

Coldwater Board of Public Utilities Energy Optimization Annual Report for 2009 MPSC Case No. U-(15853)

Introduction

Pursuant to 2008 Public Act 295 (PA 295), the Coldwater Board of Public Utilities (CBPU) is filing this annual energy optimization (EO) report with the Michigan Public Service Commission (MPSC). This EO annual report consists of three sections:

- Section 1 will address the requirements under PA 295 Section 97, Subsections 1-3 and Section 71, Subsection 3 (i).
- Section 2 will summarize the EO programs implemented in 2009.
- Section 3 will provide additional information and goals for 2010 programs.

SECTION 1: PA 295 SECTION 97 SUBSECTIONS 1-3 REQUIREMENTS

Section 97 (1) Each provider shall submit to the commission an annual report that provides information relating to the actions taken by the provider to comply with the energy optimization standards.

The CBPU has taken the following actions to comply with the EO standards:

- Filed a 4-year Energy Optimization plan with the MPSC on March 31, 2009 as required by PA 295.
- This EO plan was approved by the MPSC on July 1, 2009.
- Launched an energy optimization program for the residential customer class in October 2009.
- Administration and implementation of the EO programs were the responsibility of CBPU personnel.
- Evaluated the implementation of the Residential Low Income program between City of Coldwater grant administration program and Community Action Agency (CAA).
- Education for both Residential and Business was implemented by CBPU in-house personnel.

Section 97 (2) Annual reports under subsection (1) shall include the following: (a) The number of energy optimization credits that the provider generated during the reporting period. (b) Expenditures made in the past year and anticipated future expenditures to comply with this subpart. (c) Any other information that the commission determines necessary.

In the fall of 2009, the MPSC staff approved an interim report format for all the municipal utilities in Michigan. That interim report details the energy optimization

credits generated, expenditures and surcharges collected from customers in the past year. The end of year interim report for 2009 can be found in Attachment A. Future expenditures for 2010 are expected to follow the EO Plan filing that was submitted and approved in 2009. Exceptions to that plan filing will be explained in Section 3 of this report.

Section 97 (3) Concurrent with the submission of each report under subsection (1), a municipally-owned electric utility shall submit a summary of the report to its customers in their bills with a bill insert, to its governing body, at its office and on its website.

The CBPU will submit a copy of this annual report to its Board of Directors, make it available at its office and on its website and a summary to its customers through the bill insert no later than July 30, 2010.

Section 71 (3)(i) Include a process for obtaining an independent expert evaluation of the actual energy optimization programs to verify the incremental energy savings from each energy optimization program for purposes of section 77.

KEMA, Inc. was chosen as the evaluation contractor to verify the incremental gross energy savings for the 2009 EO program. That evaluation is attached to this report as Attachment B.

SECTION 2: SUMMARY OF EO PROGRAMS IMPLEMENTED IN 2009

Residential Low Income Services

The CBPU was unable to contract with any local agencies in 2009 but will pursue opportunities to partner with local organizations in 2010. The energy savings goals and the budget allocations from the 2009 Low Income program will be added to the goals for the 2010 program.

Low Income Program Summary

	2009 Goal	2009 Actual	Difference
Energy Savings (kWh)	16,985	0	16,985
Budget (\$)	\$11,040	\$9,030	\$2,010

Residential Solutions

Efficient Lighting Program

The CBPU focused on the distribution of CFL's to our residential customers. The CBPU distributed 700 CFLs to customers free of charge. This was done through a promotional and education event held at the CBPU office facility. This program was marketed through the CBPU website and local media. This program was held in October 2009.

The CBPU partnered with The Home Depot in December 2009 for a CFL rebate program for CBPU customers. This program will run from January 1, 2010 through

February 28, 2010. This will be done through a rebate coupon mailed directly to CBPU customers and redeemed and tracked by The Home Depot.

The CBPU has a long standing CFL recycling program for our residential and commercial customers. This program is advertised through the CBPU website, newsletter and community bulletin board. The CBPU has also partnered with The Home Depot's recycling program.

Refrigerator/Freezer Turn-In and Recycling Program

The objective of this program was to produce long-term energy savings in the residential sector by removing operable, inefficient refrigerators and freezers from the power grid and recycling them in an environmentally safe manner. Target market is residential customers who have "second" or back-up units in their garage or basement. All units were required to be operable to participate in this program and each customer received a \$30 incentive for each unit recycled.

The CBPU selected JACO Environmental in December 2009 as the recycling subcontractor to provide comprehensive turn-key services. The program will begin in March 2010 and JACO is responsible for qualifying customers, scheduling and tracking unit pick-ups and processing incentive payments.

Residential Education Services

One and a half percent of the EO budget was used on Residential education programs. These budget expenditures were used to communicate and educate customers on the benefits of energy efficiency, and load management. Budget funds for education are deemed to generate a proportional amount of the required energy savings for each program year in which the money is spent.

The CBPU Residential Education Program was implemented by in-house personnel, and is a carry-over of programs and services existing before the enactment of the energy optimization program. These programs include web-based information and energy audit program, demonstration projects with the energy bike to schools and civic organizations, hosting and participating in community events. Program updates and offerings are communicated on the local public access television station, local print and radio media and the CBPU website and newsletter.

Residential Program Summary

Overall the 2009 residential CFL program was successful considering the program was not launched until late fall. The tables below summarize the energy savings achieved and budget expenditures from the 2009 residential programs compared to the 2009 EO Plan goals. The residential program energy savings goals were bundled together to achieve the 2009 goals. Any net shortages or excess kilowatt hours and budget expenditures from the 2009 programs will be carried over into the 2010 program goals.

Residential Energy Savings

Program	2009 kWh Goals	kWh Installed	Difference
Efficient Lighting	59,827	30,870	28,957
Refrigerator/Freezer Recycling	59,345	0	59,345
Education Services	13,262	6,534	6,728
Total	132,434	37,404	95,030

Residential Budget Summary

Program	2009 Budget	2009 Expenditures	Difference
Efficient Lighting	\$4,951	\$760	\$4,191
Refrigerator/Freezer Recycling	\$8,118	\$0	\$8,118
Education Services	\$2,070	\$1,020	\$1,050
Total	\$15,139	\$1,780	\$13,359

Business Solutions

Commercial and Industrial Prescriptive Incentive Program

The Prescriptive Incentive program provides incentives when replacing inefficient equipment with high-efficiency electric technologies on a one-for-one basis. These incentives address the first-cost barrier for customers by providing financial incentives averaging 20% to 40% of the incremental cost of purchasing qualifying technologies. The program will be launched in 2010 and marketed through trade allies, presentations at various organizations, local events and the CBPU website. The majority of the incentive will be for lighting upgrades.

Commercial and Industrial Custom Incentive Program

The objective of the Custom Incentive Program is to affect the installation of site-specific and unique energy efficiency technologies and process improvements (that do not fit the parameters of the Prescriptive Program) by business customers that would not have done so in the absence of the program. This program will launch in 2010 and be marketed through the same channels as the Prescriptive Program.

Business Education Services

One and a half percent of the EO budget was used on Business education programs. These budget expenditures communicated and educated customers on the benefits of energy efficiency, conservation and load management. Budget funds for education are deemed to generate a proportional amount of the required energy savings for each program year in which the money is spent.

The CBPU Business Education program will be implemented by in-house personnel when the prescriptive and custom programs launch in 2010.

Business Program Summary

Due to the short time period to promote programs, and due to the fact that the business programs often required a significant investment from the customer, and due to the economic conditions in Michigan, the business programs will be implemented in 2010 with the hope that they will be more successful.

The tables below details the energy savings and the budget expenditures for the 2009 business programs compared to the 2009 EO Plan goals. Any net shortages or excess energy goals or budget expenditures from the 2009 programs will be carried over into the 2010 program goals.

Business Energy Savings Summary

Program	kWh Goals	kWh Installed	Difference
Prescriptive Incentive	569,847	0	569,847
Custom Incentive	133,099	0	133,099
Business Education	13,262	0	13,262
Totals	716,207	0	716,207

Business Budget Summary

Program	2009 Budget	2009 Expenditures	Difference
Prescriptive Incentive	\$78,329	\$0	\$78,329
Custom Incentive	\$19,166	\$0	\$19,166
Education Services	\$2,070	\$0	\$2,070
Total	\$99,565	\$0	\$99,565

SECTION 3: ADDITIONAL INFORMATION AND 2010 EO PROGRAMS

This section provides additional information to 2009 programs and a summary of the 2010 Energy Optimization programs.

Recovery of Costs from Customers

The CBPU started levying surcharges for the Energy Optimization programs in September 2009. Those surcharges are shown in the table below:

Levelized Surcharges		2009-2012
Residential	Per kWh	\$0.00252
Secondary 1	Per meter	\$3.76
Secondary 2	Per meter	\$27.44
Primary 1	Per meter	\$200.60
Primary 2	Per meter	\$613.63
Unmetered Lighting	Per fixture	\$0.27

Coordination of Energy Optimization Programs;

The CBPU has and will continue to meet with other utilities and agencies regarding the coordination of programs. In addition, the CBPU has participated in the EO Collaborative meetings hosted by MPSC through our membership in Michigan Municipal Electric Association (MMEA).

New Energy Optimization Programs for 2010

The CBPU plans to launch the following new programs in 2010, in addition to the 2009 programs identified previously in this report that were delayed to a 2010 implementation:

- Refrigerator/Freezer Turn-in & Recycling
- Residential Appliances and HVAC (This a combination of the Efficient Appliances/Electronic and HVAC Equipment program listed in the 2009 Plan filing. Due to limited budgets in both these programs the energy savings goals and the budgets will be blended together to ensure savings goals are met. This revision was approved for municipal utilities by the MPSC staff in the fall of 2009.)
- Electric Water Heating Kits
- Business Prescriptive and Custom Incentive Programs
- Business Pilot/Emerging Technology Programs
- Residential Pilot/Emerging Technology Programs

Summary of Energy Optimization Programs for 2010

The table below shows: a) applicable revisions/adjustments from the 2009 programs; b) 2010 Plan Filing goals and 3) the revised energy savings and expenditure goals for 2010 programs.

2010 Energy Optimization Program Portfolio

Program Portfolio	2009 Revisions		2010 Plan Filing Goals		2010 Revised Goals	
	kWh Savings Revisions	Budget Revisions	Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget
Low Income Services	0	\$0	30,092	\$19,560	47,077	\$30,600
Efficient Lighting	30,870	\$760	89,741	\$7,426	118,698	\$11,617
Refrigerator/Freezer Recycling	0	\$0	118,690	\$16,826	178,035	\$24,944
Efficient Appliances & HVAC	n/a	n/a	3,586	\$1,733	3,586	\$1,733
Electric Hot Water Heating Kits	n/a	n/a	45,924	\$5,409	45,924	\$5,409
Educational Services	6,534	\$1,020	22,710	\$3,668	29,438	\$4,718
Pilot/Emerging Technology	n/a	n/a	15,140	\$2,445	15,140	\$2,445
Subtotal - Residential Solutions	37,404	\$1,780	325,883	\$57,067	437,898	\$81,466
Prescriptive Incentive Program	0	\$0	950,619	\$130,669	1,520,466	\$208,998
Custom Incentive Program	0	\$0	199,648	\$28,749	332,747	\$47,915
Educational Services	0	\$0	22,710	\$3,668	35,972	\$5,738
Pilot/Emerging Technology	n/a	n/a	15,140	\$2,445	15,140	\$2,445
Subtotal - Business Solutions	0	\$0	1,188,117	\$165,531	1,904,325	\$265,096
Total Program Portfolio	37,404	\$1,780	1,514,000	\$222,598	1,904,325	\$346,562
CBPU Program Administration		\$0		\$12,225		\$19,125
Evaluation (EM&V)		\$2,000		\$9,780		\$13,300
Subtotal - Admin/Evaluation		\$2,000		\$22,005		\$32,425

Appendix A

Coldwater Board of Public Utilities (U-15853)
Semi-Annual Energy Optimization Report
December, 2009

	Current Period	Year to Date
Revenue		
Net Revenue	112,884.89	112,884.89
 Expenditures		
All Programs (excluding Low Income)	1,780.00	1,780.00
Low Income Programs	-	-
Total Expenditures	1,780.00	1,780.00
 Over(Under) Collection	 <u>111,104.89</u>	 <u>111,104.89</u>

Energy Optimization Credits Generated

All Programs (excluding low income)	55,926.00	55,926.00
Low Income Programs	-	-
Total Energy Optimization Credits	<u>55,926.00</u>	<u>55,926.00</u>

Surcharge Billed

Residential	\$	0.00252	per kWh
Secondary 1 - Rate B	\$	3.76	per Meter
Secondary 2 - Rate C	\$	27.44	per Meter
Primary 1 - Rate D	\$	200.60	per Meter
Primary 2 - Rate D2	\$	613.63	per Meter
Unmetered Lighting	\$	0.27	per Fixture
Self Directed	\$	-	-

To the best of our knowledge Coldwater Board of Public Utilities (U-15853) has met the requirements of Public Act 295 regarding the Energy Optimization Program during the reporting period indicated above.

By Paul Beaudin

Date 5/27/2010

Coldwater Board of Public Utilities (U-15853)
Semi-Annual Energy Optimization Report
December, 2009

	Commercial and Industrial							Total	EO Credits Generated (kWh)
	Residential	Secondary 1 - Rate B	Secondary 2 - Rate C	Primary 1 - Rate D	Primary 2 - Rate D2	Unmetered Lighting	Self Directed		
Revenue									
Billed Revenue	30,523	14,367	19,318	39,318	7,364	1,996	-	112,885	
Less Revenue Tax	-	-	-	-	-	-	-	-	
Net Revenue	30,523	14,367	19,318	39,318	7,364	1,996	-	112,885	
Expenses									
Residential									
Efficient Lighting	760							760	30,870
Refrigerator/Freezer Turn-In & Rec	-							-	-
Educational Services	1,020							1,020	6,534
Program Savings - 2008	-							-	18,522
-	-							-	-
-	-							-	-
-	-							-	-
-	-							-	-
-	-							-	-
-	-							-	-
-	-							-	-
Total Residential Programs	1,780	-	-	-	-	-	-	1,780	55,926
Commercial and Industrial									
Prescriptive Incentive Program	-	-	-	-	-	-	-	-	-
Custom Incentive Program	-	-	-	-	-	-	-	-	-
Educational Services	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Total C&I Programs	-	-	-	-	-	-	-	-	-
Administration	-	-	-	-	-	-	-	-	-
Evaluation	-	-	-	-	-	-	-	-	-
Low Income Programs	-	-	-	-	-	-	-	-	-
Total Expense/EO Credits	1,780	-	-	-	-	-	-	1,780	55,926
Over(Under) Collection	28,743	14,367	19,318	39,318	7,364	1,996	-	111,105	

Coldwater Board of Public Utilities (U-15853)
 Budget to Actual Comparison, EO Program Expenditures
 December, 2009

	Actual Year-to-Date	Budget	Budget to Actual	Percentage of Budget
<u>Residential</u>				
Efficient Lighting	760	4,951	4,191	15.35%
Refrigerator/Freezer Turn-In & Rec	-	8,118	8,118	0.00%
Educational Services	1,020	2,070	1,050	49.28%
Program Savings - 2008	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
Total Residential	1,780	15,139	13,359	11.76%
<u>Commercial and Industrial</u>				
Prescriptive Incentive Program	-	78,329	78,329	0.00%
Custom Incentive Program	-	19,166	19,166	0.00%
Educational Services	-	2,070	2,070	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
Total Commercial and Industrial	-	99,565	99,565	0.00%
Administration	-	6,900	6,900	0.00%
Evaluation	-	5,520	5,520	0.00%
Low Income	-	11,040	11,040	0.00%
Total Program Expenditures	1,780	138,164	136,384	1.29%

Coldwater Board of Public Utilities (U-15853)
 Budget to Actual Comparison, EO Credits (kWh)
 December, 2009

	Actual Year-to-Date	Budget	Budget to Actual	Percentage of Budget
<u>Residential</u>				
Efficient Lighting	30,870	59,827	28,957	51.60%
Refrigerator/Freezer Turn-In & Rec	-	59,345	59,345	0.00%
Educational Services	6,534	13,262	6,728	49.27%
Program Savings - 2008	18,522	18,522	-	100.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
Total Residential	55,926	150,956	95,030	37.05%
<u>Commercial and Industrial</u>				
Prescriptive Incentive Program	-	569,847	569,847	0.00%
Custom Incentive Program	-	133,099	133,099	0.00%
Educational Services	-	13,262	13,262	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
-	-	-	-	0.00%
Total Commercial and Industrial	-	716,208	716,208	0.00%
Low Income	-	16,985	16,985	0.00%
Total EO credits	55,926	884,149	828,223	6.33%

Appendix B



Coldwater Board of Public Utilities Audit of 2009 Energy Optimization Program Savings

This report presents the findings of an audit by KEMA, Inc, an independent evaluation contractor, of energy savings for the EO programs implemented by Coldwater Board of Public Utilities. The audit compared deemed energy savings found in the Michigan Energy Measures Database (MEMD) to the claimed savings of the Coldwater Board of Public Utilities' residential and commercial and industrial EO programs implemented in 2009. Table 1 identifies the audit findings for the Coldwater Board of Public Utilities.

Program	Actual	Verified
Residential		
Efficient Lighting Program	30,870	30,870

Table 1 Coldwater Board of Public Utilities' Energy Optimization Actual and Verified Savings (kWh)

Programs

Residential – Coldwater Board of Public Utilities implemented one residential program in 2009 – the Efficient Light Program. The reported savings from this program were 30,870 kWh. The audit verified that these savings were correctly derived from the MEMD.

Conclusion

Coldwater Board of Public Utilities' claimed savings are consistent with the Michigan Energy Measures Database. KEMA, Inc. will conduct a comprehensive verification for Coldwater Board of Public Utilities' 2010 EO programs.