTED
	BILLS	CREDITS	REBATES	BENEFITS	BENEFITS	COSTS	O&M COSTS	COSTS	COSTS	BENEFITS	NET BENEFITS
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2006	0	0	0	0	0	0	0	0	0	0	0
2007	77	0	22	0	99	0	392	0	392	(293)	(270)
2008	230	0	23	0	253	0	421	0	421	(168)	(414)
2009	398	0	24	0	422	0	445	0	445	(23)	(432)
2010	573	0	24	0	597	0	463	0	463	134	(335)
2011	670	0	0	0	670	0	0	0	0	670	114
2012	680	0	0	0	680	0	0	0	0	680	533
2013	694	0	0	0	694	0	0	0	0	694	929
2014	703	0	0	0	703	0	0	0	0	703	1,298
2015	714	0	0	0	714	0	0	0	0	714	1,644
2016	724	0	0	0	724	0	0	0	0	724	1,968
2017	7 37	0	22	0	759	0	504	0	504	255	2,074
2018	752	0	23	0	775	0	546	0	546	230	2,161
2019	768	0	24	0	792	0	580	0	580	212	2,236
2020	784	0	24	0	808	0	605	0	605	203	2,302
2021	796	0	0	0	796	0	0	0	0	796	2,540
2022	822	0	0	0	822	0	0	0	0	822	2,767
2023	835	0	0	0	835	0	0	0	0	835	2,980
2024	852	0	0	0	852	0	0	0	0	852	3,181
2025	870	0	0	0	870	0	0	0	0	870	3,370
2026	888	0	0	0	888	0	0	0	0	888	3,548
2027	907	0	22	0	929	0	661	0	661	268	3,597
2028	926	0	23	0	949	0	715	0	715	234	3,637
2029	946	0	24	0	970	0	760	0	760	210	3,670
2030	966	0	24	0	990	0	793	0	793	197	3,699
2031	986	0	0	0	986	0	0	0	0	986	3,831

NOM	18,297	0	279	0	18,577	0	6,885	0	6,885	11,692
NPV	6,407	0	126	0	6,532	0	2,701	0	2,701	3,831

In Service of Gen Unit: Discount Rate : Benefit/Cost Ratio (Col(6) / Col(10)) 2011 8.37 2.42

RATE IMPACT TEST PROGRAM METHOD SELECTED: REV_REQ

PROGRAM NAME: Commericial/Industrial Refrigeration

(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)	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)
2006	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	20	22	60	0	102	78	0	0	0	78	(25)	(23)
2008	0	22	23	181	0	226	203	12	0	0	216	(10)	(31)
2009	0	23	24	312	0	359	334	25	0	0	359	(1)	(32)
2010	0	24	24	448	0	496	427	38	0	0	465	(31)	(54)
2011	0	0	0	522	0	522	739	51	0	0	790	269	126
2012	0	0	0	529	0	529	779	50	0	0	828	300	311
2013	0	0	0	539	0	539	793	48	0	0	842	303	483
2014	0	0	0	545	0	545	7 97	47	0	0	844	299	640
2015	0	0	0	553	0	553	836	46	0	0	882	329	800
2016	0	0	0	560	0	560	835	45	0	0	880	320	943
2017	0	26	22	569	0	617	830	44	0	0	874	257	1,049
2018	0	28	23	581	0	632	882	43	0	0	924	293	1,161
2019	0	30	24	592	0	646	909	42	0	0	950	305	1,268
2020	0	31	24	604	0	660	933	41	0	0	974	314	1,370
2021	0	0	0	613	0	613	911	40	0	0	951	338	1,471
2022	0	0	0	633	0	633	966	39	0	0	1,005	372	1,574
2023	0	0	0	642	0	642	961	38	0	0	998	356	1,665
2024	0	0	0	655	0	655	914	37	0	0	951	296	1,734
2025	0	0	0	668	0	668	954	36	0	0	989	321	1,804
2026	0	0	0	682	0	682	958	35	0	0	993	311	1,866
2027	0	34	22	696	0	752	962	34	0	0	996	244	1,912
2028	0	37	23	710	0	770	989	33	0	0	1,022	252	1,955
2029	0	39	24	724	0	787	998	33	0	0	1,031	243	1,993
2030	0	41	24	739	0	804	1,002	32	0	0	1,034	230	2,026
2031	0	0	0	754	0	754	1,047	32	0	0	1,079	324	2,070

NOM.	0	356	279	14,109	0	14,745	20,035	919	Ö	0	20,954	6,209
NPV	0	140	126	4,958	0	5,223	6,931	361	0	0	7,293	2,070

Discount Rate

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

8.37 1.40

APPENDIX C

(Continued from Sheet No. 8.207)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

April 1 through October 31: 2 p.m. to 10 p.m.

November 1 through March 31: 5 a.m. to 11 a.m.

4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

1. <u>Conventional electric water heating</u> equipment may be interrupted up to, but not to exceed, 240 minutes per day.

2. <u>Central electric air conditioning</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

- 3. Swimming pool pump equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 4. <u>Central electric space heating</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may discontinue service by giving the Company seven (7) days² advance notice. If, upon seven (7) days² advance notice, the Customer requests to change interruption options, the selection of electrical appliances connected to the load management equipment, or have one or more appliances removed from participation in the program on or subsequent to April 1, 2003, then the Customer will be ineligible to participate further in the program.

SPECIAL PROVISIONS

- 1. The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
- 2. Billing under this Rate Schedule will commence upon the installation and completion of required inspections of the load management equipment.
- 3. Multiple units of any particular appliance type must all be connected with load management equipment to qualify for the credit attributable to that appliance type. In such circumstances, only a single credit for that appliance type will be applied. Pool sweeps, when coupled with pool pumps, are included in this category.

(Continued on Sheet No. 8.209)

Issued by: S. E. Romig, Director, Rates and Tariffs

Effective: April 1, 2003

(Continued from Sheet No. 8.207)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

April 1 through October 31: 2 p.m. to 10 p.m.

November 1 through March 31: 5 a.m. to 11 a.m.

4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

- 1. <u>Conventional electric water heating</u> equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 2. <u>Central electric air conditioning</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

- 3. Swimming pool pump equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 4. <u>Central electric space heating</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may discontinue service by giving the Company seven (7) days advance notice. If, upon seven (7) days advance notice, the Customer requests to change interruption options, the selection of electrical appliances connected to the load management equipment, or have one or more appliances removed from participation in the program on or subsequent to April 1, 2003, then the Customer will be ineligible to participate further in the program.

SPECIAL PROVISIONS

- The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
- Billing under this Rate Schedule will commence upon the installation and completion of required inspections of the load management equipment.
- 3. Multiple units of any particular appliance type must all be connected with load management equipment to qualify for the credit attributable to that appliance type. In such circumstances, only a single credit for that appliance type will be applied. Pool sweeps, when coupled with pool pumps, are included in this category.

(Continued on Sheet No. 8.209)

Issued by: S. E. Romig, Director, Rates and Tariffs

Effective:

(Continued from Sheet No. 8.217)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

April 1 through October 31:

2 p.m. to 10 p.m.

November 1 through March 31:

5 a.m. to 11 a.m.

4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

- 1. <u>Conventional electric water heating</u> equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 2. <u>Central electric air conditioning</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

- 3. Swimming pool pump equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 4. <u>Central electric space heating</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may change interruption options or the selection of electrical appliances connected to the load management equipment or discontinue service under this Rate Schedule by giving the Company 7 days² advance notice. If the Customer requests to have one or more appliances removed from participation in the Pilot Project, the Customer will be ineligible to participate with such appliance(s) again in the Pilot Project for one year (12 months) from the time participation ended.

SPECIAL PROVISIONS

- 1. The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
- 2. Billing under this Rate Schedule will commence upon the installation and completion of required inspections of the load management equipment.
- 3. Multiple units of any particular appliance type must all be connected with load management equipment to qualify for the credit attributable to that appliance type. In such circumstances, only a single credit for that appliance type will be applied. Pool sweeps, when coupled with pool pumps, are included in this category.

(Continued on Sheet No. 8.219)

Issued by: S. E. Romig, Director, Rates and Tariffs

Effective: April 1, 2003

(Continued from Sheet No. 8.217)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

April 1 through October 31: 2 p.m. to 10 p.m.

November 1 through March 31: 5 a.m. to 11 a.m.

4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

- 1. <u>Conventional electric water heating</u> equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 2. Central electric air conditioning equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

- 3. Swimming pool pump equipment may be interrupted up to, but not to exceed, 240 minutes per day.
- 4. <u>Central electric space heating</u> equipment may be interrupted under one of the following options selected by the Customer:

Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.

Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may change interruption options or the selection of electrical appliances connected to the load management equipment or discontinue service under this Rate Schedule by giving the Company 7 days advance notice. If the Customer requests to have one or more appliances removed from participation in the Pilot Project, the Customer will be ineligible to participate with such appliance(s) again in the Pilot Project for one year (12 months) from the time participation ended.

SPECIAL PROVISIONS

- The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
- 2. Billing under this Rate Schedule will commence upon the installation and completion of required inspections of the load management equipment.
- 3. Multiple units of any particular appliance type must all be connected with load management equipment to qualify for the credit attributable to that appliance type. In such circumstances, only a single credit for that appliance type will be applied. Pool sweeps, when coupled with pool pumps, are included in this category.

(Continued on Sheet No. 8.219)

Issued by: S. E. Romig, Director, Rates and Tariffs

Effective:

GENERAL SERVICE LOAD MANAGEMENT PROGRAM (FPL "BUSINESS ON CALL" PROGRAM)

RATE SCHEDULE: GSL

AVAILABLE:

Available only within the geographic areas served by the Company's Load Management system.

APPLICATION:

To customers receiving service under Rate Schedules GS-1 and GSD-1 who elect to participate in this program, who utilize direct expansion central electric air conditioning and have operating hours that include 3 p.m. to 5 p.m., a minimum of four weekdays per week.

SERVICE:

The same as specified in Rate Schedules GS-1 and GSD-1.

LIMITATION OF SERVICE:

The same as specified in Rate Schedules GS-1 and GSD-1. Central electric air conditioning equipment shall be interrupted at the option of the Company by means of load management equipment installed on the Customer's premises.

MONTHLY CREDIT:

Customers receiving service under this schedule will receive a credit on the monthly bill as follows:

DEVICE	APPLICABILITY	CREDIT
DEVICE	AFILICABILITI	CKEDII

Central electric air conditioning April - October \$2 per ton of air conditioning

The total monthly credit shall not exceed 40 percent of the Rate Schedules GS-1 and GSD-1 non-fuel energy and (where applicable) Base Demand Charges actually incurred for the month and no credit will be applied to reduce the Minimum bill specified on Rate Schedules GS-1 and GSD-1.

The air conditioning tonnage will be calculated by dividing the name plate BTU rating by 12,000 BTUs per ton. The tonnage will then be rounded to the nearest half-ton to calculate the monthly credit amount.

INTERRUPTION SCHEDULE:

The Customer's participating central electric air conditioning equipment will be interrupted only during the following period, except under emergency conditions:

April 1 through October 31: 2 p.m. to 10 p.m.

Central electric air conditioning equipment may be interrupted an accumulated total of 15 minutes during any 30-minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

The limitations on interruptions of central electric air conditioning equipment shall not apply during emergencies on the Company's system or to interruptions caused by <u>force majeure</u> or other causes beyond the control of the Company.

(Continued on Sheet No. 8.110)

Issued by: S. E. Romig, Director, Rates and Tariffs

Effective: November 15, 2002

GENERAL SERVICE LOAD MANAGEMENT PROGRAM (FPL "BUSINESS ON CALL" PROGRAM)

RATE SCHEDULE: GSL

AVAILABLE:

Available only within the geographic areas served by the Company's Load Management system.

APPLICATION:

To customers receiving service under Rate Schedules GS-1 and GSD-1 who elect to participate in this program, who utilize direct expansion central electric air conditioning and have operating hours that include 3 p.m. to 5 p.m., a minimum of four weekdays per week.

SERVICE:

The same as specified in Rate Schedules GS-1 and GSD-1.

LIMITATION OF SERVICE:

The same as specified in Rate Schedules GS-1 and GSD-1. Central electric air conditioning equipment shall be interrupted at the option of the Company by means of load management equipment installed on the Customer's premises.

MONTHLY CREDIT:

Customers receiving service under this schedule will receive a credit on the monthly bill as follows:

<u>DEVICE</u> <u>APPLICABILITY</u> <u>CREDIT</u>

Central electric air conditioning April - October \$2 per ton of air conditioning

The total monthly credit shall not exceed 40 percent of the Rate Schedules GS-1 and GSD-1 non-fuel energy and (where applicable) Base Demand Charges actually incurred for the month and no credit will be applied to reduce the Minimum bill specified on Rate Schedules GS-1 and GSD-1.

The air conditioning tonnage will be calculated by dividing the name plate BTU rating by 12,000 BTUs per ton. The tonnage will then be rounded to the nearest half-ton to calculate the monthly credit amount.

INTERRUPTION SCHEDULE:

The Customer's participating central electric air conditioning equipment will be interrupted only during the following period, except under emergency conditions:

April 1 through October 31: 2 p.m. to 10 p.m.

Central electric air conditioning equipment may be interrupted an accumulated total of 15 minutes during any 30-minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.

The limitations on interruptions of central electric air conditioning equipment shall not apply during emergencies on the Company's system or to interruptions caused by <u>force majeure</u> or other causes beyond the control of the Company.

(Continued on Sheet No. 8.110)

Issued by: S. E. Romig, Director, Rates and Tariffs Effective: