

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

City of Stephenson

Department of Public Works

**In cooperation with the Michigan Electric Cooperative
Association**

Energy Optimization Plan

2012-2015

Program Descriptions



City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

City of Stephenson

Department of Public Works

Energy Optimization Plan

Program Descriptions

Table of Contents

	Page
Overview	3
Residential	5
• Low Income Services	6
• ENERGY STAR Products	12
• Appliance Recycling	19
• Efficient HVAC Equipment	24
• Audit/Weatherization/New Construction	30
• Farm Services	39
• Educational Services	48
• Pilot Programs	51
Commercial and Industrial	54
• General Business Services	55
• Educational Services	64
• Pilot Programs	67

Overview

The energy efficiency programs in this Energy Optimization Plan (2012-2015) are designed to help customers use energy more efficiently. Programs focus on major electric energy using devices such as cooling, heating, lighting, appliances, building and energy management systems, and high use commercial and industrial equipment. The Energy Optimization (EO) portfolio of programs offers a variety of options for customers from all classes, including residential low income, to participate in EO programs.

The primary goal of the programs is to save energy use in a cost effective manner and encourage customers to use more energy efficient equipment thus achieving market transformation to more efficient energy use. Besides encouraging customers to use less energy with higher efficient equipment, the programs will also encourage the wise use of energy.

There will be four components to the energy efficiency programs.

- Incentives
- Education and information
- Promotion
- Direct assistance

Each component is designed to complement the others to optimize program performance and delivery.

The EO Plan is designed to cost-effectively achieve the savings goals within the spending limits as defined in the “Energy Efficient Michigan Act” (PA 295). Programs have been designed to achieve annual energy savings goals of 1% of the utility’s energy sales within a budget of 2% of electric revenues. This is a 4-year EO Plan and is design to achieve 4-year energy savings goals within the 4-year budget.

All energy efficiency programs are cost effective using the Utility System Resource Cost Test.

Programs are available to all customers.

- Within our Residential Program, customers will be provided
 - Incentives to purchase low cost measures such as CFLs and other energy efficient appliances,
 - Incentives for retiring old, working, and inefficient appliances (refrigerators, freezers) that consume some of the highest loads in the home, and
 - Information for conducting an in-home energy survey that will include an energy efficiency kit if the survey is completed.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

- For all Commercial and Industrial (C&I) customers, programs have sufficient measures and flexibility built in so that all businesses can take advantage of a variety of energy efficiency offerings.
- The Residential Low Income Program enables the utility to efficiently and effectively serve this customer segment.

Energy Optimization educational programs are designed to communicate to and educate customers on the benefits of energy efficiency, conservation and load management. The budget for the educational program is 3% of the total EO budget. The program will be deemed to generate saving proportional to the money spent.

Energy Optimization pilot programs are designed to investigate future energy optimization program development and to assess emerging technologies. The budget for the pilot program is 5% of the total EO budget. The program will be deemed to generate saving proportional to the money spent.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Energy Optimization Plan (2012-2015)

Residential Program

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Low Income Services Program
Objective	<p>The objective of the Residential Low Income Services Program is to reduce electricity use and lower electric bills of low income homeowners through improvements to their existing home at no cost to them. These installations will be made through existing low income weatherization agencies. The measures installed will include additional measures not normally installed in the weatherization program, making energy savings and bill reduction even greater for low income families.</p> <p>The second objective of the program will be to increase the installation of high efficiency equipment in low income rental properties.</p>
Target Market	<p>All income qualified homeowners that are served through approved Weatherization Providers are eligible for the program. Specifically the target market is customers with household incomes at or below 200% of federal poverty guidelines and serviced through the Michigan Weatherization Assistance Program.</p>
Program Duration	<p>January 1, 2012 through December 31, 2015.</p>
Program Description	<p>The Residential Low Income Services Program provides funding to State of Michigan approved Weatherization Providers through non-profit Community Action Agencies (CAA), to expand their low income services of installing energy-efficient equipment and improving insulation levels and infiltration for income qualified homeowners. Through partnering with these agencies that already have infrastructure in place, MECA EO Collaborative Members can cost-effectively serve these income qualified homeowners to help reduce their energy usage and their electric bills.</p> <p>The program is designed to:</p> <ul style="list-style-type: none">• Provide additional funding to the approved Weatherization Providers so that they can:<ul style="list-style-type: none">○ Install 5 CFL bulbs in each home that is weatherized.○ Replace inefficient refrigerators based on on-site testing with high efficiency ENERGY STAR refrigerators.○ Include installation of a high efficiency ECM motor when replacing a gas furnace.• Provide technical information, education and support to the Weatherization Providers so they can understand and comply with the program requirements.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none">• Provide customer and agency education materials where appropriate. The key to success for the Residential Low Income Services Program is working with the existing Michigan Weatherization Assistance Program delivery infrastructure. Given that most homes in the utility’s service territory are served with fossil heat (natural gas, propane, fuel oil, wood and others), insulation or building shell improvements and programmable thermostats only produce electric efficiency savings when air conditioning is present. The utility will provide funding support for insulation and infiltration measures in proportional to the electric savings coming from the central air conditioning compared to the gas savings. Also the program provides funds for electric only measures beyond insulation that can further help low income customers reduce their energy bills. <p>MECA EO Collaborative Members may elect to expand the assistance to low income customers beyond the weatherization assistance provided by the CAA’s by working jointly with the natural gas providers to co-fund additional home weatherization projects. These projects will be targeted at redevelopment projects and/or low income neighborhoods where at least 75% of the residents are income qualified.</p> <p>A significant barrier for this customer group is lack of funds to make needed improvements to their homes and appliances that would save electricity and money. There is also a lack of awareness and knowledge as to the ways that they can improve their homes. For the Weatherization Providers there is a lack of money to serve all the low income homeowners in need of these services. There is also a lack of funds for electric technologies that could improve the home’s energy usage. This program is designed to help overcome these barriers and improve energy efficiency for this specific customer group who has large energy needs and a large potential for savings.</p>
Eligible Measures	<p>The technologies to be included within this program are:</p> <ul style="list-style-type: none">• CFL bulbs• Refrigerator replacements• ECM motors on gas furnace replacements

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none">• Co-fund building shell measures and programmable thermostats that save electric energy from reduced air conditioning usage in homes that have central air conditioners. <p>Technologies included in the program will change over time.</p> <p>Measures may be added or removed based on market response, technology availability and changes in efficiency standards. Technologies must be cost-effective, passing the Utility System Resource Cost Test individually, to be included.</p>
Implementation Strategy	<p>With assistance from MECA, the MECA EO Collaborative Members will provide program management and oversight, tracking and reporting oversight, and regulatory review. The Residential Low Income Services Program will be delivered through the existing approved Weatherization Providers and third parity contractor. These Community Action Agencies already have a delivery mechanism established with a long running program. By utilizing these agencies, MECA EO Collaborative Members can cost-effectively deliver these needed services without duplicating efforts. The work of the third party contractor will provide energy efficiency measures in homes that would not otherwise be served.</p> <p>Funds for the program will be provided to the Community Action Agencies. There will be a budgeted amount for the program provided to each agency to use according to MECA EO Collaborative Members' guidelines. These funds will cover the total cost of the measure plus installation.</p> <p>For the program expansion beyond the CAA delivery channel, a third party implementation contractor will have day to day implementation responsibility including education and training, application, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member. The third party contractor will also be responsible for developing community relationships in support of this expanded program.</p>
Marketing Strategy	<p>Education and promotional materials will be developed as needed for each participating agency.</p> <p>The marketing and communications strategy for the CAA weatherization assistance will be designed to help the agencies recruit participants and explain the MECA EO Collaborative Member's portion of the program.</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>General program promotion will encourage low income customers to dial 2-1-1 to get in touch with agencies that will help with their particular need including the Low Income Weatherization Program.</p> <p>As this is an existing program for the Weatherization Providers and since it has a limited and targeted audience based on income, there will be limited additional promotion by MECA EO Collaborative Members.</p> <p>The marketing and communication strategy for the redevelopment or neighborhood based program may be designed to inform redevelopment contractors of the program that will provide additional energy efficiency measures in the homes of the redeveloped project. For neighborhood weatherization, the marketing and communication strategy will be directed to the residents of the neighborhood and to community leaders who supportive of the weatherization efforts.</p> <p>More specifically, the marketing and communications plan may include:</p> <ul style="list-style-type: none"> • Public relations materials. • Brochures that describe the benefits and features of the program including Community Action Agency contact information. The brochures will be available for various public awareness events (presentations, seminars etc). • Bill inserts, bill messages and email messages. • Newsletters and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program. • Informational content on the MECA EO Collaborative Member website providing program information. 														
<p>Milestones</p>	<table border="1"> <thead> <tr> <th>Major milestones</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Energy Optimization Plan modeling complete</td> <td>4/11</td> </tr> <tr> <td>Energy Optimization program written</td> <td>5/11</td> </tr> <tr> <td>Energy Optimization Plan filed with MPSC</td> <td>8/11</td> </tr> <tr> <td>Implementation contract signed</td> <td>10/11</td> </tr> <tr> <td>Energy Optimization Plan approved by MPSC</td> <td>12/11</td> </tr> <tr> <td>Program implementation begins</td> <td>1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date														
Energy Optimization Plan modeling complete	4/11														
Energy Optimization program written	5/11														
Energy Optimization Plan filed with MPSC	8/11														
Implementation contract signed	10/11														
Energy Optimization Plan approved by MPSC	12/11														
Program implementation begins	1/12														
<p>EM&V</p>	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the</p>														

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p>The evaluation of the Residential Low Income Services Program is a limited-focus evaluation. The study will consist of an electric energy impact evaluation and an electric measures integration process evaluation. The energy impact evaluation will focus on reliably estimating the program's gross annual kWh savings over the effective useful life of the energy efficient equipment installations funded by the program. The process evaluation is intended to provide an assessment of the integration approach for placing electric measures into the program's operation and to identify ways to improve the electric energy savings from participants who enroll in the state's Weatherization Program. This evaluation is not designed to assess the impacts of the state weatherization program, but only the energy impacts associated with the electric measures funded by the MECA EO Collaborative Member. The evaluator will provide recommendations on whether the process or the measures should be modified in a way that captures additional cost effective electric savings within the service delivery approach of the state's weatherization program.</p> <p>The evaluation approach will be contingent on the evaluation resources available for the study.</p> <p>The MECA EO Collaborative Members intends to add or eliminate measures from the program based on cost-effectiveness, market acceptance and standard practice.</p>																																				
<p>Estimated Participation</p>	<table border="1"> <thead> <tr> <th colspan="6">Participation in units of implemented measures</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lighting</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>51</td> </tr> <tr> <td>Refrigerators</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>3</td> </tr> <tr> <td>EMC</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> </tr> <tr> <td>Total</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>55</td> </tr> </tbody> </table>	Participation in units of implemented measures							2012	2013	2014	2015	Total	Lighting	13	13	13	13	51	Refrigerators	1	1	1	1	3	EMC	0	0	0	0	1	Total	14	14	14	14	55
Participation in units of implemented measures																																					
	2012	2013	2014	2015	Total																																
Lighting	13	13	13	13	51																																
Refrigerators	1	1	1	1	3																																
EMC	0	0	0	0	1																																
Total	14	14	14	14	55																																
<p>Estimated Program Investment</p>	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 792</td> <td>\$ 787</td> <td>\$ 779</td> <td>\$ 775</td> <td>\$ 3,132</td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total	\$ 792	\$ 787	\$ 779	\$ 775	\$ 3,132																					
Annual investments																																					
2012	2013	2014	2015	Total																																	
\$ 792	\$ 787	\$ 779	\$ 775	\$ 3,132																																	

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Energy Savings Targets	The estimated MWh energy savings shown below are based on measures installed at the end of the year.				
	Energy saving (Annual Gross) - MWh				
	2012	2013	2014	2015	Total
	1.7	1.7	1.6	1.6	6.6
Benefit-Cost Test Results	Benefit/Cost Test		B/C Ratio		
	Utility System Resource Cost Test		N/A		
	Total Resource Cost Test		N/A		
	Rate Impact Measure		N/A		
	Participant Test		N/A		

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential and Small Business ENERGY STAR Products Program
Objective	The primary objective of the program is to increase the adoption of high efficiency ENERGY STAR products through retail markets. The premise is that through market support of retailers, these products will have more customer exposure and better placement in the store. The sales force will also be more aware of the product and promote it more often to customers. It is expected that over time, as the product gets more widely accepted and prices are reduced, the MECA EO Collaborative Member can lower or eliminate the incentive since the product will be commonly adopted by their customers.
Target Market	All residential and small business customers who purchase ENERGY STAR products through retail stores are eligible for the program. All retail stores that carry or could carry ENERGY STAR products in the utilities' service territory are eligible to participate in the program.
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p>The ENERGY STAR Products Program provides market incentives and market support through retailers to build market share and usage of ENERGY STAR products. Special incentives to buyers, distributors and/or manufacturers and in-store support stimulate demand for the products and make it easier for store participation. The program targets both residential and small business customers' purchase of specified ENERGY STAR technologies through market channels, retail stores and special sales events. The products to be included will vary over time as new ENERGY STAR products are developed or existing products become widely adopted and no longer need incentives to encourage purchase.</p> <p>The program is designed to:</p> <ul style="list-style-type: none">• Provide retail or distribution/manufacturer incentives to customers for the purchase and installation of products to reduce energy use in the home or in small business and information about other programs that encourage the installation of high efficiency equipment, such as lighting, room air conditioners, electronics and appliances.• Provide a marketing mechanism for retailer and high efficiency product suppliers to promote energy-efficient equipment and

products to end users.

- Ensure that the participation process is clear, easy to understand and simple for the customer and contractor.

The key to success for the ENERGY STAR Products Program is working through retailers at the point of purchase and with manufacturers for product supply. Through joint marketing, retail support, and special incentives more product is offered and promoted making the buying decision easy for customers. Another important aspect of success is to leverage the ENERGY STAR brand for marketing and promotion. National events such as the “Change a Light, Change the World” campaign help increase national awareness of the ENERGY STAR label and increase the demand for ENERGY STAR products.

There are several barriers addressed through the program. The first barrier is price. Retail purchase incentives are provided for customers to lower upfront cost of the item and stimulate interest. Another alternative to retail purchase incentives that may be utilized on some products in the program are distributor/manufacturer “buy down” incentives to lower the purchase price of the product.

The second barrier is retailer participation. Through retailer education, in-field sales support (signs, ads, etc), and stimulated market demand, retailers will stock more product, provide special promotions and plan sales strategies around these ENERGY STAR products. Additional support is provided through manufacturer relationships that often can reduce prices through special large-scale purchases. Coordination will occur with national ENERGY STAR initiatives such as the “Change a Light, Change the World” campaign.

Certain barriers exist to the adoption of energy efficiency products, including lack of financial resources, competition for funds with other household budget items, lack of awareness/knowledge about the benefits and costs of energy efficiency products, difficulty of finding retailers carrying the products, and energy saving performance uncertainties. This program is designed to help overcome these market barriers and encourage greater adoption of energy efficiency products used in the market. Having a simple program structure and incentive schedule provides customers with certainty and ease of use regarding the incentives they will receive for installing a wide variety of energy

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	efficiency products.
Eligible Measures	<p>Technologies that will be included in the program will change over time. The ENERGY STAR technologies for this Plan will included:</p> <ul style="list-style-type: none">• High Efficiency Light Bulbs and fixtures• Clothes Washers (If customer has electric hot water)• Dehumidifiers• Room Air Conditioners CEE Tier 1 Level• Room Air Conditioners CEE Tier 2 Level• Pool Pumps• LED Holiday Lights• Smart Power Strip <p>Measures will be added or removed based on market response, technology availability and changes in ENERGY STAR standards. Technologies must be cost-effective, passing the Utility System Resource Cost Test individually, to be included.</p>
Implementation Strategy	<p>With assistance from MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. Through a competitive bid process, MECA will select an implementation contractor to provide turn-key implementation services including education and training, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.</p> <p>The third party implementation contractor will also be responsible for supporting the retailers and manufacturers with this program including in field training and marketing/promotion support.</p> <p>Incentives will be available in several ways that will be adapted to the retail partner needs and market response. The strategies that might be used include;</p> <ul style="list-style-type: none">• Mail-in forms available from the retailer• In-store “Instant Reward” events that occur in-store at the time of purchase.• Customer coupons sent by the utility to target customers that will be redeemable at a specific store• Special sale events in retail customer facilities

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none">• Manufacturer buy down to retailer• Incentives to retailer sales representatives <p>Initial incentives for the proposed ENERGY STAR products listed above in Eligible Measures are shown in Appendix X. Incentives may change based on market prices and response as well as manufacturer/distributor co-funding.</p> <p>Other incentive alternatives may be used when appropriate. Manufacturer or distributor “buy down” incentives directly to the manufacturer or distributor before delivery to the retailer will reduce the end price to the customer. Incentives to sales personnel may also be used where it is needed to get the sales force engaged in the program. Those additional incentive strategies will be determined as experience is gained in the market.</p>
Marketing Strategy	<p>Training will be provided to retailer sales staff, with additional sales aids provided as needed.</p> <p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to key partners and trade allies including the retailer community, relevant trade associations and other parties of interest in the market. An important part of the marketing plan will be content and functionality on the MECA EO Collaborative Member’s website, which will direct customers to information about the program.</p> <p>A combination of strategies will be used to train and support retailers, including media advertising, outreach community forums and events, and direct outreach to customers and retailers.</p> <p>Marketing activities will include:</p> <ul style="list-style-type: none">• Point of purchase displays and materials, joint advertising with retailers, coupons, and special “instant sales events”.• Public relations materials.• Brochures that describe the benefits and features of the program including program application forms and processes. The brochures will be available for various public awareness events (presentations, seminars etc).

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none"> • Bill inserts, bill messages and email messages. • New letters and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program. • MECA EO Collaborative Member’s website content providing program information resources, contact information, downloadable application forms, and links to other relevant service and information resources. • Customer representatives trained to promote the program to their customers. • Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials. 																				
<p>Milestones</p>	<table border="1"> <thead> <tr> <th data-bbox="493 869 1216 909">Major milestones</th> <th data-bbox="1216 869 1425 909">Date</th> </tr> </thead> <tbody> <tr> <td data-bbox="493 909 1216 949">Energy Optimization Plan modeling complete</td> <td data-bbox="1216 909 1425 949">4/11</td> </tr> <tr> <td data-bbox="493 949 1216 989">Energy Optimization program written</td> <td data-bbox="1216 949 1425 989">5/11</td> </tr> <tr> <td data-bbox="493 989 1216 1029">Issue implementation RFP</td> <td data-bbox="1216 989 1425 1029">6/11</td> </tr> <tr> <td data-bbox="493 1029 1216 1068">Implementation bid submittal deadline</td> <td data-bbox="1216 1029 1425 1068">8/11</td> </tr> <tr> <td data-bbox="493 1068 1216 1108">Energy Optimization Plan filed with MPSC</td> <td data-bbox="1216 1068 1425 1108">8/11</td> </tr> <tr> <td data-bbox="493 1108 1216 1148">Implementation contractor selected</td> <td data-bbox="1216 1108 1425 1148">9/11</td> </tr> <tr> <td data-bbox="493 1148 1216 1188">Implementation contract signed</td> <td data-bbox="1216 1148 1425 1188">10/11</td> </tr> <tr> <td data-bbox="493 1188 1216 1228">Energy Optimization Plan approved by MPSC</td> <td data-bbox="1216 1188 1425 1228">12/11</td> </tr> <tr> <td data-bbox="493 1228 1216 1268">Program implementation begins</td> <td data-bbox="1216 1228 1425 1268">1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				
<p>EM&V</p>	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members’ Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p>The Residential and Small Business ENERGY STAR Products Program is intended to increase the sales of ENERGY STAR equipment by partnering with retailers to provide purchase rebates to customers. The Residential and Small Business ENERGY STAR Products Program evaluation study will consist of both an impact evaluation and a process evaluation.</p>																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>The success of the impact evaluation of the Residential and Small Business ENERGY STAR Products Program depends on the accuracy of capturing the sales of equipment that would have occurred without the program and compare that to program influenced sales. Energy savings will be calculated relative to the energy usage of non- ENERGY STAR equipment that would have been purchased in the absence of the program.</p> <p>The process evaluation will provide information on the effectiveness of the 1) retailer education and marketing support and its impact on sales operational changes that focus on ENERGY STAR products and 2) the ability of the program to move the market toward increased high efficiency sales. The primary objective of the process evaluation is to provide recommendations to improve the effectiveness and savings potential for the program.</p> <p>The utility intends that products or measures will be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. They will also be added as new products, measures and technologies emerge in the market.</p>																																				
Estimated Participation	<table border="1"> <thead> <tr> <th colspan="6">Participation in units of implemented measures</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lighting</td> <td>425</td> <td>443</td> <td>592</td> <td>589</td> <td>2,049</td> </tr> <tr> <td>Appliances</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>3</td> </tr> <tr> <td>Other</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>9</td> </tr> <tr> <td>Total</td> <td>428</td> <td>446</td> <td>595</td> <td>592</td> <td>2,061</td> </tr> </tbody> </table>	Participation in units of implemented measures							2012	2013	2014	2015	Total	Lighting	425	443	592	589	2,049	Appliances	1	1	1	1	3	Other	2	2	2	2	9	Total	428	446	595	592	2,061
Participation in units of implemented measures																																					
	2012	2013	2014	2015	Total																																
Lighting	425	443	592	589	2,049																																
Appliances	1	1	1	1	3																																
Other	2	2	2	2	9																																
Total	428	446	595	592	2,061																																
Estimated Program Investment	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 1,709</td> <td>\$ 2,105</td> <td>\$ 3,210</td> <td>\$ 3,409</td> <td>\$ 10,434</td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total	\$ 1,709	\$ 2,105	\$ 3,210	\$ 3,409	\$ 10,434																					
Annual investments																																					
2012	2013	2014	2015	Total																																	
\$ 1,709	\$ 2,105	\$ 3,210	\$ 3,409	\$ 10,434																																	
Energy Savings Targets	<p>The estimated MWh energy savings shown below are based on measures installed at the end of the year.</p> <table border="1"> <thead> <tr> <th colspan="5">Energy saving (Annual Gross) - MWh</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>17.2</td> <td>17.1</td> <td>16.9</td> <td>16.8</td> <td>68.1</td> </tr> </tbody> </table>	Energy saving (Annual Gross) - MWh					2012	2013	2014	2015	Total	17.2	17.1	16.9	16.8	68.1																					
Energy saving (Annual Gross) - MWh																																					
2012	2013	2014	2015	Total																																	
17.2	17.1	16.9	16.8	68.1																																	

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Benefit-Cost Test Results

Benefit/Cost Test	B/C Ratio
Utility System Resource Cost Test	4.5
Total Resource Cost Test	4.4
Rate Impact Measure	0.8
Participant Test	7.9

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Appliance Recycling Program
Objective	The objective of the Residential Appliance Recycling Program is to produce cost-effective, long-term annual energy savings and demand reduction by removing from the utility grid operable, inefficient appliances in an environmentally safe manner and to prevent those appliances from being resold in the secondary used appliance market. In addition, the program will be designed to educate customers on the cost of keeping an inefficient unit in operation and raise awareness of ENERGY STAR appliances and how much those appliances can save customers.
Target Market	All residential customers are eligible for the program. The primary target market will be those with working second and third refrigerators and freezers, inefficient room air conditioners (room ACs) and inefficient dehumidifiers.
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p>The Appliance Recycling Program will produce cost-effective long-term annual energy savings in the residential market by removing operable, inefficient refrigerators, freezers, room air conditioners (room ACs) and dehumidifiers from the utility grid in an environmentally safe manner. Older room ACs, refrigerators, freezers and dehumidifiers can be some of the least efficient electrical appliances in the home. Often these older inefficient appliances are used when they are not functioning properly and as a result, they use electricity very inefficiently.</p> <p>A certified recycling agency will be responsible for the recycling process of dismantling the refrigerators, freezers, room ACs and dehumidifiers and removing oils and refrigerants and other recyclable components.</p> <p>Certain barriers exist to the replacement of old existing appliances with energy-efficient products, including difficulty in finding places to recycle old appliances, inability to deliver appliances to the drop-off location, lack of financial resources, competition for funds with other household budget items, and lack of awareness/knowledge about the benefits and costs of new energy efficiency measures. The Residential Appliance Recycling</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>Program is designed to minimize these market barriers and encourage customers to dispose of old inefficient appliances and to increase the market share of ENERGY STAR appliances by offering incentives, convenient scheduling of appointments, and cost-free pick-up of qualifying equipment.</p>
Eligible Measures	<p>Technologies that will be included in the program are:</p> <ul style="list-style-type: none">• Refrigerators• Freezers• Dehumidifiers• Room Air Conditioners <p>Eligible measures may be revised over time as needed to reflect changes in current market conditions, EM&V results, and program experience.</p>
Implementation Strategy	<p>With assistance from MECA, the Utility will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. Through a competitive bid process, MECA may select an appliance recycling contractor to provide turn-key implementation services, including the pick-up and proper disposal of the appliances in an environmentally safe manner, application and incentive processing, incentive payments, coupon distribution, education and training, community outreach, tracking, verification, customer support, and marketing, jointly with the Utility.</p> <p>Customers will receive an incentive to have their old, working refrigerator or freezer picked up. A dehumidifier or room air conditioner can also be scheduled for pick-up in conjunction with a refrigerator or freezer pick-up</p> <p>The incentive levels are described in Appendix X.</p> <p>Incentives may change based on market and program responses.</p>
Marketing Strategy	<p>Consumer education and marketing will be key components that emphasize the benefits of savings associated with retiring old, inefficient appliances and the importance of ensuring proper disposal and recycling.</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate. To control the implementation of this program and scheduling of the appliance pick-up, direct marketing will be the primary source of communication.</p> <p>Marketing activities will include:</p> <ul style="list-style-type: none">• Direct mail to potential participant customers/customers based on zip code for the appliance pick-up to optimize travel costs.• Brochures that describe the benefits and features of the program including program contact information. The brochures will be available for various public awareness events (presentations, seminars, etc).• Bill inserts, bill messages and email messages to targeted customers.• News letter or magazine will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program.• Informational content on the MECA EO Collaborative Member website.• Customer representatives trained to promote the program to their customers.• Presentations to key retailers and supplier groups to actively solicit their support in the program.• The marketing strategy will identify key retailer groups for target marketing, and will prepare specific outreach activities for them.																				
Milestones	<table border="1"><thead><tr><th>Major milestones</th><th>Date</th></tr></thead><tbody><tr><td>Energy Optimization Plan modeling complete</td><td>4/11</td></tr><tr><td>Energy Optimization program written</td><td>5/11</td></tr><tr><td>Issue implementation RFP</td><td>6/11</td></tr><tr><td>Implementation bid submittal deadline</td><td>8/11</td></tr><tr><td>Energy Optimization Plan filed with MPSC</td><td>8/11</td></tr><tr><td>Implementation contractor selected</td><td>9/11</td></tr><tr><td>Implementation contract signed</td><td>10/11</td></tr><tr><td>Energy Optimization Plan approved by MPSC</td><td>12/11</td></tr><tr><td>Program implementation begins</td><td>1/12</td></tr></tbody></table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

EM&V

MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.

The impact evaluation may use a participant actions-based approach to evaluate the energy impacts of the program, linked to a new and used market effects impact adjustment for estimating net grid-based energy impacts. This assessment may also include an onsite metering assessment to determine the energy consumption of the appliance picked-up.

The process evaluation will consist of a review of the program operations and practices, including its management practices, marketing materials and efforts, processing of units, including the pickup and handling of the units, the scheduling systems and approaches and tracking and reporting systems. The evaluation will also assess the participant screening approach used during contact with the participant and scheduling efforts to make sure that the screening approach filters out or appropriately limits participation from customers who would have effectively disposed of their units without the program.

The process evaluation will also include interviews with program and implementation managers, used and new refrigerator dealers and their partners who dispose of units outside of the program. The process evaluation will also include an assessment of participant satisfaction and identify the drivers of satisfaction and dissatisfaction in order to make specific and actionable program improvement recommendations. The purpose of the process evaluation is to make recommendations on how the programs designs and operations can be improved while maintaining or improving cost effectiveness.

The MECA EO Collaborative Members will add or eliminate measures from the program based on cost-effectiveness, market acceptance and standard practice.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Estimated Participation	Participation in units of implemented measures					
		2012	2013	2014	2015	Total
	Refrigerators	3	3	3	3	11
	Freezers	1	1	1	1	3
	Dehumidifiers	0	0	0	0	0
	Room AC	0	0	0	0	0
	Total	4	4	4	4	15
Estimated Program Investment	Annual investments					
	2012	2013	2014	2015	Total	
	\$ 671	\$ 666	\$ 660	\$ 656	\$ 2,653	
Energy Savings Targets	The estimated MWh energy savings shown below are based on measures installed at the end of the year.					
	Energy saving (Annual Gross) - MWh					
	2012	2013	2014	2015	Total	
	6.1	6.1	6.0	6.0	24.2	
Benefit-Cost Test Results	Benefit/Cost Test		B/C Ratio			
	Utility System Resource Cost Test		6.1			
	Total Resource Cost Test		4.7			
	Rate Impact Measure		0.8			
	Participant Test		9.3			

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential HVAC Equipment Program	
Objective	<p>The primary goal of the Residential HVAC Equipment Program is to encourage residential customers to install energy-efficient heating, cooling and ventilation equipment. The installation of energy efficiency equipment will be made through HCAC contractors. The program will encourage the use of electricity and lower energy bills of the customer. It encourages the HVAC contractors to development business practices (inventory, training, sales) that would promote the use of energy efficient HVAC equipment.</p>	<p>The primary goal of the Residential HVAC Equipment Program is to encourage residential customers to install energy-efficient heating, cooling and ventilation equipment. The installation of energy efficiency equipment will be made through HCAC contractors. The program will encourage the use of electricity and lower energy bills of the customer. It encourages the HVAC contractors to development business practices (inventory, training, sales) that would promote the use of energy efficient HVAC equipment.</p>
Target Market	<p>All residential customers are eligible for the program. The primary target market is the contractor who specifies and replaces the heating, cooling and ventilation equipment in a home.</p>	<p>All residential customers are eligible for the program. The primary target market is the contractor who specifies and replaces the heating, cooling and ventilation equipment in a home.</p>
Program Duration	<p>January 1, 2015</p>	<p>December 31, 2015.</p>
Program Description	<p>The Residential HVAC Equipment Program provides incentives to residential customers for installing energy-efficient electric heating, cooling and ventilation equipment. This program will pertain to existing homes and to new equipment and to new homes only when they do not qualify for the New Home Construction incentives. Incentives will be provided to the home owner and will be based on fulfilling the energy requirements. More specifically, the program is designed to:</p> <ul style="list-style-type: none"> • Provide incentives to purchase high efficiency equipment as specified within the program. • Provide technical information, education and training to contractors, builders and homeowners so that they can understand the benefits of the high efficiency alternatives and provide high efficiency alternatives as the best choice to customers. • Provide a marketing mechanism for contractors and equipment distributors to promote high efficiency equipment. • Ensure that the participation process is clear, easy to understand and simple. <p>Certain barriers exist to the adoption of energy-efficient equipment, including lack of investment capital, competition for funds with other home investments or amenities, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, lack of education and</p>	<p>The Residential HVAC Equipment Program provides incentives to residential customers for installing energy-efficient electric heating, cooling and ventilation equipment. This program will pertain to existing homes and to new equipment and to new homes only when they do not qualify for the New Home Construction incentives. Incentives will be provided to the home owner and will be based on fulfilling the energy requirements. More specifically, the program is designed to:</p> <ul style="list-style-type: none"> • Provide incentives to purchase high efficiency equipment as specified within the program. • Provide technical information, education and training to contractors, builders and homeowners so that they can understand the benefits of the high efficiency alternatives and provide high efficiency alternatives as the best choice to customers. • Provide a marketing mechanism for contractors and equipment distributors to promote high efficiency equipment. • Ensure that the participation process is clear, easy to understand and simple. <p>Certain barriers exist to the adoption of energy-efficient equipment, including lack of investment capital, competition for funds with other home investments or amenities, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, lack of education and</p>

This program is not being implemented at this time. The program description is being provided for future reference.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>skills of the contractor, and technology performance uncertainties. If the equipment is replaced without electric efficiency in mind, there might not be the opportunity to make these improvements until many years later when the equipment fails. Avoiding this lost opportunity at the time of replacement allows energy efficiency to be optimized and is usually less costly than equipment replacement at a later time. This program is designed to help overcome these market barriers and encourage greater adoption of energy-efficient HVAC equipment in the residential market.</p>
Eligible Measures	<p>Technologies that may be included within this program are high efficiency heating, cooling and water heating equipment. Guidelines for equipment specified as high efficiency will change over time as manufactured equipment specifications change. Initial standards will include:</p> <ul style="list-style-type: none">• Central AC units with SEER ratings of 15 or above• Geothermal or Air Source Heat Pumps with SEER rating of 15 or above.• Heat Pump Water Heaters• Water heaters with efficiency of 93% or higher• ECM motors in Gas Furnaces, Air Conditioners or Heat Pumps <p>Measures will be added or removed based on market response, technology availability and changes in ENERGY STAR standards.</p>
Implementation Strategy	<p>With the assistance of MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. A third party implementation contractor may be selected to have day to day implementation responsibility including training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.</p> <p>The third party contractor will also be responsible for supporting contractors and distributors with this program including training and marketing/promotion support.</p> <p>To make the Residential HVAC Equipment Program effective, the MECA EO Collaborative Member will work with equipment distributors, HVAC contractors and plumbing contractors. Those market participants are</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>key in making sure high efficiency HVAC equipment is available, and key for selling the high efficiency alternative directly to customers as they replace their old and failing equipment. By having these market participants sell and promote energy-efficient equipment, customers will better understand the benefits of the higher efficiency choices.</p> <p>The incentives for the program will be paid to the customer as either an instant incentive on the installing contractor's invoice or a direct payment to the customer. Once the equipment is installed and is verified as complying with the minimum standards, the instant incentive provided on the invoice to the customer will be paid to the HVAC contractor, or the incentive will be paid to the customer. Incentives will be provided to the contractor for all qualifying incentives paid each month. The initial incentive levels are described in Appendix X. Incentives may change based on market conditions. Agreements will be established with contractors to provide this incentive as a line item on the customer's invoice.</p> <p>As an option to lower the financial barrier to the installation of qualifying high efficiency equipment, the MECA EO Collaborative Member may offer financing to qualified customers.</p>
Marketing Strategy	<p>The marketing and communications strategy will be designed to inform homeowners, contractors and equipment distributors of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to key partners and trade allies including contractors, equipment distributors, trade associations, and other parties of interest in the market. An important part of the marketing plan will be the content and functionality on the MECA EO Collaborative Members' website, which will direct customers to information about the program.</p> <p>Marketing and communications plan will include:</p> <ul style="list-style-type: none">• Education seminars implemented in each market to provide details about how to participate in the program. The seminars will be tailored to the needs of homeowners, contractors and equipment distributors.• A combination of strategies including local media advertising, outreach and presentations at professional and community forums and events, and through direct outreach to key contractors such as:<ul style="list-style-type: none">○ Brochures that describe the benefits and features of the program

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>including program application forms and worksheets. The brochures will be mailed upon request and distributed through the MECA EO Collaborative Member and their websites. They will also be available through various public awareness events (presentations, home shows, etc).</p> <ul style="list-style-type: none">○ Targeted direct mailings used to educate homeowners on the benefits of the program and explaining how they can apply.○ Customer and trade partner outreach and presentations informing interested parties about the benefits of the program and how to participate.○ Print advertisements to promote the program placed in selected local media including the local area newspapers and trade publications.○ News letter and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program.○ MECA EO Collaborative Member’s website content providing program information resources, contact information, downloadable application forms and worksheets, and links to other relevant service and information resources.○ Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials.○ Presentations to customers and trade allies to actively solicit their participation in the program. <ul style="list-style-type: none">● The marketing strategy will identify key customer segments and groups for target marketing, and will prepare specific outreach activities for these customers. <p>With the assistance of MECA, the MECA EO Collaborative Member will oversee the development of content, messaging, branding, and calls to action of all of the marketing and collateral materials used to promote the program.</p>										
Milestones	<table border="1"><thead><tr><th data-bbox="493 1629 1216 1671">Major milestones</th><th data-bbox="1216 1629 1425 1671">Date</th></tr></thead><tbody><tr><td data-bbox="493 1671 1216 1709">Energy Optimization Plan modeling complete</td><td data-bbox="1216 1671 1425 1709">4/11</td></tr><tr><td data-bbox="493 1709 1216 1749">Energy Optimization program written</td><td data-bbox="1216 1709 1425 1749">5/11</td></tr><tr><td data-bbox="493 1749 1216 1787">Issue implementation RFP</td><td data-bbox="1216 1749 1425 1787">6/11</td></tr><tr><td data-bbox="493 1787 1216 1829">Implementation bid submittal deadline</td><td data-bbox="1216 1787 1425 1829">8/11</td></tr></tbody></table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11
Major milestones	Date										
Energy Optimization Plan modeling complete	4/11										
Energy Optimization program written	5/11										
Issue implementation RFP	6/11										
Implementation bid submittal deadline	8/11										

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	Energy Optimization Plan filed with MPSC	8/11																																																		
	Implementation contractor selected	9/11																																																		
	Implementation contract signed	10/11																																																		
	Energy Optimization Plan approved by MPSC	12/11																																																		
	Program implementation begins	1/12																																																		
EM&V	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p>The evaluation of the Residential HVAC Equipment Program will have an energy impact evaluation and a process evaluation. The energy impact evaluation will focus on reliably estimating the program's gross annual kWh savings over the effective useful life of the heating, cooling and water heating equipment. The process evaluation is intended to provide program managers with timely recommendations on program operations, effectiveness, and ability to maximize the program enrollment approach and incentive allocations to capture new savings, and participant satisfaction so that mid-course corrections may be considered.</p> <p>The utility intends that products or measures will be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. They will also be added as new products, measures and technologies emerge in the market.</p>																																																			
Estimated Participation	<table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="5">Participation in units of implemented measures</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>HP</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>AC</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>WH</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>EMC</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Total</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>						Participation in units of implemented measures					2012	2013	2014	2015	Total	HP	-	-	-	-	-	AC	-	-	-	-	-	WH	-	-	-	-	-	EMC	-	-	-	-	-	Other	-	-	-	-	-	Total	-	-	-	-	-
	Participation in units of implemented measures																																																			
	2012	2013	2014	2015	Total																																															
HP	-	-	-	-	-																																															
AC	-	-	-	-	-																																															
WH	-	-	-	-	-																																															
EMC	-	-	-	-	-																																															
Other	-	-	-	-	-																																															
Total	-	-	-	-	-																																															

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Estimated Program Investment	Annual investments				
	2012	2013	2014	2015	Total
Energy Savings Targets	The estimated MWh energy savings shown below are based on measures installed at the end of the year.				
	Energy saving (Annual Gross) - MWh				
	2012	2013	2014	2015	Total
Benefit-Cost Test Results	Benefit/Cost Test		B/C Ratio		
	Utility System Resource Cost Test				
	Total Resource Cost Test				
	Rate Impact Measure				
	Participant Test				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Audit/Weatherization/New Construction Program
Objective	<p>The objective of the Residential Audit/Weatherization/New Construction Program is to provide information, incentive and support for customers to improve the energy efficiency of their homes in areas not address by the other EO Programs. Most of the focus is on building shell insulation and infiltration.</p> <p><u>Audit and Weatherization</u> The Audit and Weatherization part of the program will include online energy information and easy to install measures to help customers take action to reduce energy use.</p> <p><u>New Construction</u> The New Construction part of the program is to encourage residential customers to build more efficient new homes and to install energy-efficient lighting, heating and cooling equipment, and improve building envelope efficiency in new homes.</p>
Target Market	<p><u>Audit and Weatherization</u> All residential customers are eligible for the online energy survey and energy saving measures kit.</p> <p><u>New Construction</u> All residential customers and builders constructing new single family homes in the utility’s service territories are eligible for this program. The primary target market is the custom and production builders and developers of new homes.</p>
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p><u>Audit and Weatherization</u> The residential Audit and Weatherization part of the program provides an energy savings kit to residential customers who complete the online energy survey.</p> <ul style="list-style-type: none"> • Receiving the energy saving kit interacts with the online home energy audit that is included in the Educational Program. • For completing the self-audit information for the online energy

survey, the customer will receive an energy savings kit that includes easy to install energy saving measures.

The single family market has significant barriers to energy efficiency. The primary barrier is a lack of awareness and knowledge as to the ways that they can improve their home and change behaviors to save energy. Another major barrier is the lack of funds to make needed improvements to their homes that would save energy and money. Home owners have little time to implement or knowledge of energy efficiency measures. By providing surveys and energy savings kits, the homeowner can improve their efficiency and reduce energy costs. This program is designed to help overcome these barriers and improve energy efficiency for this customer group who has large energy needs and a large potential for savings.

New Construction

The residential New Construction part of the program provides assistance for builders designing new ENERGY STAR qualified homes and homeowner/builder incentives for the installation of energy efficiency measures in new residential homes. Incentives will be provided to the home builder based on meeting the ENERGY STAR certification requirements.

More specifically, the program is designed to:

- Provide incentives to meet the national ENERGY STAR New Homes requirements. Those requirements can be on a performance basis or a builder equivalence basis for the State of Michigan.
- Provide technical information, education and training to builders so that they can understand and comply with the standard.
- Provide connections between ENERGY STAR raters and area builders or homeowners.
- Provide a marketing mechanism for builders to promote ENERGY STAR rated new homes.
- Ensure that the participation process is clear, easy to understand and simple

ENERGY STAR new construction standards are set by the federal government and provide uniform guidelines to builders to become ENERGY STAR certified. The ENERGY STAR certification has recognition in the marketplace with potential home buyers and results in

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>a more energy-efficient home. There are several ways to comply with the ENERGY STAR standards based on trade offs in the construction materials, techniques, equipment and appliances installed in the home. The utility and their implementation contractor will work with the builders in their service territories to get more energy-efficient electrical appliances, lighting, air conditioners, heat pumps, furnaces with ECM motors, water heaters and thermal improvements installed as part of meeting these standards for qualification.</p> <p>Certain barriers exist to the adoption of energy efficiency measures, including lack of investment capital, competition for funds with other home investments or amenities, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, lack of education and skills of the builder, and technology performance uncertainties. If the home is not designed and constructed with electric efficiency in mind, there might not be the opportunity to make these improvements until many years later when the equipment fails or further building remodeling occurs. Avoiding this lost opportunity at the time of design and construction allows energy efficiency to be optimized and is usually less costly than equipment replacement or redesign. This program is designed to help overcome these market barriers and encourage greater adoption of energy efficiency measures in the new construction residential market.</p>
Eligible Measures	<p><u>Audit and Weatherization</u></p> <p>The technologies to be included in the energy savings kit are:</p> <ul style="list-style-type: none">• 5 CFLs• 2 energy efficient faucet aerators• 1 energy efficient showerhead <p><u>New Construction</u></p> <p>The technologies to be included within the New Construction part of the program are the whole house building shell (insulation and infiltration), heating and cooling equipment, ECM motors, lighting, appliances and other measures required to meet the ENERGY STAR certification guidelines.</p> <p>Measures may be added or removed based on market response, technology availability and changes in efficiency or building code standards.</p>

Implementation Strategy

Audit and Weatherization

With assistance from MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting, oversight, and regulatory review. Through a competitive bid process, MECA may select an implementation contractor to provide turn-key implementation services including training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.

The implementing contractor will be responsible for sending the energy efficiency kits.

The energy survey is offered through the online energy survey and when the self-audit is completed, the customer will be sent an energy savings kit containing easy to install energy efficiency measures.

New Construction

With assistance from MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. Through a competitive bid process, MECA will select a contractor to provide turn-key implementation services, including education and training, community outreach, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.

The third party contractor will also provide ENERGY STAR home experts to talk with the builder community about the program and educate them on its benefits. These experts will also provide technical assistance to the builders concerning the ENERGY STAR modeling and construction practices.

The incentives for the program will be provided once the home is certified as ENERGY STAR compliant. The incentives will be provided to the homeowner or builder/developer of the home. The incentive levels are described in Appendix X.

The utility will provide a listing of area certified Home Energy Raters to perform the inspections and assure compliance with the ENERGY STAR standards. These experts also work with the builders to educate,

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>inspect and certify that the home meets the ENERGY STAR standards.</p> <p>The implementation of this program will be coordinated with the customer's gas provider.</p>
Marketing Strategy	<p><u>Audit and Weatherization</u> Education and promotional materials will be developed for all residential customers.</p> <p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate. Additional communication will be provided through the news media.</p> <p>Marketing activities will include:</p> <ul style="list-style-type: none">• Direct mail to potential participant customers based on zip code.• Public relations materials and general media.• Brochures that describe the benefits and features of the program including program contact information. The brochures will be available for various public awareness events (presentations, seminars, etc).• Bill inserts, bill messages and email messages to targeted customers.• News letter and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program.• Informational content on the MECA EO Collaborative Member's websites. <p>Customer representatives trained to promote the program to their customers.</p> <p><u>New Construction</u> Education and promotional materials will be developed for home owners and developers on the benefits of ENERGY STAR homes and improved systems performance, including educational brochures, program promotional material, and website content. Specific educational and promotional efforts will be provided to help them promote energy-efficient measures to the homeowners/buyers. This education will be through a combination of mailings, workshops and direct meetings with key market participants in the area.</p>

The marketing and communications strategy will be designed to inform homeowners, builders and developers of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to key partners and trade allies including builders, developers, architects, contractors, equipment distributors, trade associations, and other parties of interest in the market. An important part of the marketing plan will be the content and functionality on the utility's website, which will direct customers to information about the program.

More specifically, the marketing and communications plan will include:

- Educational seminars to provide details about how to participate in the program. The seminars will be tailored to the needs of homeowners, builders, developers and architects.
- A combination of strategies including local media advertising, outreach and presentations at professional and community forums and events, and through direct outreach to key builders and developers such as:
 - Brochures that describe the benefits and features of the program including program application forms and worksheets. The brochures will be distributed through various mechanisms such as public awareness events, presentations, and home shows.
 - Targeted direct mailings used to educate homeowners on the benefits of the program and explaining how they can apply.
 - Customer and trade partner outreach and presentations informing interested parties about the benefits of the program and how to participate.
 - Print advertisements to promote the program placed in selected local media including area newspapers and trade publications.
 - Newsletters and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program.
 - Website content providing program information resources, contact information, downloadable application forms and worksheets, and links to other relevant service and information resources.
 - Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials.
 - Presentations to key customers and customer groups to actively

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>solicit their participation in the program.</p> <ul style="list-style-type: none"> The marketing strategy will identify key customer segments and groups for target marketing, and will prepare specific outreach activities for these customers. 																				
<p>Milestones</p>	<table border="1"> <thead> <tr> <th data-bbox="493 552 1216 590">Major milestones</th> <th data-bbox="1216 552 1425 590">Date</th> </tr> </thead> <tbody> <tr> <td data-bbox="493 590 1216 630">Energy Optimization Plan modeling complete</td> <td data-bbox="1216 590 1425 630">4/11</td> </tr> <tr> <td data-bbox="493 630 1216 669">Energy Optimization program written</td> <td data-bbox="1216 630 1425 669">5/11</td> </tr> <tr> <td data-bbox="493 669 1216 709">Issue implementation RFP</td> <td data-bbox="1216 669 1425 709">6/11</td> </tr> <tr> <td data-bbox="493 709 1216 749">Implementation bid submittal deadline</td> <td data-bbox="1216 709 1425 749">8/11</td> </tr> <tr> <td data-bbox="493 749 1216 789">Energy Optimization Plan filed with MPSC</td> <td data-bbox="1216 749 1425 789">8/11</td> </tr> <tr> <td data-bbox="493 789 1216 829">Implementation contractor selected</td> <td data-bbox="1216 789 1425 829">9/11</td> </tr> <tr> <td data-bbox="493 829 1216 869">Implementation contract signed</td> <td data-bbox="1216 829 1425 869">10/11</td> </tr> <tr> <td data-bbox="493 869 1216 909">Energy Optimization Plan approved by MPSC</td> <td data-bbox="1216 869 1425 909">12/11</td> </tr> <tr> <td data-bbox="493 909 1216 949">Program implementation begins</td> <td data-bbox="1216 909 1425 949">1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				
<p>EM&V</p>	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p><u>Audit and Weatherization</u></p> <p>The impact evaluation approaches consist of engineering analysis of the energy savings from the measures included in the energy savings kit. Analyses methods are adjusted to reflect use conditions identified via participant surveys for minor measure participants. The analysis employs the use of a comparison group to adjust for naturally occurring changes in consumption. The program has a process evaluation to look at satisfaction, program delivery and other aspects.</p> <p>Products or measures may be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. New products, measures and technologies may be added as they emerge in the market.</p>																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p><u>New Construction</u></p> <p>The energy impact evaluation for this program will be based on assessing the difference in energy efficiency and energy usage between the home that would have been built without the program, compared to the energy efficiency and consumption of the Energy Star home that was built through the program. The impact will count savings for each of the home's measures and construction practices that represent a change in efficient practice that is beyond what would have been built by each builder. The process evaluation will focus on improving program designs and operations and on determining the impacts of the program on the market. The process evaluation will also assess lost potential associated with the Energy Star specified home and quantify the added savings that can be achieved by moving beyond Energy Star (pushing the market).</p> <p>Products or measures may be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. New products, measures and technologies may be added as they emerge in the market.</p>																		
<p>Estimated Participation</p>	<table border="1"> <thead> <tr> <th colspan="6">Participation in units of implemented measures</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Energy Efficiency Kit</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>13</td> </tr> </tbody> </table>	Participation in units of implemented measures							2012	2013	2014	2015	Total	Energy Efficiency Kit	3	3	3	3	13
Participation in units of implemented measures																			
	2012	2013	2014	2015	Total														
Energy Efficiency Kit	3	3	3	3	13														
<p>Estimated Program Investment</p>	<table border="1"> <thead> <tr> <th colspan="6">Annual investments</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td>\$ 61</td> <td>\$ 61</td> <td>\$ 60</td> <td>\$ 60</td> <td>\$ 242</td> </tr> </tbody> </table>	Annual investments							2012	2013	2014	2015	Total		\$ 61	\$ 61	\$ 60	\$ 60	\$ 242
Annual investments																			
	2012	2013	2014	2015	Total														
	\$ 61	\$ 61	\$ 60	\$ 60	\$ 242														
<p>Energy Savings Targets</p>	<p>The estimated MWh energy savings shown below are based on measures installed at the end of the year.</p> <table border="1"> <thead> <tr> <th colspan="6">Energy saving (Annual Gross) - MWh</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td>0.6</td> <td>0.6</td> <td>0.6</td> <td>0.6</td> <td>2.5</td> </tr> </tbody> </table>	Energy saving (Annual Gross) - MWh							2012	2013	2014	2015	Total		0.6	0.6	0.6	0.6	2.5
Energy saving (Annual Gross) - MWh																			
	2012	2013	2014	2015	Total														
	0.6	0.6	0.6	0.6	2.5														

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Benefit-Cost Test Results

Benefit/Cost Test	B/C Ratio
Utility System Resource Cost Test	5.6
Total Resource Cost Test	9.3
Rate Impact Measure	0.8
Participant Test	N/A

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Farm Services Program	
Objective	The primary objective of the Residential Farm Services Program is to encourage residential farm operations to install energy-efficient measures and new facilities.	
Target Market	All residential customers are eligible for the program.	
Program Duration	January 1, 2015 through December 31, 2015.	
Program Description	<p>This program provides prescriptive incentives to residential farm customers for the installation of energy-efficient equipment for numerous agricultural applications including but not limited to lighting, motors and drives, control systems, ventilation and refrigeration equipment and custom incentives for the installation of innovative and unique energy-efficient equipment and controls. Having a custom incentive allows customers to have equipment and systems installed for situations specific to their operation or process.</p> <p><u>Prescriptive Incentives</u> The prescriptive incentives are structured to broadly apply to many common energy measures that are similar across many types of farm operations. Having a simple program structure and common equipment and applications provides market suppliers with certainty and ease of use regarding the incentives they will receive for installing a wide variety of energy efficient measures.</p> <p><u>Custom Incentive</u> Custom incentives for the installation of innovative and unique energy-efficient equipment and controls are to be offered on a per kWh basis based on pre-approved engineering estimates. This program targets energy savings equipment or processes as well as applications with so much variability in operating characteristics that standardized savings cannot be assumed across the farm producer base. This program also includes those technologies that are new to the market and have not yet established baseline savings.</p> <p>More specifically, the program is designed to:</p> <ul style="list-style-type: none"> • Provide incentives to farm owners and operators for the installation of high efficiency equipment and controls. 	

This program is not being implemented at this time. The program description is being provided for future reference.

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none">• Provide the knowledge necessary and market demand to justify the marketing of high efficiency measures by electrical contractors, mechanical contractors, and their distributors.• Ensure that the participation process is clear, easy to understand and simple. <p>Where applicable, the MECA EO Collaborative Member will work with the gas company supplying services to the customer to coordinate incentives, processing and assistance for those measures or systems that apply to both fuels (ex: building shell measure improvements).</p> <p>Certain barriers exist to the adoption of energy efficiency measures, including lack of investment capital, competition for funds with other capital improvements, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, high transaction and information research costs, and technology performance uncertainties. This program is designed to help overcome these market barriers and encourage greater adoption of energy efficiency measures in the farm producer market. The premise of the program is that through engagement and education with the market participants and through customer incentives to reduce upfront costs, the risks to energy efficiency implementation will be reduced and the rewards from the savings will become more apparent thus increasing adoption.</p>
Eligible Measures	<p><u>Prescriptive Incentive</u></p> <p>Technology categories for which prescriptive incentives have been established include the following.</p> <ul style="list-style-type: none">• High Efficiency Lighting• Motors/Pumps/Drives• Refrigeration Equipment• Controls• Other <p>Specific technologies included in the program will change over time based on codes and standards, changing market needs, introduction of new technologies and market adoption rates. Measures covered by the prescriptive incentives and their initial incentives are listed in Appendix X.</p> <p><u>Custom Incentive</u></p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>For the effective use of custom incentives, flexibility is the key. Technologies that are unique to that customer, new to the market or have a wide range of savings based on their application cannot be covered by prescriptive incentives due to their variability. However these variable energy savings technologies can be significant and encouraged with custom incentives. Measures must show electric energy savings through accepted engineering analysis that will be reviewed and pre-approved by the utility for the incentive. Measures cannot receive a custom incentive if they are eligible for a prescriptive incentive unless they are in combination with other measures or systems that makes them unique.</p> <p>Measures may be added or removed based on market response, technology availability and changes in efficiency standards.</p>
Implementation Strategy	<p><u>Prescriptive Incentive</u></p> <p>With assistance from MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting, oversight, and regulatory review. Through a competitive bid process, MECA may select an implementation contractor to provide turn-key implementation services including training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.</p> <p>The key to program success is twofold. First, the utility will engage farm producer customer participants by using their existing market delivery channel. This market delivery channel includes manufacturers, distributors, consultants, engineers and contractors. The program will have resources specifically dedicated to educating, partnering and engaging these important market actors in the program. Through these existing market actors who have relationships with farm producer customers, the new high efficiency technology will be offered to customers as a viable option. To support the market participants, the program also includes farm customer educational and promotional pieces designed to assist facility owners, operators and decision makers with the information necessary to improve the energy efficiency of the systems in their facilities. Second, the utility will use internal staff resources that have direct relationships with customers and can help identify opportunities to participate in the program. These resources will build customer awareness, educate the customer on opportunities and</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

connect interested customers with the appropriate participating contractors.

Incentives will be offered to reduce the cost of the energy-efficient equipment and will vary based on cost-effectiveness and market response. The program strives to cover a minimum of 50% of the incremental equipment cost of the measure to stimulate the market if it is cost-effective; however, depending on the acceptance of a measure in the marketplace, 50% is not always needed. Additional guidelines may be established such as total incentives available per customer per year to assure that funds are allocated across all farm customer opportunities.

Where applicable, the MECA EO Collaborative Member will work with the gas company supplying services to the customer to coordinate incentives, processing and assistance for those measures or systems that apply to both fuels (ex: building shell measure improvements).

Custom Incentive

Work to achieve cost effective energy savings with custom incentives will center on working with farm customers to apply energy efficiency in unique ways to their operations and processes and working with the industry participants to find the right solutions to their needs. The primary key to success is utilizing the existing relationships of the utility's internal staff that has relationships with their farm customers and can help identify opportunities to participate in the program. These resources will build customer awareness, educate the customer, and work with engineering staff, supporting engineering firms and Energy Service Companies. Through the engagement of the market participants throughout the delivery channel additional projects can be identified and potential solutions suggested. These participants include manufacturers, distributors, trade associations, consultants, engineers and contractors. The program will have utility staff dedicated to educating, partnering and engaging these important participants in the program as they also discuss other program offerings. Through these existing market participants who have relationships with residential farm customers, new high efficiency technology and custom program solutions will be offered to customers as a viable option. To support the market participants, the program also includes customer educational and promotional pieces designed to assist facility owners, operators and decision makers with the information necessary to improve the energy

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>efficiency of the systems in their facilities.</p> <p>Utility's account managers will promote the program to their farm customers directly and cross promote it with other programs.</p> <p>Custom incentives will be set using a per kWh basis so energy savings will be rewarded. Incentive levels will vary over time based on costs and market need but will typically be established in one year increments. The MECA EO Collaborative Member will use a three tier custom incentive approach. The first tier is a lower incentive rate for technologies that are established and known in the market but need financial help to get them implemented. The second and third tiers target technologies that are newer to the market or have more significant risk or other barriers that need higher stimulation and awareness. All three tiers may or may not be used in a specific time period. Many new technologies will have higher incentive levels and migrate to a lower incentive level over time as they gain acceptance within the market. This approach gives appropriate signals to the market about new technologies or riskier technologies that have significant savings potential. Other guidelines to reduce free ridership will also be established. These guidelines are:</p> <ul style="list-style-type: none">• Simple payback for the project must be between 1 year and 8 years after the incentive is applied. Incentives can be adjusted to meet the payback criteria.• Program incentives will not exceed 50% of the installed project cost.• The MECA EO Collaborative Member reserves the right to adjust these guidelines over time and to make exceptions. <p>One barrier to getting custom measures identified and installed is getting customers to spend funds to analyze the opportunity and savings. To help address this issue, assessment/audit grants will be available to customers for up to 25% of the analysis cost not to exceed an amount to be determined for facilities less than 25,000 square feet and not to exceed an amount to be determined for larger facilities. If the customer implements that project an additional bonus will be included in the incentive to cover an additional 25% of the assessment cost using the same cost caps.</p>
Marketing Strategy	Educational and promotional materials will be developed for farm owners and operators on the benefits of energy efficiency improvements

and improved systems performance, including educational brochures, farm customer and market provider seminars, program promotional material, and website content. Specific educational, training and promotional efforts will be aimed at market participants such as electrical contractors, building supply firms, and distributors to help them promote efficient measures to their customers. This education will be through a combination of mailings and direct meetings with key market participants.

The marketing and communications strategy will be designed to inform farm producer customers of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to key partners and market participants including A&E firms, Energy Services Companies, the equipment supply community, the contractor community, relevant professional and trade associations and other interested parties. An important part of the marketing plan will be content and functionality on the MECA EO Collaborative Member's website, which will direct farm customers to information about the program.

Marketing and communications plan will include:

- Education seminars will provide details about the program and how to participate in the program.
- A combination of strategies including media advertising, outreach and presentations at professional and community forums and events, and through direct outreach to key customers of the farm community and customer representatives such as:
 - Brochures that describe the benefits and features of the program including program application forms and worksheets.
 - Targeted direct mailings used to educate customers on the benefits of the program and explaining how they can apply.
 - Customer and trade partner outreach and presentations informing interested parties about the benefits of the program and how to participate.
 - Print advertisements to promote the program placed in selected local media including newspapers and trade publications in the utility's service territories.
 - Newsletters and magazines will include general information about all energy efficiency programs and will be used to feature special stories and solicit participation in this program.
 - Website content providing program information resources,

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>contact information, downloadable application forms and worksheets, and links to other relevant service and information resources.</p> <ul style="list-style-type: none"> ○ The utility's' account managers informing their assigned accounts about the program during their regular communications. ○ Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials. ○ Presentations to key customers and customer groups to actively solicit their participation in the program. <p>The marketing strategy will identify key customer segments and groups for target marketing, and will prepare specific outreach activities for these customers.</p>																				
<p>Milestones</p>	<table border="1"> <thead> <tr> <th data-bbox="493 898 1216 936">Major milestones</th> <th data-bbox="1216 898 1425 936">Date</th> </tr> </thead> <tbody> <tr> <td data-bbox="493 936 1216 974">Energy Optimization Plan modeling complete</td> <td data-bbox="1216 936 1425 974">4/11</td> </tr> <tr> <td data-bbox="493 974 1216 1012">Energy Optimization program written</td> <td data-bbox="1216 974 1425 1012">5/11</td> </tr> <tr> <td data-bbox="493 1012 1216 1050">Issue implementation RFP</td> <td data-bbox="1216 1012 1425 1050">6/11</td> </tr> <tr> <td data-bbox="493 1050 1216 1087">Implementation bid submittal deadline</td> <td data-bbox="1216 1050 1425 1087">8/11</td> </tr> <tr> <td data-bbox="493 1087 1216 1125">Energy Optimization Plan filed with MPSC</td> <td data-bbox="1216 1087 1425 1125">8/11</td> </tr> <tr> <td data-bbox="493 1125 1216 1163">Implementation contractor selected</td> <td data-bbox="1216 1125 1425 1163">9/11</td> </tr> <tr> <td data-bbox="493 1163 1216 1201">Implementation contract signed</td> <td data-bbox="1216 1163 1425 1201">10/11</td> </tr> <tr> <td data-bbox="493 1201 1216 1239">Energy Optimization Plan approved by MPSC</td> <td data-bbox="1216 1201 1425 1239">12/11</td> </tr> <tr> <td data-bbox="493 1239 1216 1297">Program implementation begins</td> <td data-bbox="1216 1239 1425 1297">1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				
<p>EM&V</p>	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p><u>Prescriptive Incentives</u> For prescriptive incentive measures, the energy impact evaluation will focus on reliably estimating the program's annual kWh savings over the effective useful life of the prescriptive retrofits and installations.</p>																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p><u>Custom Incentives</u></p> <p>Because custom incentives targets projects with a wide range of non-standard measures or standard measures used in non-standard installations/configurations, the evaluation will rely on the engineering analysis of each project.</p> <p>The process evaluation is intended to provide program managers with timely recommendations on program operations, effectiveness and participant satisfaction so that mid-course corrections may be considered.</p> <p>Products or measures may be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. New products, measures and technologies may be added as they emerge in the market.</p>																																				
<p>Estimated Participation</p>	<table border="1"> <thead> <tr> <th colspan="6">Participation in units of implemented measures</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lighting</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Custom</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Total</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Participation in units of implemented measures							2012	2013	2014	2015	Total	Lighting	-	-	-	-	-	Other	-	-	-	-	-	Custom	-	-	-	-	-	Total	-	-	-	-	-
Participation in units of implemented measures																																					
	2012	2013	2014	2015	Total																																
Lighting	-	-	-	-	-																																
Other	-	-	-	-	-																																
Custom	-	-	-	-	-																																
Total	-	-	-	-	-																																
<p>Estimated Program Investment</p>	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total																										
Annual investments																																					
2012	2013	2014	2015	Total																																	
<p>Energy Savings Targets</p>	<p>The estimated MWh energy savings shown below are based on measures installed at the end of the year.</p> <table border="1"> <thead> <tr> <th colspan="5">Energy saving (Annual Gross) - MWh</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Energy saving (Annual Gross) - MWh					2012	2013	2014	2015	Total																										
Energy saving (Annual Gross) - MWh																																					
2012	2013	2014	2015	Total																																	

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Benefit-Cost Test Results	Benefit/Cost Test	B/C Ratio
	Utility System Resource Cost Test	
	Total Resource Cost Test	
	Rate Impact Measure	
	Participant Test	

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Educational Services Program
Objective	<p>The objective of the Educational Services Programs is to provide information and education about energy efficiency and conservation. The educational information will be delivered through many media and communication channels. These educational programs will provide the basis for more program specific efforts aimed at getting customers to participate in the utility's Energy Optimization portfolio of programs.</p>
Target Market	<p>The target markets are all customer segments served by the Energy Optimization Programs. Trade allies will also be a targeted market.</p>
Program Duration	<p>January 1, 2012 through December 31, 2015.</p>
Program Description	<p>The Educational Program will provide information about energy efficiency and conservation, giving customers valuable information on the benefits of participation, what they need to do to participate and how to sign up for the program. Specifically, the information about the programs will encourage low income customers to dial 2-1-1 to get in touch with agencies that will help with their particular needs including the Low Income Weatherization Program.</p> <p>The Educational Services Programs will increase customer participation in the programs by making customers aware of the benefits of energy efficiency and conservation programs, educating the customer about how much energy and cost savings they can expect, and the long-term environmental benefits associated with these actions.</p> <p>The Educational Services Programs will be primarily focused on the customers, but it will also to make it easy for trade allies to support the energy efficiency programs.</p> <p>Besides generally supporting all energy efficiency programs, the Educational Program will directly implement the energy efficiency online self audit program. Besides providing an online audit, the program will also provide a connection to other programs and provide materials customers need to participate.</p> <p>Program education and information will be provided through many different channels. The following are examples of channels that might</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>be used.</p> <ul style="list-style-type: none">• Customer representatives trained to promote the program to their customers• Informational content on the MECA EO Collaborative Members websites• Magazine and news letters that will include general information about all energy efficiency programs• Residential seminars• Trade ally seminars/education• Radio advertising• Print advertising• Bill inserts• Events and trade shows• School programs• Trade publication advertising
Eligible Measures	<p>The Educational Services Programs will not include eligible measures but will support and promote energy efficiency and conservation messages.</p>
Implementation Strategy	<p>The Educational Services Programs will provide general information on energy efficiency and conservation in support of the program specific marketing messages.</p> <p>The implementation of this program will be coordinated with all MECA EO Collaborative Members.</p>
Marketing Strategy	<p>Marketing strategy for the Educational Program is to have general information about energy efficiency and conservation readily available to customers enabling them to understand the benefits of participating. Cost savings as well as the long-term environmental benefits will be communicated.</p> <p>Magazines and newsletters will include general information about all energy efficiency programs and will be used to feature special stories and events promoting specific programs.</p> <p>Besides achieving energy saving by installing energy efficiency measures through the energy efficiency programs, low-cost/no-cost energy savings will be promoted with other publications distributed</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	directly to interested customers.																				
Milestones	<table border="1"> <thead> <tr> <th>Major milestones</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Energy Optimization Plan modeling complete</td> <td>4/11</td> </tr> <tr> <td>Energy Optimization program written</td> <td>5/11</td> </tr> <tr> <td>Issue implementation RFP</td> <td>6/11</td> </tr> <tr> <td>Implementation bid submittal deadline</td> <td>8/11</td> </tr> <tr> <td>Energy Optimization Plan filed with MPSC</td> <td>8/11</td> </tr> <tr> <td>Implementation contractor selected</td> <td>9/11</td> </tr> <tr> <td>Implementation contract signed</td> <td>10/11</td> </tr> <tr> <td>Energy Optimization Plan approved by MPSC</td> <td>12/11</td> </tr> <tr> <td>Program implementation begins</td> <td>1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				
EM&V	Process evaluation will be conducted under the direction of the MECA EO Collaborative.																				
Estimated Participation	The number of verified customer touches made by the Educational Program will be a measure of how many customers are impacted by the program, whether they have participated directly in the programs or not.																				
Estimated Program Investment	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 130</td> <td>\$ 143</td> <td>\$ 179</td> <td>\$ 185</td> <td>\$ 637</td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total	\$ 130	\$ 143	\$ 179	\$ 185	\$ 637					
Annual investments																					
2012	2013	2014	2015	Total																	
\$ 130	\$ 143	\$ 179	\$ 185	\$ 637																	
Energy Savings Targets	The estimated energy saving from the Educational Program will be a percentage of the annual savings that is proportional to the amount spent, up to 3%.																				
Benefit-Cost Test Results	<table border="1"> <thead> <tr> <th>Benefit/Cost Test</th> <th>B/C Ratio</th> </tr> </thead> <tbody> <tr> <td>Utility System Resource Cost Test</td> <td>4.2</td> </tr> <tr> <td>Total Resource Cost Test</td> <td>4.2</td> </tr> <tr> <td>Rate Impact Measure</td> <td>0.8</td> </tr> <tr> <td>Participant Test</td> <td>N/A</td> </tr> </tbody> </table>	Benefit/Cost Test	B/C Ratio	Utility System Resource Cost Test	4.2	Total Resource Cost Test	4.2	Rate Impact Measure	0.8	Participant Test	N/A										
Benefit/Cost Test	B/C Ratio																				
Utility System Resource Cost Test	4.2																				
Total Resource Cost Test	4.2																				
Rate Impact Measure	0.8																				
Participant Test	N/A																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	Residential Pilot Programs
Objective	The objective of the Pilot Programs is to make current programs as effective as possible for customers and test and develop new program designs, test new marketing strategies and approaches to most effectively serve the energy needs of customers, and to test the energy saving impact of emerging technologies.
Target Market	All customer segments will be served by the pilot programs. Program design and new marketing approaches will be tested to reach “hard-to-reach” market segments. For example, these markets might include the non-English speaking community or customers who conduct all of their financial transactions in cash. This may require a test of social marketing techniques and unique partnerships for effectively delivering energy information, education and programs.
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p>The Pilot Programs is designed to enrich the effectiveness of the Energy Optimization Programs. The Pilot Programs will evolve over time and will be dictated by the changing needs of customers and new technologies. An important component of the Pilot Programs will be to conduct customer research to get the “voice of the customer” related to current and future programs and technologies.</p> <p>The Energy Optimization Programs are designed to permit all customers to have reasonable access to program benefits. The Pilot Programs will help improve the effectiveness and customer reach of the Energy Optimization Programs.</p> <p>The Pilot Programs provides incentives to introduce new products to demonstrate proof of product, technology application, technology acceptance and market acceptance. The Pilot Programs also determines product performance, customer satisfaction and energy saving of emerging technologies.</p>
Eligible Measures	<p>Different technologies, programs or marketing approaches will be considered in the Pilot Programs. These are just examples and are not necessarily ideas that will be tested.</p> <ul style="list-style-type: none"> • Technologies investigated

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none"> ○ Phantom load reduction devices ○ Wireless load control systems • New programs studied <ul style="list-style-type: none"> ○ Broader application of LEDs and hard to place CFLs ○ Other new lighting technologies ○ New furnace fans technology with advanced controls program • New marketing approaches <ul style="list-style-type: none"> ○ Target non-English speaking community ○ Deliver marketing messages through social networks ○ Test new marketing approaches for soliciting low income participation ○ Work with colleges to test new technologies, programs or approaches to the market ○ Work with farm support organizations to test comprehensive approaches to agriculture producer optimization 								
<p>Implementation Strategy</p>	<p>The Pilot Programs ideas and direction will come from feedback from the current programs, “voice of the customer” research and Utility and implementation contractor staff.</p> <p>The implementation of this program will be coordinated with other Members of the MECA EO Collaborative.</p>								
<p>Marketing Strategy</p>	<p>Marketing strategy of the Pilot Programs will be dictated by the technology, the program or marketing approach being tested.</p>								
<p>Milestones</p>	<p>The Pilot Programs’ roll of enhancing the effectiveness of the energy efficiency programs requires feedback from the first round of approved programs and ongoing feedback as programs are implemented. If a program is not reaching the intended market or there are pockets within the market segment not being served, a plan will be designed to improve program performance. This plan will be tested as part of the Pilot Programs.</p> <table border="1" data-bbox="493 1682 1425 1839"> <thead> <tr> <th>Major milestones</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Energy Optimization Plan modeling complete</td> <td>4/11</td> </tr> <tr> <td>Energy Optimization program written</td> <td>5/11</td> </tr> <tr> <td>Energy Optimization Plan filed with MPSC</td> <td>8/11</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Energy Optimization Plan filed with MPSC	8/11
Major milestones	Date								
Energy Optimization Plan modeling complete	4/11								
Energy Optimization program written	5/11								
Energy Optimization Plan filed with MPSC	8/11								

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	Energy Optimization Plan approved by MPSC	12/11															
	Program implementation begins	1/12															
EM&V	Impact and process evaluation may be conducted on each Pilot Programs. This evaluation will be conducted under the direction of the MECA EO Collaborative.																
Estimated Participation	The number of participants in the Pilot Programs will not be a key performance measurement. Other performance measurements such as the take rate of a particular offering by a hard-to-reach segment will be determined.																
Estimated Program Investment	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 217</td> <td>\$ 239</td> <td>\$ 298</td> <td>\$ 309</td> <td>\$ 1,063</td> </tr> </tbody> </table>		Annual investments					2012	2013	2014	2015	Total	\$ 217	\$ 239	\$ 298	\$ 309	\$ 1,063
Annual investments																	
2012	2013	2014	2015	Total													
\$ 217	\$ 239	\$ 298	\$ 309	\$ 1,063													
Energy Savings Targets	The estimated energy saving from the Pilot Programs will be a percentage of the annual savings proportional amount spent, up to 5%.																
Benefit-Cost Test Results	<table border="1"> <thead> <tr> <th>Benefit/Cost Test</th> <th>B/C Ratio</th> </tr> </thead> <tbody> <tr> <td>Utility System Resource Cost Test</td> <td>4.2</td> </tr> <tr> <td>Total Resource Cost Test</td> <td>4.2</td> </tr> <tr> <td>Rate Impact Measure</td> <td>0.8</td> </tr> <tr> <td>Participant Test</td> <td>N/A</td> </tr> </tbody> </table>		Benefit/Cost Test	B/C Ratio	Utility System Resource Cost Test	4.2	Total Resource Cost Test	4.2	Rate Impact Measure	0.8	Participant Test	N/A					
Benefit/Cost Test	B/C Ratio																
Utility System Resource Cost Test	4.2																
Total Resource Cost Test	4.2																
Rate Impact Measure	0.8																
Participant Test	N/A																

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Energy Optimization Plan (2012-2015)

Commercial and Industrial Programs

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	C&I General Business Services Program
Objective	The primary objective of the Commercial and Industrial (C&I) General Business Services Program is to encourage commercial and industrial (C&I) customers to install energy-efficient measures in existing and new facilities.
Target Market	All C&I customers are eligible for the program. Customers who elect to implement a self-directed energy optimization plan are not eligible.
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p>This program provides prescriptive incentives to C&I customers for the installation of energy-efficient equipment for numerous applications including but not limited to lighting, motors and drives, controls, heating ventilation and air conditioning (HVAC), refrigeration, and food service equipment and custom incentives for the installation of innovative and unique energy-efficient equipment and controls. Having a custom incentive allows efficiency measures and systems to be installed for situations specific to that customer's application or process.</p> <p><u>Prescriptive Incentive</u> The prescriptive incentives are structured to broadly apply to many common energy efficiency measures that are similar across many C&I market segments. Having a simple program structure and incentive schedule for common equipment and applications provides customers and the market suppliers with certainty and ease of use regarding the incentives they will receive for installing a wide variety of energy efficiency measures.</p> <p><u>Custom Incentive</u> Custom incentives for the installation of innovative and unique energy-efficient equipment and controls are to be offered on a per kWh basis based on pre-approved engineering estimates. This program targets energy savings equipment or processes as well as applications with so much variability in operating characteristics that standardized savings cannot be assumed across the customer base. This program also includes those technologies that are new to the market and have not yet established baseline savings.</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>More specifically, the program is designed to:</p> <ul style="list-style-type: none">• Provide incentives to facility owners and operators for the installation of high efficiency equipment and controls.• Provide the knowledge necessary and market demand to justify the marketing of high efficiency measures by electrical contractors, mechanical contractors, and their distributors.• Ensure that the participation process is clear, easy to understand and simple. <p>Where applicable, the MECA EO Collaborative Member will work with the gas company supplying services to the customer to coordinate incentives, processing and assistance for those measures or systems that apply to both fuels (ex: building shell measure improvements).</p> <p>Certain barriers exist to the adoption of energy efficiency measures, including lack of investment capital, competition for funds with other capital improvements, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, high transaction and information research costs, and technology performance uncertainties. This program is designed to help overcome these market barriers and encourage greater adoption of energy efficiency measures in the C&I market. The premise of the program is that through engagement and education with the market participants and through customer incentives to reduce upfront costs, the risks to energy efficiency implementation will be reduced and the rewards from the savings will become more apparent thus increasing adoption.</p>
Eligible Measures	<p><u>Prescriptive Incentive</u></p> <p>Technology categories for which prescriptive incentives have been established include the following.</p> <ul style="list-style-type: none">• High Efficiency Lighting• HVAC Equipment• Motors/Pumps/Drives• Refrigeration Equipment• Food Service Equipment• Controls• Other <p>Specific technologies included in the program will change over time</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>based on codes and standards, changing market needs, introduction of new technologies and market adoption rates. Measures covered by the prescriptive incentives and their initial incentives are listed in Appendix X.</p> <p><u>Custom Incentive</u> For the effective use of custom incentives, flexibility is the key. Technologies that are unique to that customer, new to the market or have a wide range of savings based on their application cannot be covered by prescriptive incentives due to their variability. However these variable energy savings technologies can be significant and encouraged with custom incentives. Measures must show electric energy savings through accepted engineering analysis that will be reviewed and pre-approved by the utility for the incentive. Measures cannot receive a custom incentive if they are eligible for a prescriptive incentive unless they are in combination with other measures or systems that makes them unique.</p> <p>Measures may be added or removed based on market response, technology availability and changes in efficiency standards.</p>
Implementation Strategy	<p><u>Prescriptive Incentive</u> With assistance from MECA, the MECA EO Collaborative Member will provide program management and oversight, vendor referrals, tracking and reporting, oversight, and regulatory review. Through a competitive bid process, MECA may select an implementation contractor to provide turn-key implementation services including training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing, jointly with the MECA EO Collaborative Member.</p> <p>The key to program success is twofold. First, the utility will engage customer participants by using their existing market delivery channel. This market delivery channel includes manufacturers, distributors, consultants, engineers and contractors. The program will have resources specifically dedicated to educating, partnering and engaging these important market actors in the program. Through these existing market actors who have relationships with C&I customers, the new high efficiency technology will be offered to customers as a viable option. To support the market participants, the program also includes customer educational and promotional pieces designed to assist facility owners,</p>

operators and decision makers with the information necessary to improve the energy efficiency of the systems in their facilities. Second, the utility will use internal staff resources that have direct relationships with customers and can help identify opportunities to participate in the program. These resources will build customer awareness, educate the customer on opportunities and connect interested customers with the appropriate participating contractors.

Incentives will be offered to reduce the cost of the energy-efficient equipment and will vary based on cost-effectiveness and market response. The program strives to cover a minimum of 50% of the incremental equipment cost of the measure to stimulate the market if it is cost-effective; however, depending on the acceptance of a measure in the marketplace, 50% is not always needed. Additional guidelines may be established such as total incentives available per customer per year to assure that funds are allocated across all customer opportunities.

Where applicable, the MECA EO Collaborative Member will work with the gas company supplying services to the customer to coordinate incentives, processing and assistance for those measures or systems that apply to both fuels (ex: building shell measure improvements).

Custom Incentive

Work to achieve cost effective energy savings with custom incentives will center on working with customers to apply energy efficiency in unique ways to their operations and processes and working with the industry participants to find the right solutions to their needs. The primary key to success is utilizing the existing relationships of the utility's internal staff that has relationships with customers and can help identify opportunities to participate in the program. These resources will build customer awareness, educate the customer, and work with engineering staff, supporting engineering firms and Energy Service Companies. Through the engagement of the market participants throughout the delivery channel additional projects can be identified and potential solutions suggested. These participants include manufacturers, distributors, trade associations, consultants, engineers and contractors. The program will have utility staff dedicated to educating, partnering and engaging these important participants in the program as they also discuss other program offerings. Through these existing market participants who have relationships with C&I customers, new high efficiency technology and custom program solutions will be offered to

customers as a viable option. To support the market participants, the program also includes customer educational and promotional pieces designed to assist facility owners, operators and decision makers with the information necessary to improve the energy efficiency of the systems in their facilities.

Utility's account managers will promote the program to their customers directly and cross promote it with other programs.

Custom incentives will be set using a per kWh basis so energy savings will be rewarded. Incentive levels will vary over time based on costs and market need but will typically be established in one year increments. The MECA EO Collaborative Member will use a three tier custom incentive approach. The first tier is a lower incentive rate for technologies that are established and known in the market but need financial help to get them implemented. The second and third tiers target technologies that are newer to the market or have more significant risk or other barriers that need higher stimulation and awareness. All three tiers may or may not be used in a specific time period. Many new technologies will have higher incentive levels and migrate to a lower incentive level over time as they gain acceptance within the market. This approach gives appropriate signals to the market about new technologies or riskier technologies that have significant savings potential. Other guidelines to reduce free ridership will also be established. These guidelines are:

- Simple payback for the project must be between 1 year and 8 years after the incentive is applied. Incentives can be adjusted to meet the payback criteria.
- Program incentives will not exceed 50% of the installed project cost.
- The MECA EO Collaborative Member reserves the right to adjust these guidelines over time and to make exceptions.

One barrier to getting custom measures identified and installed is getting customers to spend funds to analyze the opportunity and savings. To help address this issue, assessment/audit grants will be available to customers for up to 25% of the analysis cost not to exceed an amount to be determined for facilities less than 25,000 square feet and not to exceed an amount to be determined for larger facilities. If the customer implements that project an additional bonus will be included in the incentive to cover an additional 25% of the assessment cost using the same cost caps.

Marketing Strategy	<p>Educational and promotional materials will be developed for building owners and operators on the benefits of energy efficiency improvements and improved systems performance, including educational brochures, customer and market provider seminars, program promotional material, and website content. Specific educational, training and promotional efforts will be aimed at market participants such as electrical contractors, building supply firms, and distributors to help them promote efficient measures to their customers. This education will be through a combination of mailings and direct meetings with key market participants.</p> <p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to key partners and market participants including A&E firms, Energy Services Companies, the equipment supply community, the contractor community, relevant professional and trade associations and other interested parties. An important part of the marketing plan will be content and functionality on the MECA EO Collaborative Member's website, which will direct customers to information about the program.</p> <p>Marketing and communications plan will include:</p> <ul style="list-style-type: none">• Education seminars will provide details about the program and how to participate in the program.• A combination of strategies including media advertising, outreach and presentations at professional and community forums and events, and through direct outreach to key customers and customer representatives such as:<ul style="list-style-type: none">○ Brochures that describe the benefits and features of the program including program application forms and worksheets.○ Targeted direct mailings used to educate customers on the benefits of the program and explaining how they can apply.○ Customer and trade partner outreach and presentations informing interested parties about the benefits of the program and how to participate.○ Print advertisements to promote the program placed in selected local media including newspapers and trade publications in the utility's service territories.○ Newsletters and magazines will include general information about all energy efficiency programs and will be used to feature

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>special stories and solicit participation in this program.</p> <ul style="list-style-type: none"> ○ Website content providing program information resources, contact information, downloadable application forms and worksheets, and links to other relevant service and information resources. ○ The utility's' account managers informing their assigned accounts about the program during their regular communications. ○ Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials. ○ Presentations to key customers and customer groups to actively solicit their participation in the program. <ul style="list-style-type: none"> ● The marketing strategy will identify key customer segments and groups for target marketing, and will prepare specific outreach activities for these customers. 																				
<p>Milestones</p>	<table border="1"> <thead> <tr> <th data-bbox="493 974 1216 1014">Major milestones</th> <th data-bbox="1216 974 1425 1014">Date</th> </tr> </thead> <tbody> <tr> <td data-bbox="493 1014 1216 1054">Energy Optimization Plan modeling complete</td> <td data-bbox="1216 1014 1425 1054">4/11</td> </tr> <tr> <td data-bbox="493 1054 1216 1094">Energy Optimization program written</td> <td data-bbox="1216 1054 1425 1094">5/11</td> </tr> <tr> <td data-bbox="493 1094 1216 1134">Issue implementation RFP</td> <td data-bbox="1216 1094 1425 1134">6/11</td> </tr> <tr> <td data-bbox="493 1134 1216 1173">Implementation bid submittal deadline</td> <td data-bbox="1216 1134 1425 1173">8/11</td> </tr> <tr> <td data-bbox="493 1173 1216 1213">Energy Optimization Plan filed with MPSC</td> <td data-bbox="1216 1173 1425 1213">8/11</td> </tr> <tr> <td data-bbox="493 1213 1216 1253">Implementation contractor selected</td> <td data-bbox="1216 1213 1425 1253">9/11</td> </tr> <tr> <td data-bbox="493 1253 1216 1293">Implementation contract signed</td> <td data-bbox="1216 1253 1425 1293">10/11</td> </tr> <tr> <td data-bbox="493 1293 1216 1333">Energy Optimization Plan approved by MPSC</td> <td data-bbox="1216 1293 1425 1333">12/11</td> </tr> <tr> <td data-bbox="493 1333 1216 1373">Program implementation begins</td> <td data-bbox="1216 1333 1425 1373">1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Issue implementation RFP	6/11	Implementation bid submittal deadline	8/11	Energy Optimization Plan filed with MPSC	8/11	Implementation contractor selected	9/11	Implementation contract signed	10/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12
Major milestones	Date																				
Energy Optimization Plan modeling complete	4/11																				
Energy Optimization program written	5/11																				
Issue implementation RFP	6/11																				
Implementation bid submittal deadline	8/11																				
Energy Optimization Plan filed with MPSC	8/11																				
Implementation contractor selected	9/11																				
Implementation contract signed	10/11																				
Energy Optimization Plan approved by MPSC	12/11																				
Program implementation begins	1/12																				
<p>EM&V</p>	<p>MECA will coordinate the impact and process evaluation of the MECA EO Collaborative Members' Programs. The evaluation will include a certification of savings and will leverage knowledge gained from the evaluation of similar utility energy efficiency programs in Michigan. Data collection processes for the certification of savings will be reviewed by an independent third party evaluation contractor.</p> <p><u>Prescriptive Incentives</u></p> <p>For prescriptive incentive measures, the energy impact evaluation will focus on reliably estimating the program's annual kWh savings over the</p>																				

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>effective useful life of the prescriptive retrofits and installations.</p> <p><u>Custom Incentives</u> Because custom incentives targets projects with a wide range of non-standard measures or standard measures used in non-standard installations/configurations, the evaluation will rely on the engineering analysis of each project.</p> <p>The process evaluation is intended to provide program managers with timely recommendations on program operations, effectiveness and participant satisfaction so that mid-course corrections may be considered.</p> <p>Products or measures may be added or eliminated from the program based on cost-effectiveness, market acceptance and standard practice. New products, measures and technologies may be added as they emerge in the market.</p>																																				
Estimated Participation	<table border="1"> <thead> <tr> <th colspan="6">Participation in units of implemented measures</th> </tr> <tr> <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lighting</td> <td>82</td> <td>83</td> <td>95</td> <td>94</td> <td>82</td> </tr> <tr> <td>Other</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Custom</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Total</td> <td>85</td> <td>86</td> <td>97</td> <td>97</td> <td>85</td> </tr> </tbody> </table>	Participation in units of implemented measures							2012	2013	2014	2015	Total	Lighting	82	83	95	94	82	Other	3	3	3	3	3	Custom	0	0	0	0	0	Total	85	86	97	97	85
Participation in units of implemented measures																																					
	2012	2013	2014	2015	Total																																
Lighting	82	83	95	94	82																																
Other	3	3	3	3	3																																
Custom	0	0	0	0	0																																
Total	85	86	97	97	85																																
Estimated Program Investment	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 4,037</td> <td>\$ 4,033</td> <td>\$ 4,085</td> <td>\$ 4,078</td> <td>\$ 16,233</td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total	\$ 4,037	\$ 4,033	\$ 4,085	\$ 4,078	\$ 16,233																					
Annual investments																																					
2012	2013	2014	2015	Total																																	
\$ 4,037	\$ 4,033	\$ 4,085	\$ 4,078	\$ 16,233																																	
Energy Savings Targets	<p>The estimated MWh energy savings shown below are based on measures installed at the end of the year.</p> <table border="1"> <thead> <tr> <th colspan="5">Energy saving (Annual Gross) - MWh</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>29.6</td> <td>29.3</td> <td>29.0</td> <td>28.8</td> <td>116.7</td> </tr> </tbody> </table>	Energy saving (Annual Gross) - MWh					2012	2013	2014	2015	Total	29.6	29.3	29.0	28.8	116.7																					
Energy saving (Annual Gross) - MWh																																					
2012	2013	2014	2015	Total																																	
29.6	29.3	29.0	28.8	116.7																																	

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Benefit-Cost Test Results

Benefit/Cost Test	B/C Ratio
Utility System Resource Cost Test	5.9
Total Resource Cost Test	3.3
Rate Impact Measure	0.8
Participant Test	3.2

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	C&I Educational Services Program
Objective	<p>The objective of the Educational Services Programs is to provide information and education about energy efficiency and conservation. The educational information will be delivered through many media and communication channels. These educational programs will provide the basis for more program specific efforts aimed at getting customers to participate in the utility's Energy Optimization portfolio of programs.</p>
Target Market	<p>The target markets are all customer segments served by the Energy Optimization Programs. Trade allies will also be a targeted market.</p>
Program Duration	<p>January 1, 2012 through December 31, 2015.</p>
Program Description	<p>The Educational Services Program will provide information about energy efficiency and conservation, giving customers valuable information on the benefits of participation, what they need to do to participate and how to sign up for the program.</p> <p>The Educational Services Programs will increase customer participation in the programs by making customers aware of the benefits of energy efficiency and conservation programs, educating the customer about how much energy and cost savings they can expect, and the long-term environmental benefits associated with these actions.</p> <p>The Educational Services Programs will be primarily focused on the customers, but it will also to make it easy for trade allies to support the energy efficiency programs.</p> <p>The program will provide a connection to other programs and provide materials customers need to participate.</p> <p>Program education and information will be provided through many different channels. The following are examples of channels that might be used.</p> <ul style="list-style-type: none">• Customer representatives trained to promote the program to their customers• Informational content on the MECA EO Collaborative Members websites• Magazine and news letters that will include general information

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<p>about all energy efficiency programs</p> <ul style="list-style-type: none">• Business seminars• Trade ally seminars/education• Radio advertising• Print advertising• Bill inserts• Events and trade shows• School programs• Trade publication advertising
Eligible Measures	<p>The Educational Services Programs will not include eligible measures but will support and promote energy efficiency and conservation messages.</p>
Implementation Strategy	<p>The Educational Services Programs will provide general information on energy efficiency and conservation in support of the program specific marketing messages.</p> <p>The implementation of this program will be coordinated with all MECA EO Collaborative Members.</p>
Marketing Strategy	<p>Marketing strategy for the Educational Services Program is to have general information about energy efficiency and conservation readily available to customers enabling them to understand the benefits of participating. Cost savings as well as the long-term environmental benefits will be communicated.</p> <p>Magazines and newsletters will include general information about all energy efficiency programs and will be used to feature special stories and events promoting specific programs.</p> <p>Besides achieving energy saving by installing energy efficiency measures through the energy efficiency programs, low-cost/no-cost energy savings will be promoted with other publications distributed directly to interested customers.</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Milestones	<table border="1"> <thead> <tr> <th colspan="4">Major milestones</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="4">Energy Optimization Plan modeling complete</td> <td>4/11</td> </tr> <tr> <td colspan="4">Energy Optimization program written</td> <td>5/11</td> </tr> <tr> <td colspan="4">Energy Optimization Plan filed with MPSC</td> <td>8/11</td> </tr> <tr> <td colspan="4">Energy Optimization Plan approved by MPSC</td> <td>12/11</td> </tr> <tr> <td colspan="4">Program implementation begins</td> <td>1/12</td> </tr> </tbody> </table>					Major milestones				Date	Energy Optimization Plan modeling complete				4/11	Energy Optimization program written				5/11	Energy Optimization Plan filed with MPSC				8/11	Energy Optimization Plan approved by MPSC				12/11	Program implementation begins				1/12
	Major milestones				Date																														
	Energy Optimization Plan modeling complete				4/11																														
	Energy Optimization program written				5/11																														
	Energy Optimization Plan filed with MPSC				8/11																														
	Energy Optimization Plan approved by MPSC				12/11																														
Program implementation begins				1/12																															
EM&V	Process evaluation will be conducted under the direction of the MECA EO Collaborative.																																		
Estimated Participation	The number of verified customer touches made by the Educational Services Program will be a measure of how many customers are impacted by the program, whether they have participated directly in the programs or not.																																		
Estimated Program Investment	<table border="1"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 163</td> <td>\$ 164</td> <td>\$ 165</td> <td>\$ 165</td> <td>\$ 657</td> </tr> </tbody> </table>					Annual investments					2012	2013	2014	2015	Total	\$ 163	\$ 164	\$ 165	\$ 165	\$ 657															
Annual investments																																			
2012	2013	2014	2015	Total																															
\$ 163	\$ 164	\$ 165	\$ 165	\$ 657																															
Energy Savings Targets	The estimated energy saving from the Educational Services Program will be a percentage of the annual savings that is proportional to the amount spent, up to 3%.																																		
Benefit-Cost Test Results	<table border="1"> <thead> <tr> <th>Benefit/Cost Test</th> <th>B/C Ratio</th> </tr> </thead> <tbody> <tr> <td>Utility System Resource Cost Test</td> <td>5.4</td> </tr> <tr> <td>Total Resource Cost Test</td> <td>5.4</td> </tr> <tr> <td>Rate Impact Measure</td> <td>0.8</td> </tr> <tr> <td>Participant Test</td> <td>N/A</td> </tr> </tbody> </table>					Benefit/Cost Test	B/C Ratio	Utility System Resource Cost Test	5.4	Total Resource Cost Test	5.4	Rate Impact Measure	0.8	Participant Test	N/A																				
Benefit/Cost Test	B/C Ratio																																		
Utility System Resource Cost Test	5.4																																		
Total Resource Cost Test	5.4																																		
Rate Impact Measure	0.8																																		
Participant Test	N/A																																		

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

Program	C&I Pilot Programs
Objective	The objective of the Pilot Programs is to make current programs as effective as possible for customers and test and develop new program designs, test new marketing strategies and approaches to most effectively serve the energy needs of customers, and to test the energy saving impact of emerging technologies.
Target Market	All customer segments will be served by the pilot programs. Program design and new marketing approaches will be tested to reach “hard-to-reach” market segments. For example, these markets might include small businesses who lease space for their operations or schools with limited capital budgets. This may require a test of marketing techniques and unique partnerships for effectively delivering energy information, education and programs.
Program Duration	January 1, 2012 through December 31, 2015.
Program Description	<p>The Pilot Programs is designed to enrich the effectiveness of the Energy Optimization Programs. The Pilot Program will evolve over time and will be dictated by the changing needs of customers and new technologies. An important component of the Pilot Program will be to conduct customer research to get the “voice of the customer” related to current and future programs and technologies.</p> <p>The Energy Optimization Programs are designed to permit all customers to have reasonable access to program benefits. The Pilot Program will help improve the effectiveness and customer reach of the Energy Optimization Programs.</p> <p>The Pilot Programs provides incentives to introduce new products to demonstrate proof of product, technology application, technology acceptance and market acceptance. The Pilot Program also determines product performance, customer satisfaction and energy saving of emerging technologies.</p>
Eligible Measures	<p>Different technologies, programs or marketing approaches will be considered in the Pilot Programs. These are just examples and are not necessarily ideas that will be tested.</p> <ul style="list-style-type: none">• Technologies investigated

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

	<ul style="list-style-type: none">○ Phantom load reduction devices○ Wireless load control systems• New programs studied<ul style="list-style-type: none">○ Broader application of LEDs and hard to place CFLs○ Other new lighting technologies○ Hotel room occupancy energy control program○ Commercial building retro-commissioning• New marketing approaches<ul style="list-style-type: none">○ Target non-English speaking community○ Deliver marketing messages through trade organizations○ Work with colleges to test new technologies, programs or approaches to the market○ Work with farm support organizations to test comprehensive approaches to agriculture producer optimization
Implementation Strategy	<p>The Pilot Programs ideas and direction will come from feedback from the current programs, “voice of the customer” research and Utility and implementation contractor staff.</p> <p>The implementation of this program will be coordinated with other Members of the MECA EO Collaborative.</p>
Marketing Strategy	<p>Marketing strategy of the Pilot Programs will be dictated by the technology, the program or marketing approach being tested.</p>

City of Stephenson

In cooperation with the Michigan Electric Cooperative Association

<p>Milestones</p>	<p>The Pilot Programs' roll of enhancing the effectiveness of the energy efficiency programs requires feedback from the first round of approved programs and ongoing feedback as programs are implemented. If a program is not reaching the intended market or there are pockets within the market segment not being served, a plan will be designed to improve program performance. This plan will be tested as part of the Pilot Program.</p> <table border="1" data-bbox="493 590 1425 827"> <thead> <tr> <th>Major milestones</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Energy Optimization Plan modeling complete</td> <td>4/11</td> </tr> <tr> <td>Energy Optimization program written</td> <td>5/11</td> </tr> <tr> <td>Energy Optimization Plan filed with MPSC</td> <td>8/11</td> </tr> <tr> <td>Energy Optimization Plan approved by MPSC</td> <td>12/11</td> </tr> <tr> <td>Program implementation begins</td> <td>1/12</td> </tr> </tbody> </table>	Major milestones	Date	Energy Optimization Plan modeling complete	4/11	Energy Optimization program written	5/11	Energy Optimization Plan filed with MPSC	8/11	Energy Optimization Plan approved by MPSC	12/11	Program implementation begins	1/12			
Major milestones	Date															
Energy Optimization Plan modeling complete	4/11															
Energy Optimization program written	5/11															
Energy Optimization Plan filed with MPSC	8/11															
Energy Optimization Plan approved by MPSC	12/11															
Program implementation begins	1/12															
<p>EM&V</p>	<p>Impact and process evaluation may be conducted on each Pilot Program. This evaluation will be conducted under the direction of the MECA EO Collaborative.</p>															
<p>Estimated Participation</p>	<p>The number of participants in the Pilot Programs will not be a key performance measurement. Other performance measurements such as the take rate of a particular offering by a hard-to-reach segment will be determined.</p>															
<p>Estimated Program Investment</p>	<table border="1" data-bbox="493 1251 1425 1367"> <thead> <tr> <th colspan="5">Annual investments</th> </tr> <tr> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$ 272</td> <td>\$ 273</td> <td>\$ 276</td> <td>\$ 275</td> <td>\$ 1,096</td> </tr> </tbody> </table>	Annual investments					2012	2013	2014	2015	Total	\$ 272	\$ 273	\$ 276	\$ 275	\$ 1,096
Annual investments																
2012	2013	2014	2015	Total												
\$ 272	\$ 273	\$ 276	\$ 275	\$ 1,096												
<p>Energy Savings Targets</p>	<p>The estimated energy saving from the Pilot Programs will be a percentage of the annual savings proportional amount spent, up to 5%.</p>															
<p>Benefit-Cost Test Results</p>	<table border="1" data-bbox="493 1581 1360 1780"> <thead> <tr> <th>Benefit/Cost Test</th> <th>B/C Ratio</th> </tr> </thead> <tbody> <tr> <td>Utility System Resource Cost Test</td> <td>5.4</td> </tr> <tr> <td>Total Resource Cost Test</td> <td>5.4</td> </tr> <tr> <td>Rate Impact Measure</td> <td>0.8</td> </tr> <tr> <td>Participant Test</td> <td>N/A</td> </tr> </tbody> </table>	Benefit/Cost Test	B/C Ratio	Utility System Resource Cost Test	5.4	Total Resource Cost Test	5.4	Rate Impact Measure	0.8	Participant Test	N/A					
Benefit/Cost Test	B/C Ratio															
Utility System Resource Cost Test	5.4															
Total Resource Cost Test	5.4															
Rate Impact Measure	0.8															
Participant Test	N/A															

City of Stephenson
In cooperation with the Michigan Electric Cooperative Association