KCP&L-Greater Missouri Operations (GMO)

RESIDENTIAL ENERGY REPORTS

The following information regarding GMO's proposed Residential Energy Reports Program is provided in compliance with 4 CSR 240-3.164(2)(C).

1. Program Description

The Residential Energy Reports provides residential customers with an Energy Report that provides a comparison of the household energy usage information with similar type customers or "neighbors." The intention of the Energy Report is to provide information that will influence customers' behavior in such a way that they lower their energy usage. This is a behavioral modification program.

This program element will operate as an opt-out only program, which means GMO will select customers for participation in the program. Program participants will be mailed an energy usage report on how energy is used by their households on a monthly basis. The customer's home energy usage is compared to the average usage of households that are geographically located in close approximation of one another and have similar characteristics such as dwelling size and heating type. The report displays a monthly neighbor comparison, a 12-month neighbor comparison, a personal comparison of this year's usage versus last year and specific energy tips that are based on the characteristics and usage of the household.

2. Residential Energy Reports Measures List and Incentive Levels

N/A

3. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative gross and net energy and demand savings for the Residential Energy Reports Program over the estimated life of the program is shown below.

Cumulative	Program Energy Savings (kWh) - gross	Program Energy Savings (kWh) - net	Program Demand Savings (kW) - gross	Program Demand Savings (kW) - net
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

B. Proposed annual and demand savings targets – time horizon

The proposed annual energy and demand savings targets and cumulative energy and demand savings targets for the Residential Energy Reports Program over the estimated life of the program is shown below. (Program savings and estimated useful lifetime of one year.)

	Energy Savings (kWh) targets	Energy Savings (kWh) targets - cumulative	Demand Savings (kW) targets	Demand Savings (kW) targets- cumulative
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

4. Program Framework/Strategy

A. Relationship to other programs

The Residential Energy Reports Program is designed for residential customers; therefore, the program has a strong relationship through promotion with the Company's other residential demand side management (DSM) programs, such as the Cool Homes program, Home Performance with Energy Star program, Energy Star Homes program, Low-income Weatherization program, Optimizer, and Home Energy Analyzer.

B. Marketing strategy

The target market for the Program is GMO residential single-family and multi-family customers.

Behavioral marketing is defined as using human biases that are important for making decisions and incorporating those biases into marketing campaigns to make them more effective. The Residential Energy Reports program will use behavioral marketing by focusing on social norms.

The overall marketing strategy will largely operate as a continued education and awareness of energy efficiency because this program is conducted on an opt-out basis. Marketing will primarily occur through customized messages on participants' reports. Program participants will also be reached via e-channels and through additional targeted mailings based on energy reduction needs. In addition, the Company intends to partner with retailers to offer coded and measurable discounts and coupons that offer a call to action on energy reduction.

Key Messages:

- Reduce your energy usage – check out more energy saving opportunities at www.kcpl.com;
- Become a more informed user of energy and see how easily you can save money on your monthly expenses;
- Being more energy efficient is as simple as slightly changing an existing habit or pattern.

C. Program delivery

The Residential Energy Reports will be implemented by GMO with necessary resources to administer the Program. The Program Administrator will utilize GMO's customer database to create customized energy usage reports.

GMO will utilize an internal program manager to conduct its own administration of the program. GMO's program manager will maintain oversight of the Program.

As the program expands, additional call center personnel will be trained to field customer questions and manage program opt-out requests.

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of expected program end use measures (net-free) expected to be undertaken by Missouri residential customers over the five-year period is shown below.

	Missouri Annual Participants (Projected)		
Year 1	**	[redacted]	**
Year 2	**		**
Year 3	**		**

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below for the Residential Energy Reports program. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Residential Energy Reports Program		
Test Name	**Market Based Test Results**	**Cost Based Test Results**
Utility Test	1.10	0.73
TRC Test	1.10	0.73
RIM Test	0.56	0.37
RIM (Net Fuel)	0.64	0.43
Participant Test	N/A	N/A
Societal Test	1.29	0.92

Assumptions		
Utility Discount Rate (%)	7.45%	7.45%
Participant Discount Rate (%)	10.00%	10.00%
Electric Losses (%)	5.50%	5.50%
Societal Discount Rate (%)	3.00%	3.00%

Avoided Costs						
Avoided T&D ($ / kW)	**	[redacted]	**	**	[redacted]	**
Avoided Market-Based Ancillary Service Charges (OATT)	**	[redacted]	**	**	[redacted]	**
Cost-Based Proxy for Avoided Capacity ($ / kW Annualized)	**	[redacted]	**	**	[redacted]	**
CO2 emissions (kG/kWh)	**	[redacted]	**	**	[redacted]	**

Cost Based Avoided Electric Production	**	[redacted]	**
Avoided T&D Electric, w OATT	**	[redacted]	**
Avoided Electric Capacity	**	[redacted]	**
Total Cost Based Avoided Costs	**	[redacted]	**

Market Based Avoided Electric Production Costs	**	[redacted]	**

Program Costs			
Administration Costs	**	[redacted]	**
Implementation / Participation Costs	**	[redacted]	**
Customer Incentives	**	[redacted]	**
Other / Miscellaneous Costs	**	[redacted]	**
Total Program Cost	**	[redacted]	**

Participant Cost	**	[redacted]	**

Environmental Benefits, NOx SOx	**	[redacted]	**

Lost Revenue			
Gross Lost Revenue, Electric	**	[redacted]	**
Net Fuel Lost Revenue, Electric	**		**

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation which will be utilized by GMO are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans will be developed by the selected evaluation contractor(s) as set forth in 4 CSR 240-20.093(7) and will describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/ distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), GMO reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Market Transformation: This is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or using opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

GMO will retain one or more EM&V contractors to perform process and impact evaluations for its programs and assess progress of market transformation in order to avoid conflicts of interest and to insure credibility of the evaluation results, as well as comply with Commission requirements. GMO expects to conduct EM&V after Program Year 2 is completed.

8. Program Budget (Five-Year)

The expected budget for the Residential Energy Reports Program over the five-year period is shown below.

Residential Energy Reports Program										
	Admin		Incentive		Implementation		Other including M&V		Total	
Year 1	** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **	
Year 2	** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **	
Year 3	** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **	
Total	** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **		** [redacted] **	

9. Strategies to minimize free riders and maximize spillover

The development of this program incorporated available information from market studies, consultant studies and the California DEER database on program impacts of free ridership and spillover in the initial program design. After two years of program implementation, KCP&L will perform an evaluation, measurement and verification study and these results will be incorporated into the program design. This process provides the input necessary to minimize free-ridership and maximize spillover.

KCP&L-Greater Missouri Operations (GMO)

APPLIANCE TURN-IN PROGRAM

The following information regarding GMO's proposed Appliance Turn-In Program is provided in compliance with 4 CSR 240-3.164(2)(C).

1. Program Description

- The primary Objective of the Appliance Turn-In Program (Program) is to incent residential customers to remove improperly operating, inefficient, secondary appliances. The secondary purpose is to raise awareness of the energy benefits of Energy Star appliances.

Older vintage room air conditioners (room AC), refrigerators, freezers and humidifiers can be some of the least efficient electrical appliances in the home. Often these old units are used when they are not functioning properly and as a result use electricity very inefficiently. To encourage customers to dispose of their old appliances and purchase efficient Energy Star models, GMO proposes an appliance turn-in program. Located at retailer locations during special promotions, participants would receive coupons towards more efficient units if they turn in an old unit or arrange to have the old unit picked up. Units received will be recycled through a certified recycling agency.

2. Appliance Turn-In Measures List

Below is a listing of proposed eligible appliance turn-in measures:

Inefficient room air conditioners, refrigerators, freezers and dehumidifiers

3. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative gross and net energy and demand savings for the Appliance Turn-In Program over the estimated life of the program is shown below.

Cumulative	Program Energy Savings (kWh) - gross	Program Energy Savings (kWh) - net	Program Demand Savings (kW) - gross	Program Demand Savings (kW) - net
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

Year 6	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 7	**		**	**		**	**		**	**		**
Year 8	**		**	**		**	**		**	**		**
Year 9	**		**	**		**	**		**	**		**
Year 10	**		**	**		**	**		**	**		**
Year 11	**		**	**		**	**		**	**		**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**
Year 14	**		**	**		**	**		**	**		**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

B. Proposed annual and demand savings targets – time horizon

The proposed annual energy and demand savings targets and cumulative energy and demand savings targets for the Appliance Turn-In Program over the estimated life of the program is shown below.

	Energy Savings (kWh) targets		**Energy Savings (kWh) targets - cumulative**		**Demand Savings (kW) targets**		**Demand Savings (kW) targets- cumulative**	
Year 1	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 2	**		**	**		**	**		**	**		**
Year 3	**		**	**		**	**		**	**		**
Year 4	**		**	**		**	**		**	**		**
Year 5	**		**	**		**	**		**	**		**
Year 6	**		**	**		**	**		**	**		**
Year 7	**		**	**		**	**		**	**		**
Year 8	**		**	**		**	**		**	**		**

Year 9	**		**	**		**	**		**	**		**
Year 10	**		**	**		**	**		**	**		**
Year 11	**		**	**		**	**		**	**		**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**
Year 14	**		**	**		**	**		**	**		**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

4. Program Framework/Strategy

A. Relationship to other programs

The Appliance Turn-In Program is designed for residential customers; therefore, the program has a strong relationship through promotion with the Company's other residential demand side management (DSM) programs, such as the Cool Homes program, Home Performance with Energy Star program, Energy Star Homes program, Low-income Weatherization program, Optimizer, and Home Energy Analyzer.

B. Marketing strategy

The target market for the Program is GMO residential customers who have improperly operating, inefficient, secondary appliances.

The proposed marketing strategy includes:

- Building a strong, consistent message informing customers that the Appliance Turn-In Program will result in annual cost savings with energy efficient appliances;
- Recognition of customers' green lifestyle and position the program as an essential component to their standard of living; and
- Strengthen GMO's relationship with Energy Star appliance retailers.

    - GMO's marketing strategy will be based on the integration of marketing, customer call center and program management functions.

The program includes customer educational and promotional pieces designed to assist residential customers with the information necessary to improve the energy efficiency of their entire home. The program also includes customer and trade ally education to assist with understanding the technologies and applications that are being promoted, the incentives that are offered, and how the program functions.

Customer Marketing Tactics

The following customer marketing activities are anticipated:

- Promote program on www.kcpl.com Home Page, within site and in account payment portal (AccountLink);
- Provide promotional info embedded in the Energy Analyzer;
- Direct mail campaigns;
- Conduct telemarketing in conjunction with other campaigns;
- Bill inserts and Html email campaigns;
- Print advertising in local newspapers and magazines;
- Participation in Earth Day, Home Shows, and large customer employee fairs by providing brochures featuring the benefits and process to participate.

Retailer Marketing Tactics

GMO will increase its efforts with retailers with the following:

- Schedule retailer meetings.
  - At least one time a year;
  - Provide updates on GMO energy efficiency applications, program updates, budgets/goals, etc.; and
  - Facilitate networking.
- Determine content for partner-only web portal.
  - Provide information and documentation on GMO's programs, procedures, policies and contacts; and
  - Provide reporting and marketing tools.
- Provide marketing support to drive product participation.

For the Appliance Turn-In Program, GMO has identified the following internal and external print communications as possible marketing channels:

Externally Published Communications:

- The Kansas City Star;
- Greenability magazine or other sustainability publications.

Internally Published Communications

- The Wire. (Commercial version). This is a quarterly newsletter from GMO that is included with a customer's bill.
- Bill messaging.
- On line promotion with GMO's other e-Services products.

Other marketing activities may include:

- Online advertising will be used with Google AdWords;
- Attend and present at conferences and public events, such as Chamber of Commerce meetings, to increase general awareness of the program and distribute program promotional materials;
- Sponsor spots on public radio.

C. Program delivery

The Appliance Turn-In Program will be implemented by GMO with necessary resources to administer the Program. A Program Administrator will be responsible for items such as incentive processing, rebate processing, communication with the customer to resolve application issues, and status reporting associated with the Program as GMO directs.

GMO will utilize an internal program manager to conduct its own administration of the program. GMO's program manager will maintain oversight of the Program.

D. Partners

Partners include GMO internal staff, various retailers, local Chamber of Commerce organizations, and others as needed to promote and encourage customer participation in the program.

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of expected program end use measures (net-free) expected to be undertaken by Missouri residential customers over the five-year period is shown below.

	Missouri Annual End Use Program Measures (Net-Free)		
Year 1	**	[redacted]	**
Year 2	**		**
Year 3	**		**
Year 4	**		**
Year 5	**		**
Total	**		**

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below for the Appliance Turn-In program. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Appliance Turn-In		
Test Name	**Market Based Test Results**	**Cost Based Test Results**
Utility Test	2.66	1.61
TRC Test	2.66	1.61
RIM Test	0.71	0.43
RIM (Net Fuel)	0.82	0.50
Participant Test	N/A	N/A
Societal Test	3.15	2.10

Assumptions		
Utility Discount Rate (%)	7.45%	7.45%
Participant Discount Rate (%)	10.00%	10.00%
Electric Losses (%)	5.50%	5.50%
Societal Discount Rate (%)	3.00%	3.00%

Avoided Costs					
Avoided T&D ($ / kW)	**	[redacted]	**	**	[redacted] **
Avoided Market-Based Ancillary Service Charges (OATT)	**	[redacted]	**	**	[redacted] **
Cost-Based Proxy for Avoided Capacity ($ / kW Annualized)	**	[redacted]	**	**	[redacted] **
CO2 emissions (kG/kWh)	**	[redacted]	**	**	[redacted] **

Cost Based Avoided Electric Production	**	[redacted]	**
Avoided T&D Electric, w OATT	**	[redacted]	**
Avoided Electric Capacity	**	[redacted]	**
Total Cost Based Avoided Costs	**	[redacted]	**

Market Based Avoided Electric Production Costs	**	[redacted]	**

Program Costs			
Administration Costs	**	[redacted]	**
Implementation / Participation Costs	**		**
Customer Incentives	**		**
Other / Miscellaneous Costs	**		**
Total Program Cost	**		**

Participant Cost	**	[redacted]	**

Environmental Benefits, NOx SOx	**	[redacted]	**

Lost Revenue			
Gross Lost Revenue, Electric	**	[redacted]	**
Net Fuel Lost Revenue, Electric	**		**

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation which will be utilized by GMO are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans will be developed by the selected evaluation contractor(s) as set forth in 4 CSR 240-20.093(7) and will describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), GMO reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Market Transformation: This is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or using opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

GMO will retain one or more EM&V contractors to perform process and impact evaluations for its programs and assess progress of market transformation in order to avoid conflicts of interest and to insure credibility of the evaluation results, as well as comply with Commission requirements. GMO expects to conduct EM&V after Program Year 2 is completed.

8. Program Budget (Five-Year)

The expected budget for the Appliance Turn-In Program over the five-year period is shown below.

Appliance Turn-In Program					
	Admin	Incentive	Implementation	Other contractor costs including M&V	Total
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Total	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

9. Strategies to minimize free riders and maximize spillover

The development of this program incorporated available information from market studies, consultant studies and the California DEER database on program impacts of free ridership and spillover in the initial program design. After two years of program implementation, KCP&L will perform an evaluation, measurement and verification study and these results will be incorporated into the program design. This process provides the input necessary to minimize free-ridership and maximize spillover.

KCP&L-Great Missouri Operations (GMO)

COMMERCIAL AND INDUSTRIAL PRESCRIPTIVE REBATE PROGRAM

The following information regarding GMO's Commercial and Industrial Prescriptive Rebate Program is provided in compliance with 4 CSR 240-3.164(2)(C).

1. Program Description

- The primary goal of the Commercial & Industrial Prescriptive Rebate Program (Program) is to encourage GMO's C&I customers to install energy efficient measures in existing facilities. More specifically, the program is designed to: (1) provide incentives to facility owners and operators for the installation of high efficiency equipment and controls; and (2) provide a marketing mechanism for electrical contractors, mechanical contractors, and their distributors to promote energy efficient equipment to end users.

Prescriptive Energy Efficiency Measures
GMO's rebates for C&I prescriptive energy efficiency measures provides prescriptive incentives to C&I customers for the installation of energy efficient equipment for numerous end use applications. Rebates will be fixed per eligible energy efficiency measure.

The Company will maintain and make available a list of cost-effective energy efficiency Prescriptive Measures on its Company website. The Prescriptive Measure list, rebate amounts, and minimum efficiency criteria will be updated as market or industry conditions change. Measure category headings may include, but are not limited to:

- Lighting and Controls;
- Motors, Pumps, and Variable Frequency Drives;
- HVAC;
- Process;
- ENERGIY STAR® Equipment;
- Business Computing; and
- Food Service and Refrigeration.

Incentives for each technology will vary based on cost effectiveness and market response. The program strives to cover at least 50% of the incremental cost of the measure to stimulate the market if it is cost effective. Additional guidelines may be established such as total incentives available pre customer per year to assure that funds are allocated across all customer opportunities.

2. Prescriptive Energy Efficiency Measures List

Below is a listing of proposed eligible prescriptive energy efficiency measures and rebates.

LIGHTING & CONTROLS PRESCRIPTIVE MEASURES		
Measure	Rebate	
T8 with Electronic Ballast		
T8 8ft 1 lamp replacing T12 (retrofit only)	$	25.00
T8 8ft 2 lamp replacing T12 (retrofit only)	$	27.00
T8 4ft 4 lamp replacing T12 (retrofit only)	$	28.50
T8 4ft 3 lamp replacing T12 (retrofit only)	$	27.00
T8 4ft 2 lamp replacing T12 (retrofit only)	$	18.00
T8 4ft 1 lamp replacing T12 (retrofit only)	$	16.50
T8 3ft 4 lamp replacing T12 (retrofit only)	$	28.50
T8 3ft 3 lamp replacing T12 (retrofit only)	$	27.00
T8 3ft 2 lamp replacing T12 (retrofit only)	$	18.00
T8 3ft 1 lamp replacing T12 (retrofit only)	$	16.50
T8 2ft 4 lamp replacing T12 (retrofit only)	$	28.50
T8 2ft 3 lamp replacing T12 (retrofit only)	$	27.00
T8 2ft 2 lamp replacing T12 (retrofit only)	$	18.00
T8 2ft 1 lamp replacing T12 (retrofit only)	$	16.50
T8 HO 8ft 1 lamp replacing T12 (retrofit only)	$	33.00
T8 HO 8ft 2 lamp replacing T12 (retrofit only)	$	36.00
T8 HB 4ft 4L (retrofit only replacing 250-399W HID)	$	80.00
T8 HB 4ft 6L (retrofit only replacing 400-999W HID)	$	60.00
T8 HB 4ft 8L (retrofit only replacing 400-999W HID)	$	100.00
2 fixtures – T8 32W HB 4ft 8 Lamp (retrofit only replacing 1,000W HID-2 for one replacement)	$	200.00

T5 with Electronic Ballast		
T5 1 lamp replacing T12 (retrofit only)	$	30.00
T5 2 lamp replacing T12 (retrofit only)	$	37.00
T5 3 lamp replacing T12 (retrofit only)	$	40.00
T5 4 lamp replacing T12 (retrofit only)	$	44.00
T5 HO 1 lamp replacing T12 (retrofit only)	$	60.00
T5 HO 2 lamp replacing T12 (retrofit only)	$	70.00
T5 HO 3 lamp replacing T12 (retrofit only)	$	88.00
T5 HO 4 lamp replacing T12 (retrofit only)	$	112.00
T5 HO HB 3L (retrofit only replacing 250-399W HID)	$	90.00
T5 HO HB 4L (retrofit only replacing 400-999W HID)	$	96.00
T5 HO HB 6L (retrofit only replacing 400-999W HID)	$	175.00
2 fixtures – T5 HO HB 6 Lamp (retrofit only replacing 1,000W HID-2 for one replacement)	$	350.00
Compact Fluorescents (CFL)		
42W 8 lamp HB CFL	$	200.00
CFL – Screw In (lamp only)	$	2.00
CFL – Hardwired (Fixture and lamp)	$	22.00
320W Pulse Start Halide (retrofit only)	$	75.00
Low Watt High Performance T8 Lighting		
Re-lamp T8 fixtures with low Watt T8 lamps-30 watts or less	$	0.50/lamp
Replace standard T8 systems with 4' 25W, 28W, or 30W T8 U lamps and approved ballast OR relamp existing T8 fixtures with low Watt T8 lamps 28W or less. In order to qualify for incentives, ballasts must be from CEE approved list (www.cee1.org).		

Other Efficient Lighting Technologies	
21" Tubular Skylight/Light Tube	$250.00/fixture
LED Exit Signs (replacement fixture only)	$10.00/fixture
Daylight Sensor Lighting Control	$0.09 per Watt controlled
Centralized Lighting Control	$0.09 per Watt controlled
Multilevel Lighting Control	$0.09 per Watt controlled
Occupancy Sensors	
Under 500 W connected to sensor	$0.11 per Watt controlled
Over 500 W connected to sensor	$0.11 per Watt controlled

MOTORS, PUMPS, AND VFDs PRESCRIPTIVE MEASURES		
Nominal Efficiencies for "NEMA Premium™" Induction Motors		
HP	Rebate per HP	Minimal Efficiency
1 to 5	$ 46.50	Motors must be 1-200 hp NEMA Design A/B, 460 volts, TEFC or ODP and 1200rpm, 1800 rpm, or 3600 rpm, and the motor must be included in the most recent Consortium for Energy Efficiency (CEE) Premium Efficiency Motors List. http://www.cee1.org/ind/mot-sys/mtr-ms-main.php3
7.5 to 20	$ 104.80	
25 to 100	$ 271.00	
125 - 200	$ 820.00	
300	$ 820.00	Motors must be general-purpose, single-speed, polyphase, 250-500 horsepower, 2,4, and 6 pole, squirrel cage induction motors, NEMA Design A or B, continuous rated which meet or exceed the nominal energy efficiency levels presented in NEMA Standards Publication MG1-2003, in Table 12-12.
VFD = Variable frequency drive		

To be eligible to be included in the CEE Premium Efficiency Motors List, a motor's nominal efficiency must be at least one full National Electrical Manufacturers Association (NEMA) band higher than the 2007 US Energy Independence and Security Act (EISA) specified nominal efficiency (as defined in NEMA Motor Guide 1 Table 12-12) and the motor and corresponding nominal efficiency must be listed in a publicly available document, such as product catalog or cut sheet amounting to an advertised claim of performance, or the reporting entity must wish it to be treated as publicly available (and expressly claim to achieve performance based upon the noted test procedure).

High Efficiency Pumps		
HP	Minimal Efficiency	Rebate
1.5	Pump efficiency of 75% or greater for the dominant operating conditions as demonstrated by a pump performance curve	$ 210.00
2		$ 220.00
3		$ 230.00
5		$ 240.00
7.5		$ 250.00
10		$ 260.00
15		$ 300.00
20		$ 400.00

Variable Frequency Drives (VFDs)	
HP	Rebate
1.5	$ 1,930.25
2	$ 1,985.25
3	$ 2,047.65
5	$ 2,176.50
7.5	$ 2,751.50
10	$ 2,864.00
15	$ 3,580.50
20	$ 4,030.50
25	$ 4,705.50
30	$ 5,414.00
40	$ 5,685.00
50	$ 7,128.00

VFD = Variable frequency drive
HP = Horsepower

HVAC PRESCRIPTIVE MEASURES		
Size	Efficiency	Rebate
Unitary and Rooftop Air Conditioning		
<65,000 BTUH (1 Phase)	14 SEER	$200.00
<65,000 BTUH (3 Phase)	13 SEER	$200.00
65,000-135,000 BTUH	11.5 EER	$400.00
136,000-240,000 BTUH	11.5 EER	$800.00
241,000-760,000 BTUH	10.5 EER	$1,000.00
>760,000 BTUH	10.5 EER	$2,600.00
Unitary and Rooftop HP		
<65,000 BTUH (1 Phase)	14 SEER	$200.00
<65,000 BTUH (3 Phase)	13 SEER	$200.00
65,000-135,000 BTUH	11.5 EER	$400.00
136,000-240,000 BTUH	11.5 EER	$800.00
>240,000 BTUH	10.5 EER	$1,000.00
Water Source Heat Pump		
<17,000	11.5 EER	$16.00
17,000-65,000	12.3 EER	$46.00
65,000-135,000	12.3 EER	$115.00
Ground Source Heat Pump		
Ground Source HP Closed Loop, all	13.7 EER	$300
Water Cooled Chillers, Rotary Screw and Scroll		
< 75 Tons	FL: 0.702 kW/T ILPV: 0.540 kW/T	$25 / T
≥ 75 and < 150 T	FL: 0.698 kW/T ILPV: 0.527 kW/T	$25 / T
150-300 tons	FL: 0.612 kW/T ILPV: 0.486 kW/T	$40 / T
> 300 tons	FL: 0.588 kW/T ILPV: 0.441 kW/T	$40 / T
Water Cooled Chillers, Centrifugal		
< 150 T	FL: 0.571 kW/T ILPV: 0.405 kW/T	$30 / T
150-300 tons	FL: 0.571 kW/T ILPV: 0.405 kW/T	$35 / T
> 300 tons	FL: 0.513 kW/T ILPV: 0.360 kW/T	$20 / T

Air Cooled Chillers		
	Minimum Full Load Efficiency (FL) of a 10.52 EER, or an Integrated Part Load Value (ILPV) of 13.75 EER for units less than 150 Tons or an ILPV of 14.03 EER for units greater than or equal to 150 Tons	$25 / Ton
HP Water Heater		
500 gallon/day	3.0 COP	$3,500.00
1000 gallon/day	3.0 COP	$5,000.00
1500 gallon/day	3.0 COP	$7,000.00
Packaged Terminal A/C		
	9.2 EER	$60.00
Packaged Terminal HP		
	9.0 EER	$60.00

HVAC PRESCRIPTIVE MEASURES-Continued	
Size/Measure	Rebate
Chilled Water Reset Air Cooled	
0-100 tons	$550.00
100-200 tons	$750.00
200-300 tons	$875.00
300-400 tons	$875.00
400-500 tons	$900.00
Chilled Water Reset Water Cooled	
0-1000 tons	$500.00
1000-2000 tons	$750.00
2000-3000 tons	$875.00
Energy Star Sleeve Air Conditioners	
> 14,000 BTU/h	$15.00
< 14,000 BTU/h	$15.00
Other Measures	
Economizer	$50.00
Tuneup - Refrigerant Charge (retrofit only)	$15.00
Setback/Programmable Thermostat	$35.00
Window Film	$1 sq. ft.

PROCESS PRESCRIPTIVE MEASURES	
Measure	Rebate
Engineered Nozzles	$20.00/nozzle
Barrel Wraps for Injection Molders & Extruders	$1.00/ton
Insulated Pellet Dryer Ducts-3" diameter	$15.00/sq ft.*
Insulated Pellet Dryer Ducts-4" diameter	$20.00/sq ft.*
Insulated Pellet Dryer Ducts-5" diameter	$25.00/sq ft.*
Insulated Pellet Dryer Ducts-6" diameter	$30.00/sq ft.*
Insulated Pellet Dryer Ducts-8" diameter	$40.00/sq ft.*
*capped at 50% of final invoiced product cost	

ENERGY STAR® PRESCRIPTIVE MEASURES	
Measure	Rebate
ENERGY STAR Commercial Solid Door Refrigerators	
Less than 20 ft^3	$125.00/refrigerator
20-40 ft3	$250.00/refrigerator
More than 48 ft^3	$450.00/refrigerator
ENERGY STAR Commercial Solid Door Freezers	
Less than 20 ft^3	$75.00/freezer
20-40 ft3	$200.00/freezer
More than 48 ft^3	$350.00/freezer
Ice Machines*	
Less than 500 lbs ice production	$300.00/machine
500-1000 lbs ice production	$750.00/machine
More than 1000 lbs ice production	$1,000/machine
Energy Star Commercial Clothes Washers	
Washers Only	$130.00/washer
* Must meet Consortium for Energy Efficiency's (CEE) Tier 1 ice machine specification. Flake and nugget machines are not included.	

BUSINESS COMPUTING PRESCRIPTIVE MEASURES	
Measure	Rebate
Plug Load Occupancy Sensor Document Stations*	$40.00/station
80 PLUS Desktop Computer	$5.00/computer
80 PLUS Desktop-Derived Server	$10.00/server
Network Desktop Computer Power Management Software	$15.00/desktop computer
*Must have three (3) devices connected to plug load service	

FOOD SERVICE AND REFRIGERATION PRESCRIPTIVE MEASURES	
Measure	Rebate
Cold Beverage Vending Machine Controllers	$50.00/unit
Anti-sweat Heater Controls*	$40.00/door
Efficient Refrigeration Condenser	$17.50/ton of refrigeration capacity
Night Covers For Open Displays**	$17.50/per lineal foot
Head Pressure Control*	$60.00/ton of refrigeration
*Up to 50% of project costs **Store operation must allow covers to be covering cases at least 6 hours per 24 hour period.	

3. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative gross and net energy and demand savings for the Commercial and Industrial Prescriptive Rebate Program over the estimated life of the program is shown below.

Cumulative	Program Energy Savings (kWh) - gross	Program Energy Savings (kWh) - net	Program Demand Savings (kW) - gross	Program Demand Savings (kW) - net
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 6	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

Year 7	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 8	**		**	**		**	**		**	**		**
Year 9	**		**	**		**	**		**	**		**
Year 10	**		**	**		**	**		**	**		**
Year 11	**		**	**		**	**		**	**		**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**
Year 14	**		**	**		**	**		**	**		**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

B. Proposed annual and demand savings targets – time horizon

The proposed annual energy and demand savings targets and cumulative energy and demand savings targets for the Commercial and Industrial Prescriptive Rebate Program over the estimated life of the program is shown below.

	Energy Savings (kWh) targets		Energy Savings (kWh) targets - cumulative		Demand Savings (kW) targets		Demand Savings (kW) targets- cumulative	
Year 1	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 2	**		**	**		**	**		**
Year 3	**		**	**		**	**		**
Year 4	**		**	**		**	**		**
Year 5	**		**	**		**	**		**
Year 6	**		**	**		**	**		**
Year 7	**		**	**		**	**		**
Year 8	**		**	**		**	**		**
Year 9	**		**	**		**	**		**

Year 10	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 11	**		**	**		**	**		**	**		**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**
Year 14	**		**	**		**	**		**	**		**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

4. Program Framework/Strategy

A. Relationship to other programs

The C&I Prescriptive Rebate Program are designed for commercial and industrial customers; therefore, the program has a strong relationship through promotion with the Company's other Commercial and Industrial (C&I) demand side management (DSM) programs, such as the C&I Custom Rebate Program-Retrofit, C&I Custom Rebate Program-New Construction, Building Operator Certification (BOC) program, MPower, Optimizer (for small general service customers), and Business Energy Analyzer.

B. Marketing strategy

All GMO commercial and industrial customers are eligible for these rebate programs. Customers may apply for individual or multiple efficiency measures within the same facility under any of these programs.

In order to promote the various Prescriptive Energy Efficiency Measures, targeted messaging will be done to reach specific industries. The table below lists the seven possible subcategories of the program with the industries and entities that will be targeted to market the rebates.

C&I Prescriptive Energy Efficiency Measures	Industries and Entities
Prescriptive Motors, Pumps & VFDs	Motor manufacturers and distributors
Food Service & Refrigeration	Restaurant associations, equipment manufacturers and distributors, grocery stores, convenience stores, gas stations
HVAC	HVAC dealers, manufacturers and distributors
Lighting	Lighting manufacturers and distributors
Process	Air compressors, injection molding manufacturers
ENERGY STAR Commercial Appliances	Manufacturers and distributors of refrigerators, freezers, ice machines, clothes washers
Office Computing	Data centers, facility managers, schools, office managers, hospitals

GMO will use Energy Consultants to help promote the C&I Prescriptive Rebate Programs with Tier 1 customers.

Marketing Tactics

For the C&I Prescriptive Rebate Programs, GMO will continue to develop and foster our relationships with commercial professional/trade associations. Listed below are the associations that GMO believes will be instrumental in the continued success of this program.

Commercial Professional / Trade Organizations	Acronym
Air Conditioning Contractors of America	ACCA
American Council of Engineering Companies	ACEC-KS
American Institute of Architects of KCMO	AIA
American Institute of Architects of Mid-America	AIA – Mid Am
American Society of Heating Refrigeration Air Conditioning Engineers	ASHRAE
Association of Energy Engineers	AEE
Business Owners and Managers Association	BOMA
Design-Build Institute of America Mid-America Region	DBIA-MAR
Electric League of Missouri & Kansas	EL -- KS
Illuminating Engineering Society – KC Section	IES -- KC
International Facilities Management Association	IFMA
Mechanical Contractors Association of KC	MCA
National Electrical Contractors Association	NECA
The Builders Association	BA
U.S. Green Building Council	USGBC

For the C&I Prescriptive Rebate Program, GMO has identified the following internal and external print communications as possible marketing channels:

Externally Published Communications:

- The Kansas City Star – Business section on Tuesdays;
- HVAC/Lighting contractor newsletters/magazines;
- Kansas City Business Journal (Book of Lists); and
- Builder/Architect magazine.

Internally Published Communications

- Energy Talk. This is a monthly newsletter e-mailed to Tier 1 customers from GMO's Energy Consultants.
- The Wire. (Commercial version). This is a quarterly newsletter from GMO that is included with a customer's bill.
- Bill messaging.
- On line promotion with GMO's other e-Services products.

Other marketing activities may include:

- Online advertising will be used with Google AdWords;
- Placement of information on trade ally Web sites;
- Attend and present at conferences and public events, such as Chamber of Commerce meetings, to increase general awareness of the program and distribute program promotional materials;
- Hold seminars with targeted messages to different industry classifications;
- Hold seminars with architects and engineers, trade allies, and trade organizations; or
- Sponsor spots on public radio.

C. Program delivery

The C&I Prescriptive Rebate Program will be implemented by GMO with necessary resources to administer the Program. A Program Administrator will be responsible for items such as incentive processing, rebate processing, communication with the customer to resolve application issues, and status reporting associated with the Program as GMO directs.

GMO will utilize an internal program manager to conduct its own administration of the program. GMO's program manager will maintain oversight of the Program.

GMO will continue to market the program and utilize their sales teams to work with specific customers, such as Tier 1 or Tier 2/3 customers.

D. Partners

Partners include GMO internal staff, various trade associations, local Chamber of Commerce organizations, and others as needed to promote and encourage customer participation in the program.

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of expected program end use measures (net-free) expected to be undertaken by Missouri C&I customers over the five-year period is shown below.

	Missouri Annual End Use Program Measures (Net-Free)		
Year 1	**	[redacted]	**
Year 2	**		**
Year 3	**		**
Year 4	**		**
Year 5	**		**
Total	**		**

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below for the roll-up of the C&I Rebate programs. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Commercial & Industrial Rebates		
Test Name	**Market Based Test Results**	**Cost Based Test Results**
Utility Test	4.00	2.66
TRC Test	3.56	2.37
RIM Test	1.07	0.71
RIM (Net Fuel)	1.31	0.87
Participant Test	2.86	2.86
Societal Test	4.11	2.92

Assumptions		
Utility Discount Rate (%)	7.45%	7.45%
Participant Discount Rate (%)	10.00%	10.00%
Electric Losses (%)	5.50%	5.50%
Societal Discount Rate (%)	3.00%	3.00%

Avoided Costs					
Avoided T&D ($ / kW)	**	[redacted]	**	**	[redacted] **
Avoided Market-Based Ancillary Service Charges (OATT)	**	[redacted]	**	**	[redacted] **
Cost-Based Proxy for Avoided Capacity ($ / kW Annualized)	**	[redacted]	**	**	[redacted] **
CO2 emissions (kG/kWh)	**	[redacted]	**	**	[redacted] **

Cost Based Avoided Electric Production	**	[redacted]	**
Avoided T&D Electric, w OATT	**	[redacted]	**
Avoided Electric Capacity	**	[redacted]	**
Total Cost Based Avoided Costs	**	[redacted]	**

Market Based Avoided Electric Production Costs	**	[redacted]	**

Program Costs			
Administration Costs	**	[redacted]	**
Implementation / Participation Costs	**	[redacted]	**
Customer Incentives	**	[redacted]	**
Other / Miscellaneous Costs	**	[redacted]	**
Total Program Cost	**	[redacted]	**

Participant Cost (Gross)	**	[redacted]	**

Environmental Benefits, NOx SOx	**	[redacted]	**

Lost Revenue			
Gross Lost Revenue, Electric	**	[redacted]	**
Net Fuel Lost Revenue, Electric	**	[redacted]	**

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation which will be utilized by GMO are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans will be developed by the selected evaluation contractor(s) as set forth in 4 CSR 240-20.093(7) and will describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), GMO reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Market Transformation: This is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or using opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

GMO will retain one or more EM&V contractors to perform process and impact evaluations for its programs and assess progress of market transformation in order to avoid conflicts of interest and to insure credibility of the evaluation results, as well as comply with Commission requirements. GMO expects to conduct EM&V after Program Year 2 is completed.

8. Program Budget (Five-Year)

Although the C&I Prescriptive Energy Efficiency Measures Rebate Program is a new facet to GMO's already established C&I Rebate Programs, GMO does not have any start-up costs. The expected budget for the C&I Rebate Program over the five-year period is shown below.

Commercial & Industrial Prescriptive Rebate Program																								
	Admin						Incentive						Implementation						Other including M&V						Total					
Year 1	**	[redacted]				**	**	[redacted]				**	**	[redacted]				**	**	[redacted]				**	**	[redacted]				**
Year 2	**					**	**					**	**					**	**					**	**					**
Year 3	**					**	**					**	**					**	**					**	**					**
Year 4	**					**	**					**	**					**	**					**	**					**
Year 5	**					**	**					**	**					**	**					**	**					**
Total	**					**	**					**	**					**	**					**	**					**

9. Strategies to minimize free riders and maximize spillover

The development of this program incorporated available information from market studies, consultant studies and the California DEER database on program impacts of free ridership and spillover in the initial program design. After two years of program implementation, KCP&L will perform an evaluation, measurement and verification study and these results will be incorporated into the program design. This process provides the input necessary to minimize free-ridership and maximize spillover.

KCP&L-Greater Missouri Operations (GMO)

MULTI-FAMILY REBATE PROGRAM

The following information regarding GMO's proposed Multi-family Rebate Program is provided in compliance with 4 CSR 240-3.164(2)(C).

1. Program Description

The Multi-family Rebate Program advances comprehensive energy efficiency measures, including: whole house solutions, plug load efficiency, visual monitoring and displays, performance standards, local government opportunities and DSM integration

Multi-family property owners and managers have been historically less responsive to energy efficiency efforts than have residential customers. This unique customer segment warrants additional attention and effort to motivate property owners and managers to actively participate in energy efficiency programs. The Multi-family Rebate Program proposes a series of comprehensive measures designed to address systems within multi-family housing establishments.

The Multi-family Rebate Program offers prescribed rebates for energy efficient products to motivate the multi-family property owners/managers to install energy efficient products in both common and dwelling areas of multi-family complexes and common areas of mobile home parks and condominiums. An additional objective is to heighten property owners/managers and tenants awareness and knowledge of energy efficiency.

2. Multi-family Rebate Measures List and Incentive Levels

MEASURE	REBATE
Attic Insulation	$0.15/Square Foot
Wall Insulation	$0.15/Square Foot
High Performance Dual Pane Windows	$0.75/Square Foot
HVAC Remove or Add refrigerant	$30 / Unit
Tune-up Service for AC Unit to 8.5 SEER	$30 / Unit
HVAC - Early Retirement Install 14 SEER AC or HP	$ 450 / Unit
HVAC - Early Retirement Install 15 SEER AC or HP	$500 / Unit
HVAC - Early Retirement Install 16 SEER AC or HP	$575 / Unit
HVAC - Upon Failure Install 14 SEER AC or HP	$ 100 / Unit
HVAC - Upon Failure Install 15 SEER AC or HP	$125 / Unit
HVAC - Upon Failure Install 16 SEER AC or HP	$140 / Unit
EnergyStar® High Efficiency Window AC, EER >= 10.8	$25 / Unit
Install EnergyStar® Ceiling Fan	$25 / Unit
Install programmable thermostat	$35 / Unit

Install electronically commutated motors, for AC and Heat Pump Blowers	$50 / Unit
Replace 13 Seer A/C with 16 SEER HP	$140 / Unit
Install Compact Fluorescent Lamps in all Apartments	$0.25 per Lamp
Install CFLs in corridors, laundry and mechanical rooms	$0.25 per Lamp
Install High Efficiency Exterior Lighting Systems	$0.75 per Lamp
Purchase Energy Star Refrigerator	$ 75 / Unit
Reduce infiltration to 15000 CFM50	$0.10 per Sq. Ft.

3. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative gross and net energy and demand savings for the Multi-family Rebate Program over the estimated life of the program is shown below.

Cumulative	Program Energy Savings (kWh) - gross	Program Energy Savings (kWh) - net	Program Demand Savings (kW) - gross	Program Demand Savings (kW) - net
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 6	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 7	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 8	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 9	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 10	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 11	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 12	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 13	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 14	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 15	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 16	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 17	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 18	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

Year 19	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 20	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**

B. Proposed annual and demand savings targets – time horizon

The proposed annual energy and demand savings targets and cumulative energy and demand savings targets for the Multi-family Rebate Program over the estimated life of the program is shown below.

	Energy Savings (kWh) targets			Energy Savings (kWh) targets - cumulative			Demand Savings (kW) targets			Demand Savings (kW) targets- cumulative		
Year 1	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 2	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 3	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 4	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 5	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 6	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 7	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 8	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 9	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 10	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 11	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 12	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 13	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 14	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 15	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 16	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 17	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 18	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 19	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 20	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**

4. Program Framework/Strategy

A. Relationship to other programs

The Multi-family Rebate Program is designed for multi-family property owners and managers to assist residential customers to use energy more efficiently; therefore, the program has a strong relationship through promotion with the Company's other residential demand side management (DSM) programs, such as the Cool Homes program, Home Performance with Energy Star program, Energy Star Homes program, Low-income Weatherization program, Optimizer, and Home Energy Analyzer.

B. Marketing strategy

The target market for the Program is GMO multi-family property owners/managers who have non-energy efficient products in the common areas and dwelling units of multi-family complexes and common areas of mobile home parks and condominiums.

The proposed marketing strategy includes:

- Building a strong, consistent message informing customers that the Multi-family Rebate Program will result in annual cost savings with energy efficient appliances;
- Recognition of customers' green lifestyle and position the program as an essential component to their standard of living; and
- Strengthen GMO's relationship with Energy Star retailers, professional and trade associations.

GMO's marketing strategy will be based on the integration of marketing, customer call center and program management functions.

Customer Marketing Tactics

The following customer marketing activities are anticipated:

- Promote program on www.kcpl.com Home Page, within site and in account payment portal (AccountLink);
- Provide promotional info embedded in the Business Energy Analyzer and Home Energy Analyzer;
- Direct mail campaigns;
- Conduct telemarketing in conjunction with other campaigns;
- Bill inserts and Html email campaigns;
- Print advertising in local newspapers and magazines;
- Participation in Earth Day, Home Shows, and large customer employee fairs by providing brochures featuring the benefits and process to participate.

Property Owners/Manager and Retailer Marketing Tactics

GMO will increase its efforts with property owners/manager and retailers with the following:

- Provide updates on GMO energy efficiency applications, program updates, budgets/goals, etc.; and
- Facilitate networking.
- Provide information and documentation on GMO's programs, procedures, policies and contacts; and
- Provide reporting and marketing tools.
- Provide marketing support to drive program participation.

For the Multi-family Rebate Program, GMO has identified the following internal and external print communications as possible marketing channels:

Externally Published Communications:

- The Kansas City Star;
- Greenability magazine or other sustainability publications.

Internally Published Communications

- The Wire. (Commercial version). This is a quarterly newsletter from GMO that is included with a customer's bill.
- Bill messaging.
- On line promotion with GMO's other e-Services products.

Other marketing activities may include:

- Online advertising will be used with Google AdWords;
- Attend and present at conferences and public events, such as Chamber of Commerce meetings, to increase general awareness of the program and distribute program promotional materials;
- Sponsor spots on public radio.

C. Program delivery

The Multi-family Rebate Program will be implemented by GMO with necessary resources to administer the Program. A Program Administrator will be responsible for items such as incentive processing, rebate processing, communication with the customer to resolve application issues, and status reporting associated with the Program as GMO directs.

GMO will utilize an internal program manager to conduct its own administration of the program. GMO's program manager will maintain oversight of the Program.

D. Partners

Partners include GMO internal staff, various retailers, local Chamber of Commerce organizations, and others as needed to promote and encourage customer participation in the program.

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of expected program end use measures (net-free) expected to be undertaken by Missouri residential customers over the five-year period is shown below.

	Missouri Annual End Use Program Measures (Net-Free)		
Year 1	**	[redacted]	**
Year 2	**		**
Year 3	**		**
Year 4	**		**
Year 5	**		**
Total	**		**

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below for the Multi-family Rebate program. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Multi-family Rebate Program		
Test Name	Market Based Test Results	Cost Based Test Results
Utility Test	5.72	3.49
TRC Test	3.24	1.98
RIM Test	0.97	0.59
RIM (Net Fuel)	1.20	0.73
Participant Test	2.55	2.55
Societal Test	3.84	2.57

Assumptions		
Utility Discount Rate (%)	7.45%	7.45%
Participant Discount Rate (%)	10.00%	10.00%
Electric Losses (%)	5.50%	5.50%
Societal Discount Rate (%)	3.00%	3.00%

Avoided Costs						
Avoided T&D ($ / kW)	**	[redacted]	**	**	[redacted]	**
Avoided Market-Based Ancillary Service Charges (OATT)	**	[redacted]	**	**	[redacted]	**
Cost-Based Proxy for Avoided Capacity ($ / kW Annualized)	**	[redacted]	**	**	[redacted]	**
CO2 emissions (kG/kWh)	**	[redacted]	**	**	[redacted]	**

Cost Based Avoided Electric Production	**	[redacted]	**
Avoided T&D Electric, w OATT	**	[redacted]	**
Avoided Electric Capacity	**	[redacted]	**
Total Cost Based Avoided Costs	**	[redacted]	**

Market Based Avoided Electric Production Costs	**	[redacted]	**

Program Costs			
Administration Costs	**	[redacted]	**
Implementation / Participation Costs	**	[redacted]	**
Customer Incentives	**	[redacted]	**
Other / Miscellaneous Costs	**	[redacted]	**
Total Program Cost	**	[redacted]	**

Participant Cost (Gross)	**	[redacted]	**

Environmental Benefits, NOx SOx	**	[redacted]	**

Lost Revenue			
Gross Lost Revenue, Electric	**	[redacted]	**
Net Fuel Lost Revenue, Electric	**	[redacted]	**

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation which will be utilized by GMO are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans will be developed by the selected evaluation contractor(s) as set forth in 4 CSR 240-20.093(7) and will describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), GMO reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Market Transformation: This is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or using opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

GMO will retain one or more EM&V contractors to perform process and impact evaluations for its programs and assess progress of market transformation in order to avoid conflicts of interest and to insure credibility of the evaluation results, as well as comply with Commission requirements. GMO expects to conduct EM&V after Program Year 2 is completed.

8. Program Budget (Five-Year)

The expected budget for the Multi-family Rebate Program over the five-year period is shown below.

	Admin	Incentive	Implementation	Other including M&V	Total
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Total	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

9. Strategies to minimize free riders and maximize spillover

The development of this program incorporated available information from market studies, consultant studies and the California DEER database on program impacts of free ridership and spillover in the initial program design. After two years of program implementation, KCP&L will perform an evaluation, measurement and verification study and these results will be incorporated into the program design. This process provides the input necessary to minimize free-ridership and maximize spillover.

KCP&L-Greater Missouri Operations (GMO)

RESIDENTIAL LIGHTING AND APPLIANCE PROGRAM

The following information regarding GMO's proposed Residential Lighting and Appliance Program is provided in compliance with 4 CSR 240-3.164(2)(C).

1. Program Description

The Residential Lighting and Appliance Program promotes ENERGY STAR® appliances, lighting and home electronics. The program also promotes several products that are energy efficient, for which there are not yet ENERGY STAR labels, such as solid state lighting and light emitting diode technologies.

The program uses a two-pronged approach: (1) increasing supply of qualifying products through partnerships with retailers, manufacturers and distributors, and (2) creating demand through consumer awareness and understanding of the ENERGY STAR label and the benefits of energy efficiency.

2. Residential Lighting and Appliance Measures List and Incentive Levels

MEASURE	REBATE
EnergyStar® High Efficiency Window AC, EER >= 10.8	$25
Install EnergyStar® Ceiling Fans	$25
Install Smart Power Strips	$10
Install Compact Fluorescent Lamps	
Purchase Energy Star Labeled Refrigerator	$100
Purchase Energy Star Labeled Freezer	$100
Install Programmable Thermostat	$35

High Efficiency Window AC Option

Many homes are cooled with window AC units. The baseline measure was assigned a rated efficiency of 8.0 EER, and the retrofit model used an EnergyStar®, 10.8 EER or greater.

Install Ceiling Fans

Studies have found that using EnergyStar® ceiling fans can allow the room temperature to increase by two or three degrees while maintaining a sufficient comfort level. The baseline measure was no ceiling fans, and the retrofit model installed an EnergyStar® ceiling fan.

Install Smart Power Strips

An advanced power strip is a surge protector with special energy saving features.

This energy saving product will auto shut-off select appliances or devices at the same time designating others that must remain on. (Offer applies to BITS Smart Strips, TrickleStar TrickleStrips and Smart PowerTap. Offer is limited to 4 advanced power strips per household).

Purchase Energy Star Labeled Refrigerator or Freezer

The baseline measure is a standard new refrigerator or freezer. ENERGY STAR qualified refrigerators are required to use 20% less energy than models not labeled with the ENERGY STAR logo. A full size EnergyStar freezer is required to be at least 10% more energy efficient than the minimum federal government standard (NAECA).

Install Programmable Thermostat

The baseline measure is a non-programmable thermostat, and the retrofit was a programmable thermostat. Energy savings would be achieved by increasing the cooling setpoints 3.75 degrees F and decreasing the heating setpoints by 3.75 degrees F daily from 8AM to 3PM.

3. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative gross and net energy and demand savings for the Residential Lighting and Appliance Program over the estimated life of the program is shown below.

Cumulative	Program Energy Savings (kWh) - gross	Program Energy Savings (kWh) - net	Program Demand Savings (kW) - gross	Program Demand Savings (kW) - net
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 6	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 7	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 8	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 9	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 10	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

Year 11	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**
Year 14	**		**	**		**	**		**	**		**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

B. Proposed annual and demand savings targets – time horizon

The proposed annual energy and demand savings targets and cumulative energy and demand savings targets for the Residential Lighting and Appliance Program over the estimated life of the program is shown below.

	Energy Savings (kWh) targets			Energy Savings (kWh) targets - cumulative			Demand Savings (kW) targets			Demand Savings (kW) targets- cumulative		
Year 1	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 2	**		**	**		**	**		**	**		**
Year 3	**		**	**		**	**		**	**		**
Year 4	**		**	**		**	**		**	**		**
Year 5	**		**	**		**	**		**	**		**
Year 6	**		**	**		**	**		**	**		**
Year 7	**		**	**		**	**		**	**		**
Year 8	**		**	**		**	**		**	**		**
Year 9	**		**	**		**	**		**	**		**
Year 10	**		**	**		**	**		**	**		**
Year 11	**		**	**		**	**		**	**		**
Year 12	**		**	**		**	**		**	**		**
Year 13	**		**	**		**	**		**	**		**

Year 14	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**	**	[redacted]	**
Year 15	**		**	**		**	**		**	**		**
Year 16	**		**	**		**	**		**	**		**
Year 17	**		**	**		**	**		**	**		**
Year 18	**		**	**		**	**		**	**		**
Year 19	**		**	**		**	**		**	**		**
Year 20	**		**	**		**	**		**	**		**

4. Program Framework/Strategy

A. Relationship to other programs

The Residential Lighting and Appliance Program is designed for residential customers; therefore, the program has a strong relationship through promotion with the Company's other residential demand side management (DSM) programs, such as the Cool Homes program, Home Performance with Energy Star program, Energy Star Homes program, Low-income Weatherization program, Optimizer, and Home Energy Analyzer.

B. Marketing strategy

The target market for the Program is GMO residential customers who have inefficient lighting and appliances.

The proposed marketing strategy includes:

- Building a strong, consistent message informing customers that the Residential Lighting and Appliance program will result in annual cost savings with energy efficient appliances;
- Recognition of customers' green lifestyle and position the program as an essential component to their standard of living; and
- Strengthen GMO's relationship with Energy Star retailers.

The program includes customer educational and promotional pieces designed to assist residential customers with the information necessary to improve the energy efficiency of their entire home. The program also includes customer and trade ally education to assist with understanding the technologies and applications that are being promoted, the incentives that are offered, and how the program functions.

Customer Marketing Tactics

The following customer marketing activities are anticipated:

- Promote program on www.kcpl.com Home Page, within site and in account payment portal (AccountLink);
- Provide promotional info embedded in the Home Energy Analyzer;
- Direct mail campaigns;
- Conduct telemarketing in conjunction with other campaigns;

- Bill inserts and Html email campaigns;
- Print advertising in local newspapers and magazines;
- Participation in Earth Day, Home Shows, and large customer employee fairs by providing brochures featuring the benefits and process to participate.

Retailer Marketing Tactics

GMO will increase its efforts with retailers with the following:

- Schedule retailer meetings at least one time a year;
  - Provide updates on GMO energy efficiency applications, program updates, budgets/goals, etc.; and
  - Facilitate networking
- Determine content for partner-only web portal.
  - Provide information and documentation on GMO's programs, procedures, policies and contacts; and
  - Provide reporting and marketing tools.
- Provide marketing support to drive program participation.

For the Residential Lighting and Appliance Program, GMO has identified the following internal and external print communications as possible marketing channels:

Externally Published Communications:

- The Kansas City Star;
- Greenability magazine or other sustainability publications.

Internally Published Communications

- The Wire. (Commercial version). This is a quarterly newsletter from GMO that is included with a customer's bill.
- Bill messaging.
- On line promotion with GMO's other e-Services products.

Other marketing activities may include:

- Online advertising will be used with Google AdWords;
- Attend and present at conferences and public events, such as Chamber of Commerce meetings, to increase general awareness of the program and distribute program promotional materials;
- Sponsor spots on public radio.

C. Program delivery

The Residential Lighting and Appliance Program will be implemented by GMO with necessary resources to administer the Program. A Program Administrator will be responsible for items such as incentive processing, rebate processing, communication with the customer to resolve application issues, and status reporting associated with the Program as GMO directs.

GMO will utilize an internal program manager to conduct its own administration of the program. GMO's program manager will maintain oversight of the Program.

D. Partners

Partners include GMO internal staff, various manufacturers, retailers, local Chamber of Commerce organizations, and others as needed to promote and encourage customer participation in the program.

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of expected program end use measures (net-free) expected to be undertaken by Missouri residential customers over the five-year period is shown below.

	Missouri Annual End Use Program Measures (Net-Free)		
Year 1	**	[redacted]	**
Year 2	**		**
Year 3	**		**
Year 4	**		**
Year 5	**		**
Total	**		**

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below for the Residential Lighting and Appliance program. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Test Name	Market Based Test Results	Cost Based Test Results
Utility Test	3.65	2.43
TRC Test	2.30	1.53
RIM Test	1.05	0.70

RIM (Net Fuel)	1.23	0.82
Participant Test	1.70	1.70
Societal Test	2.57	1.80

Assumptions		
Utility Discount Rate (%)	7.45%	7.45%
Participant Discount Rate (%)	10.00%	10.00%
Electric Losses (%)	5.50%	5.50%
Societal Discount Rate (%)	3.00%	3.00%

Avoided Costs					
Avoided T&D ($ / kW)	**	[redacted]	**	**	[redacted] **
Avoided Market-Based Ancillary Service Charges (OATT)	**	[redacted]	**	**	[redacted] **
Cost-Based Proxy for Avoided Capacity ($ / kW Annualized)	**	[redacted]	**	**	[redacted] **
CO2 emissions (kG/kWh)	**	[redacted]	**	**	[redacted] **

Cost Based Avoided Electric Production	**	[redacted]	**
Avoided T&D Electric, w OATT	**	[redacted]	**
Avoided Electric Capacity	**	[redacted]	**
Total Cost Based Avoided Costs	**	[redacted]	**

Market Based Avoided Electric Production Costs	**	[redacted]	**

Program Costs			
Administration Costs	**	[redacted]	**
Implementation / Participation Costs	**	[redacted]	**
Customer Incentives	**	[redacted]	**
Other / Miscellaneous Costs	**	[redacted]	**
Total Program Cost	**	[redacted]	**

Participant Cost (Gross)	**	[redacted]	**

Environmental Benefits, NOx SOx	**	[redacted]	**

Lost Revenue			
Gross Lost Revenue, Electric	**	[redacted]	**
Net Fuel Lost Revenue, Electric	**	[redacted]	**

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation which will be utilized by GMO are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans will be developed by the selected evaluation contractor(s) as set forth in 4 CSR 240-20.093(7) and will describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), GMO reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Market Transformation: This is the strategic process of intervening in a market to create lasting change in market behavior by removing identified barriers or using opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice.

GMO will retain one or more EM&V contractors to perform process and impact evaluations for its programs and assess progress of market transformation in order to avoid conflicts of interest and to insure credibility of the evaluation results, as well as comply with Commission requirements. GMO expects to conduct EM&V after Program Year 2 is completed.

8. Program Budget (Five-Year)

The expected budget for the Residential Lighting and Appliance Program over the five-year period is shown below.

Residential Lighting and Appliance Program

	Admin	Incentive	Implementation	Other including M&V	Total
Year 1	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 2	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 3	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 4	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Year 5	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **
Total	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **	** [redacted] **

9. Strategies to minimize free riders and maximize spillover

The development of this program incorporated available information from market studies, consultant studies and the California DEER database on program impacts of free ridership and spillover in the initial program design. After two years of program implementation, KCP&L will perform an evaluation, measurement and verification study and these results will be incorporated into the program design. This process provides the input necessary to minimize free-ridership and maximize spillover.