

# 2013 Report on the Implementation of P.A. 295 Utility Energy Optimization Programs

In Compliance with Public Act 295 of 2008

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**MICHIGAN PUBLIC SERVICE COMMISSION**  
**DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS**

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## **Executive Summary**

Michigan's Energy Optimization (EO) standard, created under Public Act 295 of 2008 (PA 295 or the Act), requires all gas and electric utilities in the state to implement programs to reduce overall energy usage by specified targets, in order to reduce the future cost of service to utility customers. This report complies with Section 95(2)(e) of the Act. Summaries of the report's major findings are as follows:

### **Energy Savings**

For 2012, Michigan utility companies successfully complied with the energy savings targets laid out in PA 295. Providers met a combined average of 125 percent of their electric energy savings targets and 126 percent of their natural gas energy savings targets – one percent of retail sales for electric companies, and 0.75 percent of retail sales for gas companies. EO programs across the state accounted for electric savings totaling over 1.0 million megawatt hours (MWh) and gas savings totaling over 4.28 million Mcf for program year 2012.

### **2012 Cost of EO Programs and Lifecycle Benefits**

Energy Optimization funding can be viewed as an investment with a significant positive net-present-value (NPV) due to substantial reductions in the future utility cost-of-service resulting from energy savings. Aggregate EO program expenditures of \$246 million by all gas and electric utilities in the state are expected to result in lifecycle savings to customers of at least \$936 million on a NPV basis. This means that for every dollar spent on EO programs in 2012, customers should expect to realize utility cost-of-service benefits of \$4.07. Such benefits are in the form of avoided capital and operation costs associated with incremental utility generation or purchased power. Additional indirect environmental and health benefits may also accrue. Absent energy efficiency programs, all customers would pay a pro-rata portion of such direct and indirect costs, even customers who are able to hold their energy usage at or below current levels. For this reason, the EO program benefits will reduce future costs of service to all utility customers, whether or not those customers made energy efficiency improvements through a utility efficiency program.

### **Current Commission Initiatives**

This past year the Commission engaged the services of Optimal Energy, through a special grant from the National Association of Regulatory Utility Commissioners (NARUC). The

Optimal Energy study provided analysis and recommendations toward solving regulatory structure biases against long-life energy efficiency resources, such as furnaces or insulation. The Commission also partnered with Consumers Energy and DTE to complete a statewide energy efficiency potential study that the Commission had previously begun with GDS Associates. The mutually agreed upon objective of the GDS potential study is to create an informed basis for a set of energy optimization policy-options for statewide EO spending caps, and energy and demand targets - post 2015. The Commission furthered that research with a second contract with Optimal Energy, funded by the Joyce Foundation through the Council of Michigan Foundations.

The Commission also continues to actively promote energy efficiency in the State, in partnership with utilities and other energy stakeholders.

## Introduction

In October 2008, Public Act 295 of 2008 was signed into law. Section 95(2)(e) of the Act requires that by November 30, 2009, and each year thereafter, the Michigan Public Service Commission (MPSC or Commission) is to submit to the standing committees of the Senate and House of Representatives with primary responsibility for energy and environmental issues, a report on the Commission's effort to implement energy conservation and energy efficiency programs or measures. The report may include any recommendations of the MPSC for energy conservation legislation.

Subpart B of PA 295 requires providers of electric or natural gas service to establish energy optimization (EO) programs for their customers. Annual energy savings targets for providers are specified in the Act, ramping up to one percent of annual retail sales for electric providers and 0.75 percent of annual retail sales for natural gas providers in 2012. Providers are required to file plans with the Commission detailing the programs they will utilize to meet their annual energy savings goals. Regulated providers are allowed to fund their programs through Commission approved EO surcharges, but must demonstrate that the program costs are reasonable and prudent, as well as cost-effective according to a standardized cost-benefit analysis specified in the Act.

In compliance with PA 295, on December 4, 2008, the Commission issued a temporary order in MPSC Case Number U-15800 to implement the provisions of the Act. The temporary order provided EO plan filing guidelines and resolved implementation issues for EO and renewable energy plans. EO plan submittals were required from all gas and electric utilities in Michigan. In 2012, there were 14 investor-owned utilities (IOUs), 10 electric cooperatives, and 41 municipal electric utilities that filed EO plans, for a total of 65 Energy Optimization Plans. A listing of case numbers, company names, and current plan status can be found in [Appendix A1](#).

For the 2012 through 2015 plan years, 52 of the 65 utilities in Michigan are formally coordinating the design and implementation of their EO programs in order to reduce administrative costs, create consistency among programs, and improve customer and contractor understanding of program offerings and administrative procedure. The remaining 13 utilities are independently administering their own programs. A chart delineating these EO joint coordination groups and their respective utility partners can be found in [Appendix A2](#).

## Program Offerings

Beginning November 30, 2009, all natural gas and electric utility customers in Michigan were able to participate in specific energy efficiency programs offered by their local utility. New programs became available in 2012 as utilities continued to phase in the implementation of additional programs and expand existing programs. In general, individual programs are divided into two broad categories: residential and commercial/industrial. Residential programs consist of five major categories: lighting; heating, ventilating and air conditioning (HVAC); weatherization; energy education; and pilot programs. Commercial/industrial programs consist of prescriptive and custom incentive programs, energy education, and pilot programs. Prescriptive programs provide rebates for specific equipment replacement such as lighting, boilers, pumps, compressors, etc. Custom programs generally provide a

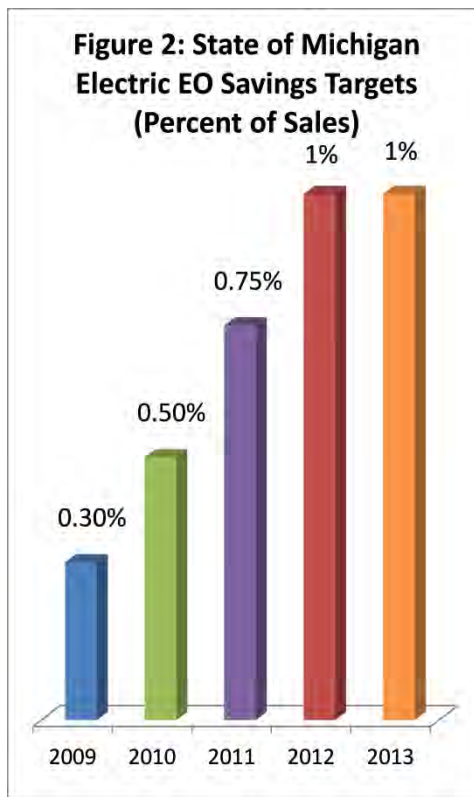
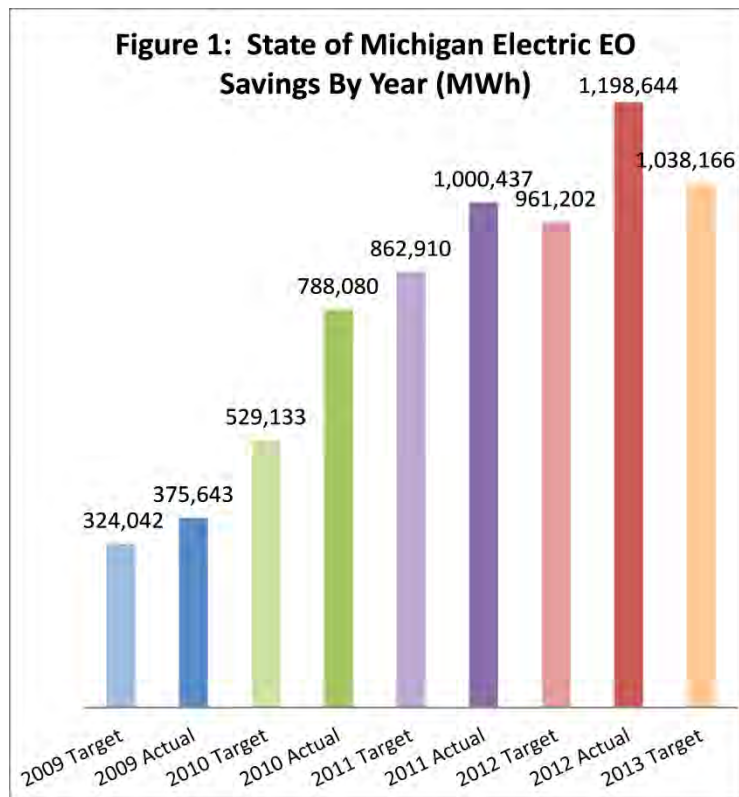
rebate per kilowatt hour (kWh) of electricity savings or per Mcf of natural gas savings for a comprehensive system or industrial process improvement.

Specific program offerings for years 2009-2012 and implementation dates listed by utility can be found in [Appendix B](#).

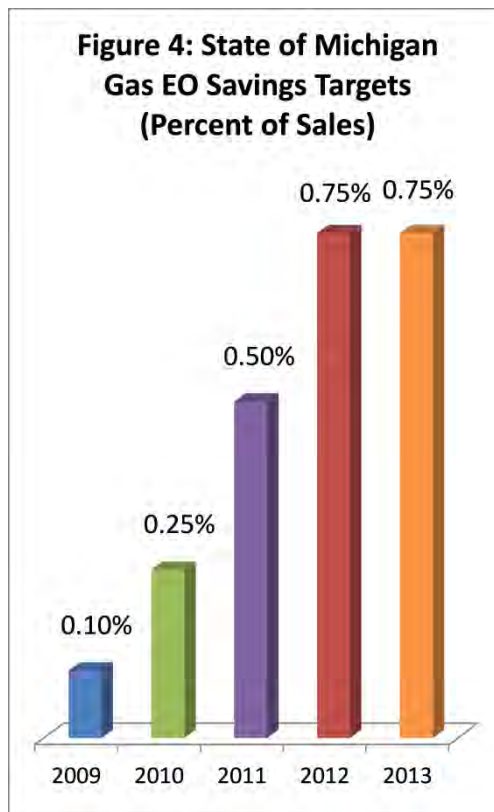
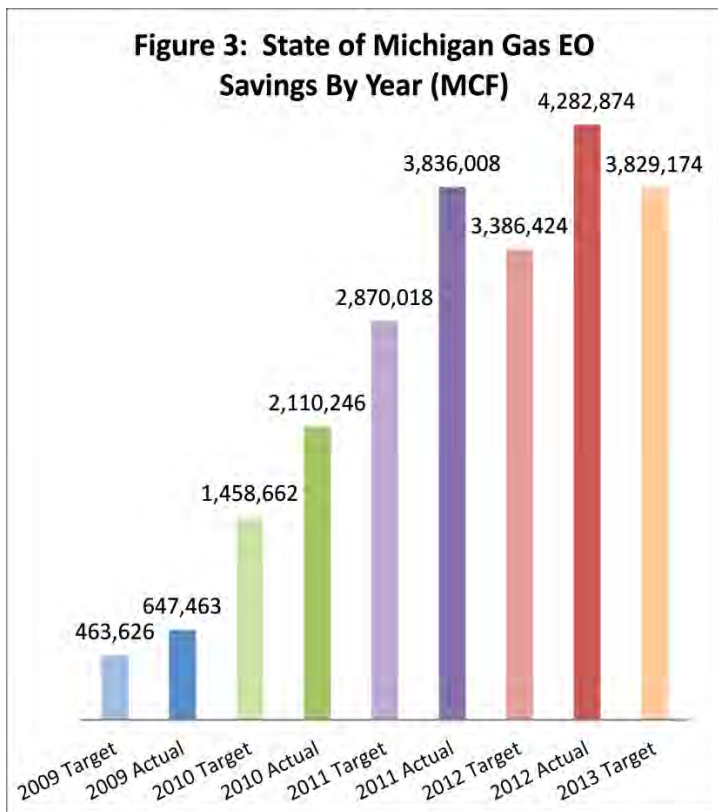
### Energy Savings Targets

Section 77 of PA 295 provides annual energy savings targets that electric and natural gas utilities are required to meet. The minimum savings targets are based upon a percentage of calendar-year retail sales for each utility. These energy savings targets progressively increase over a four year period from 2009 to 2012 at which time they continue at one percent for electric utilities and 0.75 percent for gas utilities.

In 2012, EO program savings achieved for electric utilities were 125 percent of the target of one percent of retail sales, 961,202 MWh. In 2012, the electric IOUs achieved 128 percent of their savings targets, while the municipal electric utilities reached 109 percent of their savings targets and the electric cooperatives met 87 percent of their targets. For 2013, the statewide PA 295 electric savings target remains at one percent of retail sales, resulting in a statewide aggregate energy savings target of approximately 1,038,000 MWh. The target and actual electric savings for 2009 through 2012 as well as the target for 2013 are shown in [Figure 1](#). The retail sales multipliers used to determine yearly EO electric savings are shown in [Figure 2](#).



The 2012 EO program savings achieved for natural gas utilities were 126 percent of the target of 0.75 percent of retail sales. Consumer Energy’s Gas Division achieved 129 percent of its savings target and DTE Gas Company achieved 133 percent of its savings target. The remaining gas companies achieved 111 percent of their savings target. For 2013, the statewide PA 295 gas target of 0.75 percent of sales is approximately 3.83 million Mcf. The target and actual gas savings for 2009 through 2012 and the 2013 target are shown in *Figure 3*. The retail sales multipliers for determining yearly gas savings targets are shown in *Figure 4*.



For a detailed spreadsheet of energy savings targets and achieved energy savings by utility, see *Appendix C*.

## EO Surcharges and Program Funding

Section 71 of PA 295 requires utilities to specify necessary funding levels for the activities being proposed. Commission regulated utilities are able to recover their EO program expenditures through a customer surcharge approved by the Commission. Under Section 89 of PA 295, surcharges approved by the Commission are assessed on an energy usage basis for natural gas and residential electric customers. Commercial and industrial electric customers are assessed a fixed monthly charge.

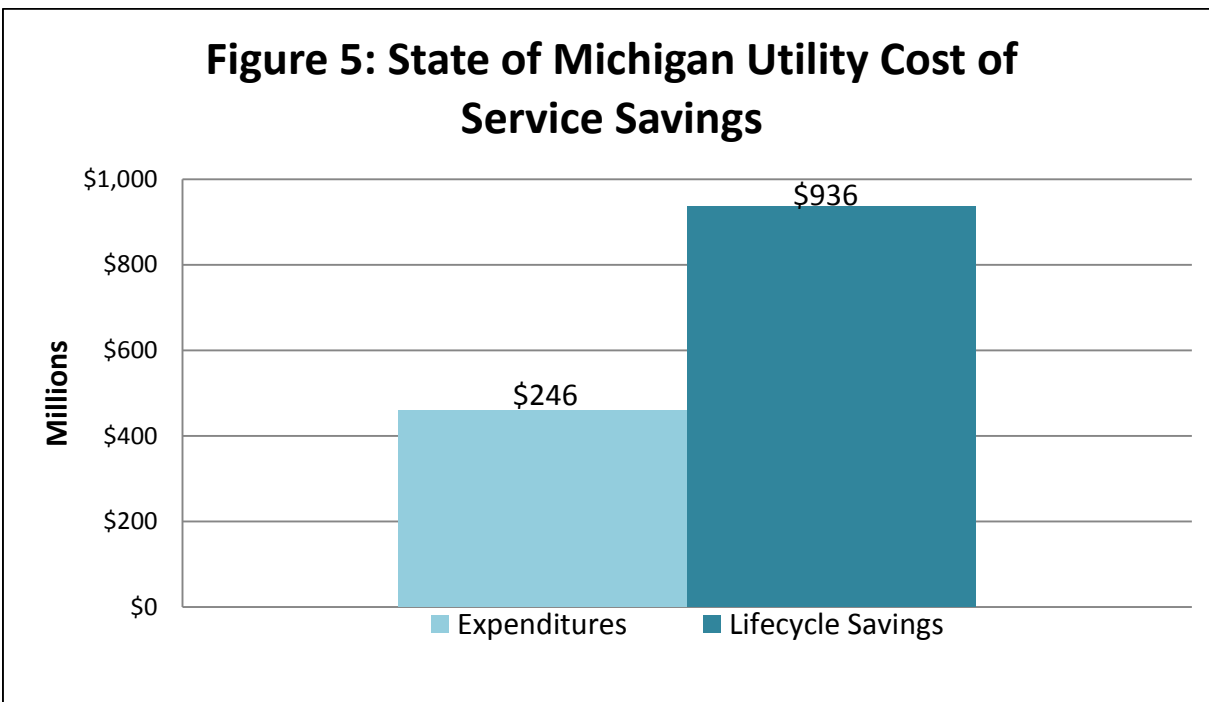
Section 73 of PA 295 requires the Commission to ensure that costs being recovered through surcharges are reasonable and prudent, and that the programs are cost effective as demonstrated by a Utility System Resource Cost Test (USRCT) which is defined in Section 13 of the Act. For additional detail

on surcharges for all customer classes see [Appendix D1](#); estimates of typical residential surcharges are found in [Appendix D2](#). Detailed spending information by utility is included in [Appendix D3](#).

## Program Benefits

In 2012, aggregate EO program expenditures of \$246 million by all gas and electric utilities in the state are estimated to result in lifecycle savings to customers of \$936 million. For every dollar spent on EO programs in 2012, customers should expect to realize benefits of \$4.07. Data provided to the Commission in EO provider annual reports indicate that EO resources were obtained at a statewide levelized cost of \$20/MWh, significantly cheaper than supply side options such as new natural gas combined cycle generation at \$67/MWh or more (Source: [U.S. Energy Information Administration Annual Energy Outlook 2013](#)).

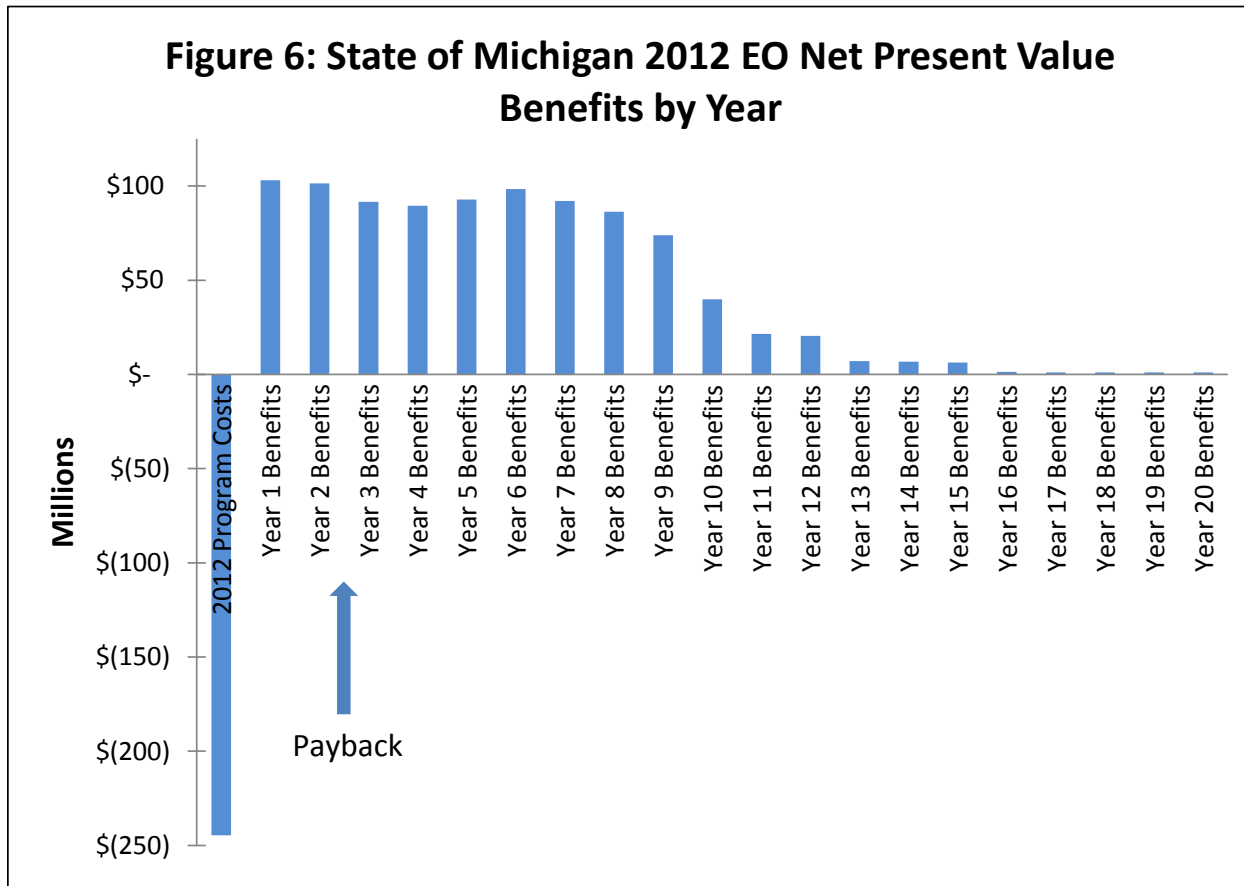
The benefits of the EO program will flow through to customers over the mean lifecycle of all efficiency projects implemented by customers during the year. The direct benefits are in the form of reduced utility cost of service for production or purchase of electricity, or purchase of natural gas, which would otherwise be recovered in utility rates. Over the long run, the cumulative reduction in customer demand for electricity is expected to result in the deferral or reduction in the need to build new electric generation plants. The net present value of utility cost of service savings for EO investments state wide is shown in [Figure 5](#).



These savings represent the avoided cost to utilities due to lower energy usage, and are calculated based on the energy savings identified for individual energy efficiency measures as reflected in the Michigan Energy Measures Database. The aggregate NPV of benefits for each year over the course



of the expected useful life of all measures implemented during 2012, and simple payback (2.3 years), are shown in *Figure 6*.



Energy Optimization programs not only delay the need for building new generation, they also reduce emissions of environmental pollutants from existing generation. Coal fired generation plants in particular emit carbon dioxide, sulfur dioxide, and nitrogen oxides. The Midcontinent Independent System Operator’s (MISO) *2012 State of the Market Report* indicates that coal-fired resources provided over two-thirds of total generation in its territory.

The EO program also results in hundreds of millions of dollars in fuel cost savings that would have otherwise been spent in order to import energy into Michigan. Other economic impacts realized by EO programs include: additional spending by participating households and businesses for efficient equipment and services, increased demand for equipment and installations from local businesses, increased spending within the economy due to utility bill savings from reduced energy consumption, and increased production from participating businesses. In addition, the benefits flowing to Michigan utility customers via the EO program should help minimize the debt burden of consumers, reduce utility uncollectible expenses, and strengthen the competitive position of Michigan businesses.

## Residential Bill Information on Estimated Monthly Savings

Section 45 of PA 295 describes information that a provider shall report to the residential customer on the monthly customer bill. Subsection (c) requires 'An estimated monthly savings, expressed in dollars and cents, for that customer to reflect the reduction in the monthly energy bill produced by the energy optimization program under this act'. Staff offers the following statewide average monthly electric and gas savings estimates for use by small providers in lieu of company specific estimates:

*The average electric residential customer is expected to save \$3.21 each month of the Energy Optimization program life.*

*The average gas residential customer is expected to save \$2.91 each month of the Energy Optimization program life.*

## State Administrator: Efficiency United

Section 91 of PA 295 created an option for electric and natural gas providers to offer energy optimization services through a program administrator selected by the Commission. Section 91(6) requires the administrator to be a 'qualified nonprofit organization' selected by the MPSC through a competitive bid process. To fund the program, which has been named Efficiency United (EU), the administrator is paid directly by the participating providers using funds collected from customers.

The Michigan Community Action Agency Association (MCAAA) was awarded the Efficiency United contract on August 10, 2009, following the required bid process. MCAAA is a membership organization of thirty local community action agencies covering the entire state of Michigan and had extensive experience in the provision of energy efficiency services. The contract period was through December 31, 2011, with up to four optional one-year extensions. The Commission exercised two options to extend the contract for both the 2012 and 2013 program years. There are now 20 utility providers within the EU program.

Efficiency United energy optimization programs were launched for customers of participating providers in December 2009. Services and offerings are similar to, and coordinated with, those of other providers. Although EU program services are specifically exempt from meeting the PA 295 energy savings targets, equivalent contractual targets were imposed by the Commission. Target energy savings for 2012 were 75,334 MWh of electricity and 646,823 Mcf of natural gas; EU achieved actual savings of 81,064 MWh and 717,896 Mcf. Detailed information on participating utilities, funding, and energy savings targets can be found in [Appendix E1](#) and [Appendix E2](#).

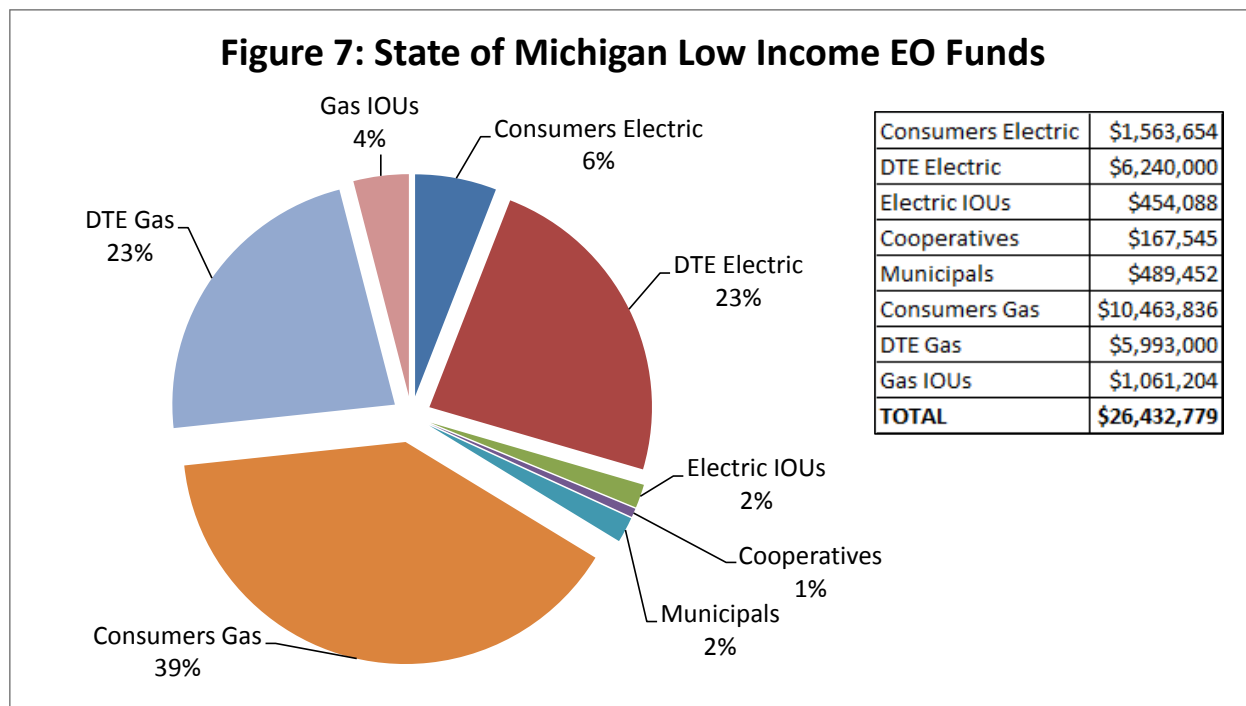
Because EU has to offer programs to customers of many utilities throughout the State, it cannot take advantage of the economic and operational advantages that are available to utilities that are implementing their own programs. However, EU has worked to substantially reduce the costs of implementation and has now achieved operational efficiencies similar to Michigan's largest utilities. This is no minor achievement, given that the program serves a geographically diverse set of small utilities.

The program continues to operate at a comparable performance level as seen in the best run programs both in Michigan and nationally.

A new competitive bid process to select the State Administrator for Efficiency United began in September 2013 for the 2014 program year, and the Michigan Community Action Agency Association was selected to continue its program. This process affords the utilities enrolled in the program will continue to achieve success in meeting their savings targets. The MPSC believes the bid process is essential for improving the competitiveness of Michigan businesses because utilizing the competitive bid process will stimulate the continued creation of new program concepts such as multi-measure incentives, emerging technology market engagement (such as LED lighting and variable speed compressors for HVAC), strategic planning services for commercial and industrial customers, and integration of advanced metering customer programs into the EO program.

### Programs for Low Income Customers

Sections 71, 89, and 93 of PA 295 require utilities to offer EO programs for each customer class, including low income residential. Each rate class must contribute proportionally to low income program costs based on its allocation of the utility’s total EO budget. Low income EO programs are excluded from the requirement to meet the cost-benefit test. Over 84,000 low income customers received EO program services during 2012 from Michigan’s two largest utilities. The contribution to low income program costs by Michigan utilities in 2012 is shown in *Figure 7*.



## Self-Directed EO Program

Under Section 93 of PA 295, large electric customers that meet certain eligibility requirements may create and implement a customized EO plan, and thus be exempt from paying an EO surcharge to their utility provider. Electric customer eligibility to participate in the self-directed EO plans is determined by the customer's annual peak demand. For 2012, the Act allows customers with at least 1 MW annual peak demand in the preceding year, or 5 MW aggregate at all of the customer's sites within a service provider's territory to participate. These are the same thresholds as 2011, but lower than the 2010 thresholds of 2 MW annual peak demand or 10 MW aggregate. The number of customers enrolled to self-direct their own EO program has dropped from 47 in 2011 to 32 in 2012. This reflects the flexibility and comprehensive program options that are being offered under utility programs. Reported and projected energy savings for these self-directed large commercial and industrial customers are summarized in *Table 1*.

**Table 1: Reported Energy Savings for Michigan Self-Directed Large Commercial and Industrial Customers**

Provider	2009 Customers	2010 Customers	2011 Customers	2012 Customers	2009 Reported Energy Reduction (MWh)	2010 Reported Energy Reduction (MWh)	2011 Reported Energy Reduction (MWh)	2012 Reported Energy Reduction (MWh)
DTE Electric	26	26	13	7	12,486	18,488	7,835	9,535
Consumers Energy	30	30	16	13	8,515	12,343	7,404	7,118
Efficiency United	9	11	10	6	5,196	14,568	20,808	30,654
Cooperatives	3	3	4	3	899	1,498	1,442	1,262
Municipals	9	9	4	3	2,006	3,343	606	500
<b>TOTAL</b>	<b>77</b>	<b>79</b>	<b>47</b>	<b>32</b>	<b>29,102</b>	<b>50,240</b>	<b>38,095</b>	<b>53,593</b>

According to PA 295, self-directed customers with less than 2 MW annual peak demand per site or 10 MW in aggregate must utilize an approved energy optimization service company (EOSC) to design and implement their EO programs. Following a public hearing in 2010, the Commission enacted an approval process, as required by PA 295, for EOSCs. The approval process and application can be found on the Commission's [website](#).

## Financial Incentive Mechanism

Section 75 of PA 295 allows Commission regulated utilities to request a financial incentive for exceeding the energy savings targets in a given year. On September 29, 2009, the Commission authorized a performance incentive mechanism for DTE Electric (U-15806), DTE Gas (U-15890) and Consumers Energy (U-15805, U-15889). For 2012, Consumers Energy (U-17281), DTE Electric (U-17282), and DTE Gas (U-17288) were approved to receive financial incentive payments of \$17,309,931, \$10,500,000 and \$4,300,000 respectively. On November 14, 2013, the Commission authorized a performance incentive mechanism for SEMCO Energy (U-17362). Earlier this year, Indiana Michigan

Power Company (U-17353) requested a performance incentive mechanism that is currently pending before the Commission.

## MPSC Energy Optimization Collaborative

In Case Numbers U-15805 and U-15806, the Commission directed the MPSC Staff to establish a statewide energy optimization collaborative which requires the participation of all gas and electric providers and offers the opportunity for a variety of additional stakeholders to participate. The structure and goals of the EO collaborative were outlined in the Commission's 2009 report to the Legislature. A key goal reached by the collaborative was the reduction of the extent and cost of the formal contested hearing process through stakeholder consensus and industry peer review of standards and procedures. The collaborative identifies recommendations for improving energy optimization plans for all providers, offers program evaluation and support, and develops any necessary redesign improvements to energy efficiency programs. Program Design and Implementation, and Program Evaluation workgroups continued to meet throughout 2012 and 2013, as well as the MEMD Technical Subcommittee, to specifically focus on issues related to the MEMD.

The collaborative is overseen by a Steering Committee that includes six representatives from electric and gas providers. The Steering Committee meets quarterly to set agendas for collaborative meetings, and address any emerging issues related to the EO programs.

### Michigan Energy Measures Database

Measurement and verification is an essential tool in improving Energy Optimization programming. In 2009, Michigan began using a database of projected energy savings that was exclusively derived from other states' experience. The database is called the Michigan Energy Measures Database (MEMD).

The initial objective of the MEMD was to provide users with accurate information on energy savings associated with technologies or measures that could be used in energy efficiency programs. The MEMD is also used to prioritize the allocation of funding toward these possible measures. For this critical function, the Commission acknowledges the high importance of including Michigan specific data in the MEMD. Thus, under the direction of Commission Staff, stakeholders are participating in monthly collaborative meetings to update this database. The collaborative has developed an annual process for selecting the highest priority measures to update with Michigan specific data. For the selected measures, field studies are undertaken in customer homes and businesses using light loggers, sub-metering, and engineering analysis to obtain reliable measurement of the actual energy consumption. The process for updating the MEMD is outlined in [Appendix F](#).

## Revenue Decoupling

PA 295 requires the Commission to establish revenue decoupling mechanisms (RDMs) upon request by those natural gas utilities that have implemented an Energy Optimization program. The Act

also requires the Commission to study the rate impacts on all classes of customers if the electric providers whose rates are regulated by the Commission are decoupled (Sec. 97(4) of PA 295).

### Natural Gas

Section 89(6) of PA 295 requires the Commission to establish RDMs for regulated gas utilities that implement an Energy Optimization program and that request such a mechanism. A gas utility must file a request for an RDM, although the Commission may authorize an alternative mechanism that it deems to be in the public interest. On and after May 17, 2010, the Commission approved revenue decoupling mechanisms for three gas utilities: Consumers Energy, DTE Gas (formerly Michigan Consolidated Gas), and Michigan Gas Utilities. Consumers Energy's gas RDM remained in place through the last day of April 2012. DTE Gas's RDM was terminated on the date DTE Gas self-implemented new rates, November 1, 2012. A new simpler revenue tracker was implemented for DTE Gas on November 1, 2013 (U-16999).

### Electric

PA 295 does not require a revenue decoupling mechanism for electric providers. Currently, Upper Peninsula Power Company (UPPCo) is the only electric utility that has a revenue decoupling mechanism in place. UPPCo's RDM was a product of a settlement agreement and will terminate December 31, 2013.

## Conclusion

Energy Optimization programs have seen many successes since first being implemented due to continued efforts by utilities and their EO contractors and implementation allies. The 2012 program year, which is the subject of this report, is no exception, with most utilities meeting or exceeding energy savings targets.

The Commission attributes much of the continuing success of Energy Optimization programs to the extensive evaluation work that is undertaken each year. An annual evaluation satisfies the statutory requirement for an independent certification of energy savings, providing ratepayers with confidence that programs will lower the cost of service, as promised. Importantly, annual evaluation includes a detailed analysis of the actual implementation of each program, to elicit improvements in program design, marketing methods, rebate/incentive processing, interaction with trade allies and customers, and customer satisfaction. This step is called "process evaluation" and is also a critical component of EO program success.

In addition, the Commission continually explores ways to modify the regulatory structure so as to reduce the cost of compliance, enhance the performance of small utilities, and balance the desire for low-cost efficiency measures that provide immediate bill savings, with the need for energy efficiency resources that are permanent, and thus capable of displacing higher-cost investment in future electric generation capacity. In particular, this year, the Commission engaged the services of Optimal Energy, through a special grant from the National Association of Regulatory Utility Commissioners (NARUC). The Optimal Energy study provided analysis and recommendations toward solving regulatory structure

biases against long-life energy efficiency resources such as insulation, furnaces and other equipment. The Commission also partnered with Consumers Energy and DTE to complete a statewide energy efficiency potential study that the Commission had previously begun with GDS Associates. The Commission emphasizes that the GDS potential study was developed by an independent third-party, and included broad input by the Commission, utilities and environmental stakeholders, so that it can be viewed as an authoritative source of numerical data and information.

The mutually agreed upon objective of the GDS potential study is to create an informed basis for a set of energy optimization policy options for statewide EO spending caps, and energy and demand targets - post 2015. The study encompasses several disparate scenarios, without favoring one over the other. The study is available on the Commission web site and will also be included as an appendix to the report: *Readying Michigan to Make Good Energy Decisions – Energy Efficiency*.<sup>1</sup> That report will include an analysis by Optimal Energy to facilitate conversion of the GDS potential study results into concrete, alternative target structures based upon, for example, first year savings, lifecycle savings or cumulative savings over multi-year periods.

PA 295 allows the Commission to provide recommendations for energy conservation legislation. The Commission makes no recommendations at this time, but notes that Governor Snyder is expected to make energy policy recommendations before the end of the year based on a series of reports released by the MPSC Chairman and Energy Office Director, including the Energy Efficiency report referenced above. The Commission looks forward to working with policymakers to ensure the continued viability of the Energy Optimization program.

Lastly, PA 295 requires the Commission to directly engage with utilities and energy stakeholders to promote energy efficiency in the State. The Commission's primary tool for doing so is the Michigan Energy Optimization Collaborative, overseen by the Commission Staff, which has met regularly over the past five years. In addition, the Commission regularly partners on special outreach events, and this year marks the first joint partnership to sponsor the [2013 Michigan Advanced Lighting Conference](#) on December 3 in Warren, Michigan. The conference focus is on LED lighting, an emerging technology that is expected to dramatically lower the lifecycle cost of energy for lighting, to provide revolutionary new lighting applications, and to create expanded economic opportunities for Michigan manufacturers of LED lighting products.

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<sup>11</sup> See: [www.michigan.gov/energy](http://www.michigan.gov/energy)

## Appendix A1: 2011 and 2013 Energy Optimization Plan Filings

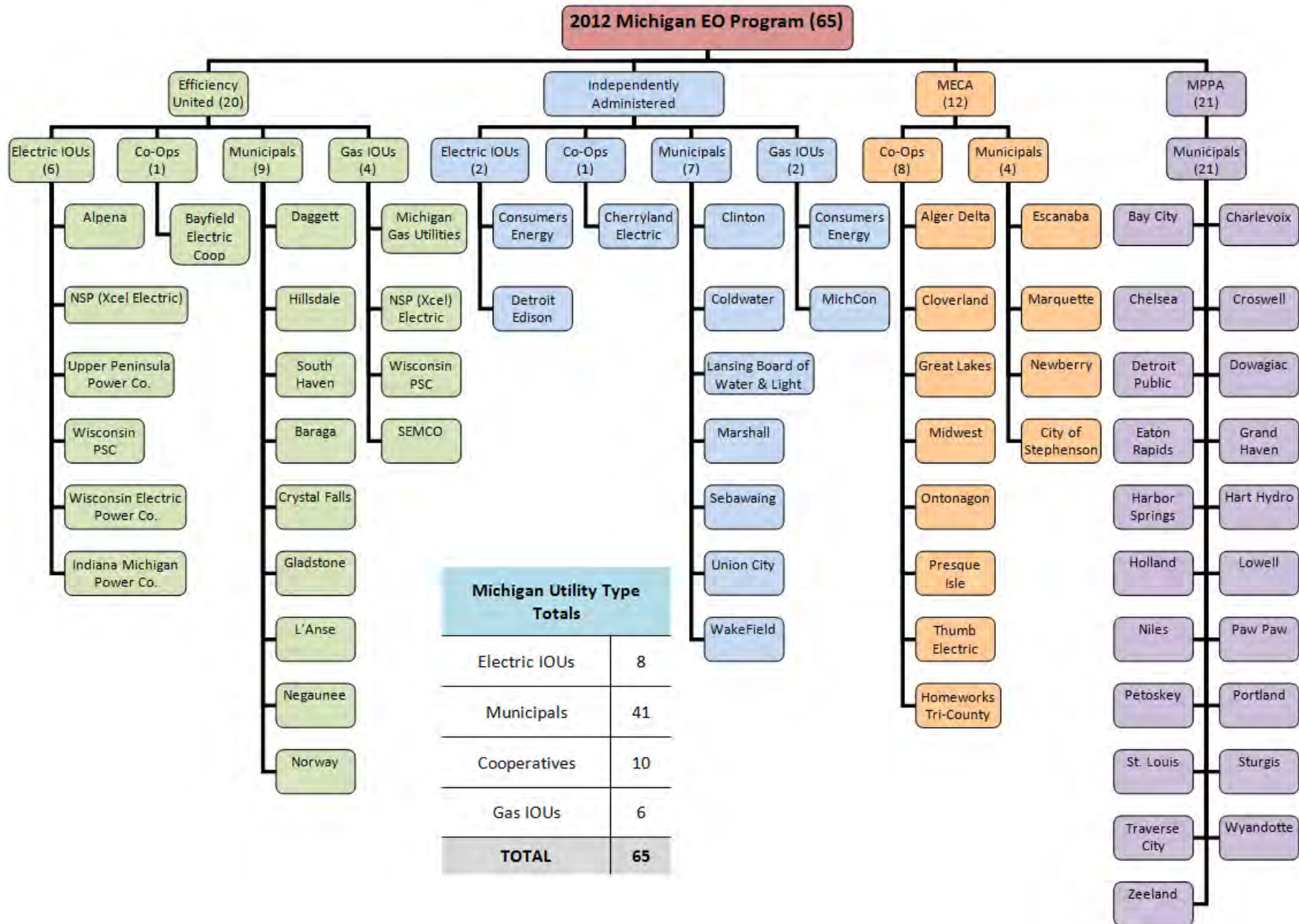
2011 EO Plan Filings				
COMPANY	2011 Plan Case #	Group	Plan Status	
<b>Electric IOUs</b>				
1	Alpena Power Company	U-16669	EU	Order Approving Settlement 9/13/2011
2	Consumers Energy Company	U-16670	Independent	Order Approving Settlement on 4/17/2012
3	Detroit Edison Company	U-17049	Independent	Order Approving Settlement on 12/20/2012
4	Indiana Michigan Power Company	U-16673	Independent	Order Approving Settlement on 1/12/2012
5	Northern States Power Company-Wisconsin	U-16674	EU	Order Approving Settlement 9/13/2011
6	Upper Peninsula Power Company	U-16675	EU	Order Approving Settlement 9/13/2011
7	Wisconsin Public Service Corporation	U-16676	EU	Order Approving Settlement on 12/6/2011
8	Wisconsin Electric Power Company **	U-16677	EU	Order Approving Settlement 9/13/2011
<b>Co-ops</b>				
9	Alger Delta Cooperative Electric Association	U-16678	MECA	Order Approving Settlement 10/17/2011
10	Bayfield Electric Cooperative	U-16679	EU	No Plan Filed / Efficiency United/Member Regulated
11	Cherryland Electric Cooperative	U-16680	Independent	Filed Plan on 7/29/2011 / Member Regulated
12	Cloverland Electric Cooperative	U-16681	MECA	Order Approving Settlement 10/17/2011
13	Great Lakes Energy Cooperative	U-16682	MECA	Order Approving Settlement 10/17/2011
14	Midwest Energy Cooperative	U-16683	MECA	Order Approving Settlement 10/17/2011
15	Ontonagon Co. Rural Electrification Assoc.	U-16684	MECA	Order Approving Settlement 10/17/2011
16	Presque Isle Electric and Gas Co-op	U-16685	MECA	Order Approving Settlement 10/17/2011
17	Thumb Electric Cooperative	U-16686	MECA	Order Approving Settlement 10/17/2011
18	Tri-County Electric Cooperative	U-16687	MECA	Order Approving Settlement 11/10/2011
<b>Municipals</b>				
19	Village of Baraga	U-16688	EU	Filed Application to join EU on 8/17/2011
20	City of Bay City	U-16689	MPPA	Filed EO Plan on 8/31/2011
21	City of Charlevoix	U-16690	MPPA	Filed EO Plan on 8/31/2011
22	Chelsea Department of Electric and Water	U-16691	MPPA	Filed EO Plan on 8/31/2011
23	Village of Clinton	U-16692	Independent	Filed EO Plan on 9/22/2011
24	Coldwater Board of Public Utilities	U-16693	Independent	Filed EO Plan on 9/26/2011
25	Croswell Municipal Light & Power Department	U-16694	MPPA	Filed EO Plan on 9/22/2011
26	City of Crystal Falls	U-16695	EU	Filed Application to join EU on 8/17/2011
27	Daggett Electric Department	U-16696	EU	Filed Application to join EU on 9/22/2011
28	Detroit Public Lighting Department	U-16697	MPPA	Filed EO Plan on 8/31/2011
29	City of Dowagiac	U-16698	MPPA	Filed EO Plan on 8/31/2011
30	City of Eaton Rapids	U-16699	MPPA	Filed EO Plan on 8/31/2011
31	City of Escanaba	U-16700	MECA	Filed EO Plan on 8/17/2011
32	City of Gladstone	U-16701	EU	Filed EO Plan on 8/17/2011
33	Grand Haven Board of Light and Power	U-16702	MPPA	Filed EO Plan on 8/31/2011
34	City of Harbor Springs	U-16703	MPPA	Filed EO Plan on 8/31/2011
35	City of Hart Hydro	U-16704	MPPA	Filed EO Plan on 9/2/2011
36	Hillsdale Board of Public Utilities	U-16705	EU	Filed EO Plan on 8/31/2011
37	Holland Board of Public Works	U-16706	MPPA	Filed EO Plan on 8/17/2011
38	Village of L'Anse	U-16707	EU	Filed EO Plan on 8/17/2011
39	Lansing Board of Water & Light	U-16708	Independent	Filed EO Plan on 8/29/2011
40	Lowell Light and Power	U-16709	MPPA	Filed EO Plan on 9/1/2011
41	Marquette Board of Light and Power	U-16710	MECA	Filed EO Plan on 8/17/2011
42	Marshall Electric Department	U-16711	Independent	Filed EO Plan on 9/29/2011
43	Negaunee Department of Public Works	U-16712	EU	Filed EO Plan on 8/17/2011
44	Newberry Water and Light Board	U-16713	MECA	Filed EO Plan on 8/17/2011
45	Niles Utility Department	U-16714	MPPA	Filed EO Plan on 8/31/2011
46	City of Norway	U-16715	EU	Filed EO Plan on 8/17/2011
47	City of Paw Paw	U-16716	MPPA	Filed EO Plan on 1/9/2012
48	City of Petoskey	U-16717	MPPA	Filed EO Plan 8/24/2011
49	City of Portland	U-16718	MPPA	Filed EO Plan on 8/31/2011
50	City of Sebewaing	U-16719	Independent	Filed EO Plan on 9/29/2011
51	City of South Haven	U-16720	EU	Filed EO Plan on 8/31/2011
52	City of St. Louis	U-16721	MPPA	Filed EO Plan on 9/1/2011
53	City of Stephenson	U-16722	MECA	Filed EO Plan on 8/17/2011
54	City of Sturgis	U-16723	MPPA	Filed EO Plan on 8/31/2011
55	Traverse City Light & Power	U-16724	MPPA	Filed EO Plan on 8/31/2011
56	Union City Electric Department	U-16725	Independent	Filed EO Plan on 10/27/2011
57	City of Wakefield	U-16726	Independent	Filed EO Plan on 10/19/2011
58	Wyandotte Department of Municipal Service	U-16727	MPPA	Filed EO Plan on 8/31/2011
59	Zeeland Board of Public Works	U-16728	MPPA	Filed EO Plan on 8/31/2011
<b>Gas IOUs</b>				
60	Consumers Energy Company(filing joint w/electric)	U-16670	Independent	Order Approving Settlement on 4/17/2012
61	Michigan Consolidated Gas Company	U-17050	Independent	Order Approving Settlement on 12/6/2012
62	Michigan Gas Utilities Corporation	U-16731	EU	Order Approving Settlement 8/25/2011
63	Northern States Power Co-Wisc.(filing joint w/elec)	U-16674	EU	Order Approving Settlement 9/13/2011
64	SEMCO Energy, Inc.	U-16733	EU	Order Approving Settlement 8/25/2011
65	Wisconsin Public Serv. Corp.(filing jointly w/elec)	U-16676	EU	Order Approving Settlement on 12/6/2011



## Appendix A1: 2011 and 2013 Energy Optimization Plan Filings Continued

2013 EO Plan Filings				
	COMPANY	2013 Plan Case #	Group	Plan Status
<b>Electric IOUs</b>				
1	Alpena Power Company	U-17350	EU	Order Approving Settlement 10/4/2013
2	Consumers Energy Company	U-17351	Independent	Settlement Pending
3	Detroit Edison Company	U-17352	Independent	Settlement Pending
4	Indiana Michigan Power Company	U-17353	Independent	Settlement Pending
5	Northern States Power Company-Wisconsin	U-17354	EU	Order Approving Settlement 10/17/2013
6	Upper Peninsula Power Company	U-17355	EU	Order Approving Settlement 9/10/2013
7	Wisconsin Public Service Corporation	U-17356	EU	Order Approving Settlement 9/24/2013
8	Wisconsin Electric Power Company **	U-17357	EU	Settlement Pending
<b>Co-ops</b>				
9	Alger Delta Cooperative Electric Association	U-17367	MECA	Filed EO Plan on 8/15/2013
10	Bayfield Electric Cooperative	U-17368	EU	Filed EO Plan on 5/20/2013 to remain in EU
11	Cherryland Electric Cooperative	U-17369	Independent	Filed EO Plan on 8/29/2013
12	Cloverland Electric Cooperative	U-17364	MECA	Filed EO Plan on 8/15/2013
13	Great Lakes Energy Cooperative	U-17370	MECA	Filed EO Plan on 8/15/2013
14	Midwest Energy Cooperative	U-17365	MECA	Filed EO Plan on 8/15/2013
15	Ontonagon Co. Rural Electrification Assoc.	U-17371	MECA	Filed EO Plan on 8/15/2013
16	Presque Isle Electric and Gas Co-op	U-17372	MECA	Filed EO Plan on 8/15/2013
17	Thumb Electric Cooperative	U-17366	MECA	Filed EO Plan on 8/15/2013
18	Tri-County Electric Cooperative	U-17373	MECA	Filed EO Plan on 8/15/2013
<b>Municipals</b>				
19	Village of Baraga	U-17381	EU	Filed (in U-16688) EO Plan on 8/1/2013 to remain in EU
20	City of Bay City	U-17382	MPPA	Filed to continue previously approved biennial EO Plan
21	City of Charlevoix	U-17383	MPPA	Filed to continue previously approved biennial EO Plan
22	Chelsea Department of Electric and Water	U-17384	MPPA	Filed to continue previously approved biennial EO Plan
23	Village of Clinton	U-17385	Independent	Filed to continue previously approved biennial EO Plan
24	Coldwater Board of Public Utilities	U-17386	Independent	Filed for Biennial Review of EO Plan
25	Croswell Municipal Light & Power Department	U-17387	MPPA	Filed to continue previously approved biennial EO Plan
26	City of Crystal Falls	U-17388	EU	Filed (in U-16695) EO Plan on 8/1/2013 to remain in EU
27	Daggett Electric Department	U-17389	EU	Filed EO Plan on 8/1/2013 to remain in EU
28	Detroit Public Lighting Department	U-17390	MPPA	Elected to join Efficiency UNITED
29	City of Dowagiac	U-17391	MPPA	Filed to continue previously approved biennial EO Plan
30	City of Eaton Rapids	U-17392	MPPA	Filed to continue previously approved biennial EO Plan
31	City of Escanaba	U-17393	MECA	Filed EO Plan on 8/15/2013
32	City of Gladstone	U-17394	EU	Filed (in U-16701) EO Plan on 8/1/2013 to remain in EU
33	Grand Haven Board of Light and Power	U-17395	MPPA	Filed to continue previously approved biennial EO Plan
34	City of Harbor Springs	U-17396	EU	Filed (in U-16703) EO Plan on 8/1/2013 to remain in EU
35	City of Hart Hydro	U-17397	MPPA	Filed to continue previously approved biennial EO Plan
36	Hillsdale Board of Public Utilities	U-17398	EU	Filed (in U-16705) EO Plan on 8/1/2013 to remain in EU
37	Holland Board of Public Works	U-17399	MPPA	Filed to continue previously approved biennial EO Plan
38	Village of L'Anse	U-17400	EU	Filed (in U-16707) EO Plan on 8/1/2013 to remain in EU
39	Lansing Board of Water & Light	U-17401	Independent	Filed for Biennial Review of EO Plan
40	Lowell Light and Power	U-17402	MPPA	Filed to continue previously approved biennial EO Plan
41	Marquette Board of Light and Power	U-17403	MECA	Filed EO Plan on 8/15/2013
42	Marshall Electric Department	U-17404	Independent	Filed to continue previously approved biennial EO Plan
43	Negaunee Department of Public Works	U-17405	EU	Filed (in U-16712) EO Plan on 8/1/2013 to remain in EU
44	Newberry Water and Light Board	U-17406	MECA	Filed EO Plan on 8/15/2013
45	Niles Utility Department	U-17407	MPPA	Filed to continue previously approved biennial EO Plan
46	City of Norway	U-17408	EU	Filed (in U-16715) EO Plan on 8/1/2013 to remain in EU
47	City of Paw Paw	U-17409	MPPA	Filed to continue previously approved biennial EO Plan
48	City of Petoskey	U-17410	MPPA	Filed to continue previously approved biennial EO Plan
49	City of Portland	U-17411	MPPA	Filed to continue previously approved biennial EO Plan
50	City of Sebawaing	U-17412	Independent	Filed to continue previously approved biennial EO Plan
51	City of South Haven	U-17413	EU	Filed (in U-16720) EO Plan on 8/1/2013 to remain in EU
52	City of St. Louis	U-17414	MPPA	Filed to continue previously approved biennial EO Plan
53	City of Stephenson	U-17415	MECA	Filed EO Plan on 8/15/2013
54	City of Sturgis	U-17416	MPPA	Filed to continue previously approved biennial EO Plan
55	Traverse City Light & Power	U-17417	MPPA	Filed to continue previously approved biennial EO Plan
56	Union City Electric Department	U-17418	Independent	Filed to continue previously approved biennial EO Plan
57	City of Wakefield	U-17419	Independent	Filed to continue previously approved biennial EO Plan
58	Wyandotte Department of Municipal Service	U-17420	MPPA	Filed for Biennial Review of EO Plan
59	Zeeland Board of Public Works	U-17421	MPPA	Filed to continue previously approved biennial EO Plan
<b>Gas IOUs</b>				
60	Consumers Energy Company(filing joint w/electric)	U-17351	Independent	Settlement Pending
61	Michigan Consolidated Gas Company	U-17359	Independent	Settlement Pending
62	Michigan Gas Utilities Corporation	U-17360	EU	Order Approving Settlement 10/4/2013
63	Northern States Power Co-Wisc.(filing joint w/elec)	U-17361	EU	Order Approving Settlement 10/17/2013
64	SEMCO Energy, Inc.	U-17362	Independent	Settlement Pending
65	Wisconsin Public Serv. Corp.(filing jointly w/elec)	U-17363	EU	Order Approving Settlement 9/24/2013

Appendix A2: 2012 Michigan Energy Optimization Programs



## Appendix B: Energy Optimization Program Offerings by Utility

Utility	Sector	Program Type	Year Imp.	Implementation Contractors	
<b>INDEPENDENTLY ADMINISTERING</b>					
<b>IOUS</b>					
Consumers	Residential	1 Appliance Recycling	2009	JACO Environmental	
		2 Multifamily Direct Install	2009	ICF	
		3 Income Qualified	2009	CLEAResult	
		4 Energy Education	2009	National Energy Foundation	
		5 Energy Star Lighting	2009	ICF	
		6 Energy Star Appliances	2009	ICF	
		7 HVAC & Water Heating	2009	ICF	
		8 New Construction	2009	CLEAResult	
		9 Existing Home Retrofit	2010	ICF	
		10 Residential Pilots	2009	ICF	
Consumers	C & I	1 Custom Business Solutions Program	2009	KEMA	
		2 Comprehensive Business Solutions	2009	KEMA	
		3 Small Business Direct Install	2009	KEMA	
		4 Business Pilots	2009	KEMA	
Consumers Gas	Residential	1 Appliance Recycling	2009	JACO Environmental	
		2 Multifamily Direct Install	2009	ICF	
		3 Income Qualified	2009	CLEAResult	
		4 Energy Education	2009	National Energy Foundation	
		5 Energy Star Lighting	2009	ICF	
		6 Energy Star Appliances	2009	ICF	
		7 HVAC & Water Heating	2009	ICF	
		8 New Construction	2009	CLEAResult	
		9 Existing Home Retrofit	2010	ICF	
		10 Residential Pilots	2009	ICF	
Consumers Gas	C & I	1 Custom Business Solutions Program	2009	KEMA	
		2 Comprehensive Business Solutions	2009	KEMA	
		3 Small Business Direct Install	2009	KEMA	
		4 Business Pilots	2009	KEMA	
DTE	Residential	1 Energy Star	2009	ICF	
		2 Audit & Weatherization	2009	CLEAResult and SEEL	
		3 HVAC	2009	ICF	
		4 Appliance Recycling	2009	JACO Environmental	
		5 Multifamily Direct Install	2009	SEEL	
		6 New Construction	2009	CLEAResult	
		7 Education	2009	Internally	
		8 Pilot Programs	2009	Internally	
		9 Low Income	2009	CLEAResult	
	DTE	C & I	1 Prescriptive	2009	KEMA
2 Custom Business Solutions Program			2009	KEMA	
3 New Construction			2009	KEMA	
4 RFP			2009	KEMA	
5 Education			2009	Internally	
6 Pilot Programs			2009	Internally	
7 Education			2009	Internally	
MichCon (Gas)	Residential	1 Energy Star Products	2009	ICF	
		2 Residential HVAC	2009	ICF	
		3 Multifamily	2009	SEEL	
		4 Audit and Weatherization	2009	CLEAResult & SEEL	
		5 New Home Construction	2009	CLEAResult	
		6 Low Income Education	2009	Internally	
		7 Education	2009	Internally	
		8 Pilots	2009	Internally	
	MichCon (Gas)	C & I	1 Prescriptive	2009	KEMA
			2 Custom	2009	KEMA
3 Education			2009	Internally	
4 Pilots			2009	Internally	

**Appendix B: Energy Optimization Program Offerings by Utility Continued**

Utility	Sector	Program Type	Year Imp.	Implementation Contractors
<b>Co-Ops</b>				
Cherryland	Residential	1 Residential Low Income	2011	Northwest Community Action Agency
		2 Efficient Lighting Program	2011	Internally
		3 Refrigerator/Freezer Turn-In/Recycle	2011	Internally
		4 HVAC - Water Heater Program	2011	Internally
		5 Residential Energy Star Program	2011	Internally
		6 Residential Home Audit Program	2011	Internally
		7 Community Solar	2013	Internally
	C & I	1 Commercial and Industrial Prescriptive Incentive	2011	Internally
		2 Business Education Services	2011	Internally
<b>Municipals</b>				
Lansing Board Of Water & Light (BWL)	Residential	1 Efficient Lighting	2010	Internally
		2 Refrigerator/Freezer Recycling	2009	Franklin Energy
		3 Education Services	2009	Internally
		4 Residential Appliances and HVAC	2010	Franklin Energy
		5 Residential Multi-Family In-Unit Efficiency	2010	Franklin Energy
		6 Residential Low Income	2009	Community Action Agency
		7 Pilot and Emerging Technology	2009	Franklin Energy
	C & I	1 Multi-Family Common Area	2009	Franklin Energy
		2 Educational Services	2009	Internally
		3 Prescriptive Incentive Program	2010	Internally
		4 Custom Incentive Program	2009	Community Action Agency
		5 Educational Services	2009	Internally
		6 Pilot and Emerging Technology	2009	Internally
<b>Municipals- MPPA Collaborative</b>				
Baraga, Bay City, Charlevoix, Chelsea, Clinton, Coldwater, Crosswell, Crystal Falls, Detroit Public Lighting, Dowagiac, Eaton Rapids, Gladstone, Grand Haven, Harbor Springs, Hart Hydro, Hillsdale, Holland, Village of L'anse, Lowell, Marshall, Negaunee, Niles, Norway, Paw Paw, Petoskey, Portland, Sebawaing, South Haven, Saint Louis, Stephenson, Sturgis, Traverse City Light and Power, Union City Electric, Wakefield, Wyandotte, Zeeland	Residential	1 Residential Low Income	2011	MCAA
		2 Refrigerator /Freezer Turn-In and Recycling Program	2011	Franklin Energy
		3 Residential Education Services	2011	Franklin Energy
		4 Residential HVAC and Appliances	2011	Internally
		5 Audit and Weatherization (on-line audits)	2011	Internally
		6 Residential Multi-Family In-Unit Efficiency	2011	Internally
		7 Electric Water Heater Saver Kits	2011	Internally
		8 Pilot/Emerging Technology Program	2011	Franklin Energy
	C & I	1 C&I Prescriptive Incentive Program	2011	Franklin Energy
		2 C&I Custom Incentive Program	2011	Internally
		3 Multi-Family Common Area Program	2011	Internally
		4 Business Education Services	2011	Northwest MCAA
		5 Pilot/Emerging Technology Program	2011	Franklin Energy
<b>Efficiency United</b>				
Electric Providers: Alpena Power Co., Bayfield Electric Coop., Daggett, Cloverland/Edison Sault, Indiana Michigan Power, UPPCO, We Energies, WPSC, Xcel Energy, Gas Providers: MGU Corp., SEMCO, WPSC, Xcel Energy	Residential	1 Low Income	2010	MCAA
		2 Residential Energy Star Program	2010	CLEAResult
		3 Appliance Recycling	2010	JACO
		4 Online Audit Program	2010	Enercom
		5 HVAC	2010	CLEAResult
		6 Audit Weatherization Program	2011	CLEAResult
		7 Multi-Family	2010	CLEAResult
		9 New Construction	2010	CLEAResult
		9 Education	2010	CLEAResult
		10 Pilots	2010	CLEAResult
	C & I	1 Prescriptive	2010	Franklin Energy
		2 Custom	2010	Franklin Energy
		3 Education	2010	Franklin Energy
		4 Pilots	2010	Franklin Energy

## Appendix B: Energy Optimization Program Offerings by Utility Continued

Utility	Sector	Program Type	Year Imp.	Implementation Contractors
<b>MECA</b>				
<b>Co-Ops - MECA</b>				
Alger Delta, Great Lakes, Midwest Energy, Ontonagon, Presque Isle, Thumb, Homeworks Tri-County	Residential	1 Residential Energy Star Program	2011	CLEAResult
		2 Residential Low Income Programs	2011	CLEAResult
		3 Residential Home Audit Program	2011	CLEAResult
		4 Residential Farm Services	2011	CLEAResult
		5 Residential Appliance Recycling Programs	2011	JACO
		6 Residential Education Services	2011	CLEAResult
		7 Residential Efficient HVAC Program	2011	CLEAResult
		8 Residential Pilot Programs	2011	Franklin Energy
	C & I	1 Commercial Prescriptive Programs	2011	Franklin Energy
		2 Industrial Prescriptive Programs	2011	Franklin Energy
		3 C&I Educational Programs	2011	Franklin Energy
		4 C&I Pilot Programs	2011	Franklin Energy
<b>Municipals - MECA</b>				
Escanaba, Marquette, Newberry, Stephenson	Residential	1 Residential Energy Star Program	2011	CLEAResult
		2 Residential Low Income Programs	2011	CLEAResult
		3 Residential Home Audit Program	2011	CLEAResult
		4 Residential Farm Services	2011	CLEAResult
		5 Residential Appliance Recycling Programs	2011	JACO
		6 Residential Education Services	2011	CLEAResult
		7 Residential Efficient HVAC Program	2011	CLEAResult
		8 Residential Pilot Programs	2011	Franklin Energy
	C & I	1 Commercial Prescriptive Programs	2011	Franklin Energy
		2 Industrial Prescriptive Programs	2011	Franklin Energy
		3 C&I Educational Programs	2011	Franklin Energy
		4 C&I Pilot Programs	2011	Franklin Energy

## Appendix C: Energy Optimization Targets

% of MWH Sales		0.30%			0.50%			0.75%			1%		
		2009 Target	2009 Actual	% Achieved	2010 Target	2010 Actual	% Achieved	2011 Target	2011 Actual	% Achieved	2012 Target	2012 Actual	% Achieved
<b>Electric IOUs</b>													
1	Alpena	973	16	2%	2,586	3,859	149%	2,419	3,453	143%	3,244	4,251	131%
2	Consumers Energy	107,939	145,118	134%	178,509	251,187	141%	255,039	353,006	138%	333,360	409,353	123%
3	DTE Energy Electric	160,000	203,000	127%	227,153	402,995	177%	477,000	519,000	109%	455,000	611,000	134%
4	Indiana Michigan	9,159	197	2%	24,110	25,157	104%	22,427	21,626	96%	29,403	30,999	105%
5	UP Power	2,509	350	14%	6,750	6,357	94%	6,363	7,749	122%	8,272	9,494	115%
6	Wisconsin Electric	8,414	44	1%	21,614	21,722	100%	19,800	20,745	105%	26,358	26,499	101%
7	WPSCorp	876	2	0%	2,271	2,474	109%	2,093	2,529	121%	2,739	3,018	110%
8	XCEL Energy	413	0	0%	1,100	1,407	128%	1,031	1,473	143%	1,378	2,074	151%
<b>Subtotal Electric IOUs</b>		<b>290,283</b>	<b>348,727</b>	<b>120%</b>	<b>464,093</b>	<b>715,158</b>	<b>154%</b>	<b>786,172</b>	<b>929,580</b>	<b>118%</b>	<b>859,755</b>	<b>1,096,689</b>	<b>128%</b>
<b>Electric Coops</b>													
9	Alger Delta	303	22	7%	486	606	125%	448	225	50%	588	658	112%
10	Bayfield	1	0	0%	2	3	150%	14	19	138%	2	2	118%
11	Cherryland	791	751	95%	1,777	2,037	115%	2,699	3,889	144%	3,751	3,798	101%
12	Cloverland/Edison S.	589	46	8%	1,610	1,500	93%	1,502	532	35%	8,149	7,365	90%
13	Great Lakes	4,265	286	7%	10,327	10,282	99.6%	9,887	5,002	51%	13,240	10,341	78%
14	Midwest	1,618	234	14%	4,390	4,509	103%	4,377	2,191	50%	5,875	5,152	88%
15	Ontonagon	160	5	3%	210	173	82%	189	212	112%	247	253	102%
16	Presque Isle	886	34	4%	1,917	2,187	114%	1,785	1,286	72%	2,362	1,981	84%
17	Thumb	529	64	12%	1,714	1,087	63%	1,121	663	59%	1,507	1,689	112%
18	Tri-County	1,092	262	24%	2,425	5,002	206%	2,337	1,084	46%	3,121	2,483	80%
<b>Subtotal Electric Coops</b>		<b>10,234</b>	<b>1,704</b>	<b>17%</b>	<b>24,858</b>	<b>27,386</b>	<b>110%</b>	<b>24,359</b>	<b>15,103</b>	<b>62%</b>	<b>38,842</b>	<b>33,722</b>	<b>87%</b>
<b>Municipals</b>													
19	Baraga	60	97	162%	84	7	8%	226	185	82%	188	191	102%
20	Bay City	896	715	80%	1,473	2,251	153%	1,937	2,317	120%	2,860	3,037	106%
21	Charlevoix	203	79	39%	450	262	58%	678	423	62%	603	643	107%
22	Chelsea	266	409	154%	365	359	98%	696	1,221	175%	366	479	131%
23	Clinton	146	173	118%	113	113	100%	161	164	102%	213	203	95%
24	Coldwater	865	37	4%	2,342	1,379	59%	2,342	1,409	60%	2,589	2,104	81%
25	Croswell	110	247	225%	133	230	173%	188	180	96%	357	489	137%
26	Crystal Falls	50	718	1436%	60	459	765%	88	92	105%	164	191	116%
27	Dagget Electric Co.	5	7	140%	12	19	158%	11	19	167%	15	26	181%
28	Detroit PLD	2	2	100%	1,587	224	14%	2,986	2,286	77%	865	592	68%
29	Dowagiac	239	52	22%	547	521	95%	543	766	141%	417	538	129%
30	Eaton Rapids	154	61	40%	347	298	86%	449	470	105%	455	607	133%
31	Escanaba	427	0	0%	1,212	1,171	97%	1,104	1,072	97%	1,428	1,338	94%
32	Gladstone	97	407	420%	182	267	147%	308	136	44%	328	412	126%
33	Grand Haven	873	921	105%	1,373	1,591	116%	1,878	2,211	118%	2,223	1,912	86%
34	Harbor Springs	112	150	134%	171	167	98%	290	248	86%	358	369	103%
35	Hart	115	101	88%	196	193	98%	299	140	47%	394	265	67%
36	Hillsdale	429	415	97%	726	1,216	167%	536	643	120%	1,275	1,508	118%
37	Holland	3,089	3,382	109%	4,849	5,481	113%	6,477	7,762	120%	7,948	8,116	102%
38	L'Anse	42	123	293%	79	10	13%	162	600	370%	137	174	127%
39	LBWL	6,831	6,972	102%	11,165	11,524	103%	15,877	17,587	111%	19,280	23,147	120%
40	Lowell	180	289	161%	226	269	119%	432	578	134%	483	503	104%
41	Marquette	872	0	0%	2,534	3,198	126%	2,435	1,827	75%	3,098	2,912	94%
42	Marshall	357	363	102%	579	835	144%	605	1,129	187%	537	868	162%
43	Negaunee	67	274	409%	92	85	92%	199	116	58%	217	256	118%
44	Newberry	17	0	0%	148	124	84%	144	155	108%	192	243	127%
45	Niles	440	234	53%	802	718	90%	1,122	1,052	94%	1,287	1,003	78%
46	Norway	94	120	128%	159	76	48%	317	313	99%	300	386	128%
47	Paw Paw	116	109	94%	201	115	57%	373	177	47%	480	450	94%
48	Petoskey	232	880	379%	404	599	148%	809	477	59%	1,080	839	78%
49	Portland	107	103	96%	182	210	115%	240	155	65%	362	332	92%
50	Sebewaing	125	531	425%	158	995	630%	203	305	150%	311	1,017	327%
51	South Haven	411	423	103%	688	610	89%	1,135	909	80%	1,312	1,582	121%
52	St. Louis	120	77	64%	242	251	104%	294	275	94%	378	365	97%
53	Stephenson	17	0	0%	49	47	96%	45	47	104%	60	68	113%
54	Sturgis	720	797	111%	1,198	1,249	104%	1,937	1,792	93%	2,215	2,798	126%
55	Traverse City	991	1,735	175%	1,149	1,945	169%	1,704	2,650	156%	2,543	4,109	162%
56	Union City	47	53	113%	79	197	251%	118	129	109%	139	125	90%
57	Wakefield	38	0	0%	103	237	230%	44	49	111%	52	52	100%
58	Wyandotte	2,464	3,034	123%	2,388	3,832	160%	1,515	1,803	119%	2,495	2,500	100%
59	Zeeland	1,099	1,122	102%	1,335	2,202	165%	1,472	1,884	128%	2,601	1,484	57%
<b>Subtotal Municipals</b>		<b>23,525</b>	<b>25,212</b>	<b>107%</b>	<b>40,182</b>	<b>45,536</b>	<b>113%</b>	<b>52,379</b>	<b>55,753</b>	<b>106%</b>	<b>62,605</b>	<b>68,233</b>	<b>109%</b>
<b>Statewide Electric Totals</b>		<b>324,042</b>	<b>375,643</b>	<b>116%</b>	<b>529,133</b>	<b>788,080</b>	<b>149%</b>	<b>862,910</b>	<b>1,000,437</b>	<b>116%</b>	<b>961,202</b>	<b>1,198,644</b>	<b>125%</b>

2012 Target does not include previous year carryover amount.

## Appendix C: Energy Optimization Targets Continued

	% of MCF Sales	0.10%			0.25%			0.50%			0.75%		
		2009 Target	2009 Actual	% Achieved	2010 Target	2010 Actual	% Achieved	2011 Target	2011 Actual	% Achieved	2012 Target	2012 Actual	% Achieved
<b>Gas Companies</b>													
1	<b>Consumers Energy</b>	299,623	396,783	132%	743,943	937,915	126%	1,263,564	2,039,609	161%	1,844,899	2,378,978	129%
2	<b>MichCon</b>	164,003	250,680	153%	405,110	792,000	196%	1,164,000	1,364,000	117%	894,701	1,186,000	133%
3	<b>MGU</b>				105,323	122,432	116%	150,300	111,990	75%	219,898	262,259	119%
4	<b>SEMCO Energy</b>				195,859	243,050	124%	280,158	305,433	109%	409,480	417,774	102%
5	<b>WPSCorp</b>				5,301	5,788	109%	7,515	7,966	106%	10,946	30,877	282%
6	<b>XCEL Energy</b>				3,126	9,061	290%	4,481	7,009	156%	6,500	6,986	107%
	<b>Statewide Gas Totals</b>	<b>463,626</b>	<b>647,463</b>	<b>140%</b>	<b>1,458,662</b>	<b>2,110,246</b>	<b>145%</b>	<b>2,870,018</b>	<b>3,836,008</b>	<b>134%</b>	<b>3,386,424</b>	<b>4,282,874</b>	<b>126%</b>

## Appendix D1: Energy Optimization Surcharges by Company

Company	Case Number	Plan Approved	Group	2012 Energy Optimization Surcharges	
<b>IOUs</b>					
Alpena Power Company	U-16669	9/13/2011	EU	Residential (\$/kwh)	\$0.00272
				General Service	\$2.76
				Standard	\$39.86
				Large Power	\$316.82
				Large Industrial below 13 kV	\$1,168.92
				Large Industrial above 13 kV	\$282.00
				Alt Energy Econ Dev	\$102.25
				Outdoor Protective Lighting 100 watt	\$0.240
				Outdoor Protective Lighting 250 watt	\$0.4100
				Street & Highway	\$0.190
				Special Contract	\$359.42
				Consumers Energy Company	U-16670
Secondary 0-1250 kwh	\$1.30				
Secondary 1251-5000 kwh	\$7.14				
Secondary 5001-30000 kwh	\$43.03				
Secondary 30001-50000 kwh	\$43.03				
Secondary Above 50000 kwh	\$43.03				
Primary 0-5000 kwh	\$3.46				
Primary 5001-10000 kwh	\$25.81				
Primary 10001-30000 kwh	\$65.30				
Primary 30001-50000 kwh	\$154.33				
Primary above 50000 kwh	\$715.14				
Detroit Edison Company	U-17027	7/13/2012	Independent		
				Secondary 0 - 850 kWh/mo	\$0.48
				Secondary 851-1650 kWh/mo	\$2.83
				Sec Above 1650 kWh/mo	\$12.21
				Primary 0 - 11500 kWh/mo	\$46.09
				Primary Above 11501 kWh/mo	\$478.09
Indiana Michigan Power Company	U-16311	1/12/2012	EU	Residential (\$/kwh)	\$0.00135
				SGS (UNMETERED) \$/kWh	\$0.28300
				C&I SGS	\$4.41
				C&I SEC MGS TOD	\$4.41
				C&I WSS	\$4.41
				C&I LGS	\$339.99
				C&I MS	\$4.41
				C&I LP	\$339.99
Northern States Power Company-Wisconsin	U-16674	9/13/2011	EU	Residential MR1,2 (\$/kwh)	\$0.0017
				Small Commercial Service MSC-1	\$1.56
				Small General TOD Service MST-1	\$1.56
				Commercial Industrial GS	\$18.76
				Large Industrial Service MI-1	\$130.31
				Peak TOD Service MPC-1 Secondary/Primary	\$130.31
				Peak TOD Service MPC-1 Transmission Transformed	\$1,426.67
				Peak TOD Service MPC-1 Transmission Untransformed	\$130.31
				Peak Controlled GS MPC-2	\$18.76
				Street Lighting MSL-1	\$0.09
				Muni Pump Service	\$1.56
				Upper Peninsula Power Company	U-16675
Small Comm C1,1W, 2,2W,H1,2	\$3.90				
Medium Commercial P1,2	\$45.28				
Lg Commercial Cp-U,WP-3,Schedule A,CP-RR,RTMP	\$697.25				
Lighting SL-3,5,6,10, Z-3,4	\$0.32				
				Special Contract	\$198.09
Wisconsin Public Service Corporation	U-16676	12/6/2011	EU	Residential, Rg-1M,Rg,2M,Rg-OTOU-1M (\$/kWh)	\$0.0021
				Small Comm Cg-1M,Cg-2M,Cg-OTOU-1M	\$3.23
				Small Comm Cg-1MSeasonal,Cg-2MSeasonal,Cg-OTOU-1MSeasonal	\$6.46
				Medium Comm Cg3M, Cg4M, Mp1M	\$28.34
				Medium Comm Cg3M seasonal, Cg4M seasonal	\$56.68
				Large Cp-1M	\$256.05
				Lighting-Ms-1M,Ms-3M,Gy-1M,Gy-3M	\$0.22



## Appendix D1: Energy Optimization Surcharges by Company Continued

Company	Case Number	Plan Approved	Group	2012 Energy Optimization Surcharges	
<b>IOUs</b>					
Wisconsin Electric Power Company	U-16677	12/6/2012	EU	Residential (\$/kwh)	\$0.00273
				Cg1	\$0.17989
				Cg2	\$0.32082
				Cg3 & Cg3C	\$5.18043
				Cg5	\$0.64283
				Cp1	\$19.02247
				Cp2, Cp3 & Cp4	\$133.25134
				Schedule A	\$980.20487
				Spec Con (CpLC)	\$2,850.22010
				Municipal Defense Siren	\$0.080
				Unmetered lamps G1	\$0.13-0.72
				Unmetered lamps Ms21	\$0.09-0.72
				Unmetered lamps Ms3	\$0.09-1.80
LED1	\$0.00514				
<b>Co-ops</b>					
Alger Delta Cooperative Electric Association	U-16678	10/17/2011	MECA	Farm and Home (A) (\$/kWh)	\$0.00262
				Seasonal Residential (AS)	\$0.00262
				Combined Residential	\$0.00262
				Commercial & Small Power (B)	\$2.48
				Large Power (LP)	\$48.26
Bayfield Electric Cooperative			EU		
Cherryland Electric Cooperative	U-16680	7/30/2012	Independent	Farm & Home Service (\$/kWh)	\$0.00143
				General Service (C)	\$1.64
				Optional Irrigation TOD (OTD)	\$1.64
				Large Power (LP)	\$26.36
				Optional Large Power TOD (LPTOD)	\$26.36
				Large Commercial & Industrial (LC&I)	\$247.81
				Primary Substation (PSDS)	\$497.36
Cloverland Electric Cooperative	U-16681	10/17/2011	MECA	Farm and Home (FH) (ES) (\$/kWh)	\$0.00197
				Seasonal Residential (SR)	\$0.00197
				Combined Residential	\$0.00197
				General Service (GS)	\$3.37
				Seasonal General Service (SG)	\$3.37
				Commercial Heating and A/C (HA)	\$3.37
				Large Power (LP)	\$183.99
				Large Power Mining (LP-MO)	\$183.99
				Primary Service (PSDS)	\$183.99
Great Lakes Energy Cooperative	U-16682	10/17/2011	MECA	Residential (A) (\$/kWh)	\$0.00198
				Seasonal Residential (AS)	\$0.00198
				Combined Residential	\$0.00198
				General Service (GS)	\$4.76
				Large Power (LP)	\$4.76
				C&I APM (C-APM)	\$4.76
				C&I APM (D-APM)	\$865.59
				Primary Service (PSDS)	\$865.59
Midwest Energy Cooperative	U-16683	10/17/2011	MECA	Farm and Home Service (A) (\$/kWh)	\$0.00198
				Int Dual Heating (I-DSH)	\$0.00198
				Combined Residential	\$0.00198
				General Service (GS)	\$1.76
				Irrigation (IRR)	\$3.84
				Large Power Service (LP)	\$54.76
				Large Power >200 kW (CD-1)	\$422.17
				Large Power Primary & Contracts (LPPS)	\$2,888.19
Ontonagon Co. Rural Electrification Assoc.	U-16684	10/17/2011	MECA	Residential (A, AH) (\$/kWh)	\$0.00275
				Seasonal Residential (A-S)	\$0.00275
				Combined Residential	\$0.00275
				General Service (B)	\$1.85
				Large Power (LP)	\$19.25
				Large Power (LP-1)	\$140.03
Presque Isle Electric and Gas Co-op	U-16685	10/17/2011	MECA	Residential (A) (\$/kWh)	\$0.00229
				Seasonal Residential (AS)	\$0.00229
				Combined Residential	\$0.00229
				General Service (GS)	\$3.10
				Large General Service (LG and LPTOD)	\$74.14
				Primary Service (PSDS)	\$400.99

## Appendix D1: Energy Optimization Surcharges by Company Continued

Company	Case Number	Plan Approved	Group	2012 Energy Optimization Surcharges	
<b>Co-ops</b>					
Thumb Electric Cooperative	U-16686	10/17/2011	MECA	Farm and Home (A) (\$/kWh)	\$0.00216
				Seasonal Residential (A-S)	\$0.00216
				Combined Residential	\$0.00216
				General Service (GS)	\$3.57
				Large General Service (LGS)	\$246.53
				Large Power Dist. Substation (LPDS)	\$276.68
				General Service TOD (GS-TOD)	\$3.57
				Seasonal General Service (SGS)	\$0.52
Tri-County Electric Cooperative	U-16687	11/10/2011	MECA	Farm and Home Service (A) (\$/kwh)	\$0.00204
				General Service	\$1.55
				Irrigation TOD Service (\$/kWh)	\$0.00217
				Large Power Service (CD)	\$47.14
				Large Power TOD Service (CD-1)	\$29.43
				Primary Service (PSDS)	\$1,186.05
<b>Retail Rate-Regulated Natural Gas Providers</b>					
Consumers Energy Company (joint filing)	U-16670	4/17/2012	Independent	Residential Rate A, A-1 (\$/Mcf)	\$0.22010
				Residential Rate GS-1,2 (\$/Mcf)	\$0.15490
				General Service-3 (0-100,000 Mcf)	\$0.1549
				General Service-3 (Above 100,000 Mcf)	\$0.0092
				LT and XLT (0 - 100,000 Mcf)	\$0.1549
				LT and XLT (Above 100,000 Mcf)	\$0.0092
Michigan Consolidated Gas Company	U-16290	11/10/2011	Independent	Residential A, AS (\$/Ccf)	\$0.22570
				Residential 2A, GS1 (\$/Ccf)	\$0.01506
				Large Volume <100,000 Mcf (\$/Ccf)	\$0.01506
				Large Volume >100,000 Mcf (\$/Ccf)	\$0.00113
				School (\$/Ccf)	\$0.01506
				ST, LT, XLT, XXL (\$/Ccf)	\$0.00113
Michigan Gas Utilities Corporation	U-16731	8/25/2011	EU	Residential (\$/Mcf)	\$0.21040
				Multi-Family (\$/Mcf)	\$0.21040
				Sm General Service	\$4.38
				Lg General Service	\$129.13
				Commercial Lighting	\$7.15
				Special Contracts	\$201.88
				Transportation TR-1	\$37.71
				Transportation TR-2	\$110.71
				Transportation TR-3	\$407.06
Northern States Power Co-Wisc.(joint filing)	U-16674	9/13/2011	EU	Residential (\$/therm)	\$0.0182
				C&I GS 302 (\$/meter)	\$3.87
				C&I GS 304 (\$/meter)	\$420.09
				C&I Interruptible Use 303 (\$/meter)	\$31.81
				C&I Transportation (\$/meter)	\$3.87
SEMCO Energy, Inc.	U-16733	8/25/2011	EU	Residential (\$/Dth)	\$0.17890
				GS-1, GS-2, GS-3	\$6.35
				TR-1, TR-2, TR-3	\$87.46
Wisconsin Public Serv. Corp.(joint filing)	U-16676	12/6/2011	EU	Residential (\$/therm)	\$0.0137
				C&I small	\$2.1900
				C&I small seasonal	\$4.3800
				C&I Large	\$30.2400
				Transport Large	\$18.9600
				Transport Super Large	\$449.5500

All Electric Residential Surcharges are Volumetric and All Other Electric Surcharges are Per Meter  
 All Natural Gas Surcharges are Volumetric

## Appendix D2: Residential Energy Optimization Surcharges and Average Monthly Totals

COMPANY	Case Number	EO Residential Surcharge \$/month*	EO Residential Surcharge \$/kwh
<b>IOUs</b>			
Alpena Power Company	U-16669	\$1.77	\$0.00272
Consumers Energy Company	U-16670	\$1.46	\$0.00224
Detroit Edison Company	U-16671	\$1.73	\$0.00266
Indiana Michigan Power Company	U-16673	\$0.88	\$0.00135
Northern States Power Company-Wisconsin	U-16674	\$1.11	\$0.00170
Upper Peninsula Power Company	U-16675	\$2.34	\$0.00360
Wisconsin Public Service Corporation	U-16676	\$1.37	\$0.00210
Wisconsin Electric Power Company	U-16677	\$1.77	\$0.00273
<b>IOU Average:</b>		<b>\$1.55</b>	<b>\$0.00239</b>
<b>Co-ops</b>			
Alger Delta Cooperative Electric Association	U-16678	\$1.70	\$0.00262
Bayfield Electric Cooperative	U-16679	\$0.00	\$0.00000
Cherryland Electric Cooperative	U-16680	\$0.93	\$0.00143
Cloverland Electric Cooperative	U-16681	\$1.28	\$0.00197
Great Lakes Energy Cooperative	U-16682	\$1.29	\$0.00198
Midwest Energy Cooperative	U-16683	\$1.29	\$0.00198
Ontonagon Co. Rural Electrification Assoc.	U-16684	\$1.79	\$0.00275
Presque Isle Electric and Gas Co-op	U-16685	\$1.49	\$0.00229
Thumb Electric Cooperative	U-16686	\$1.40	\$0.00216
Tri-County Electric Cooperative	U-16687	\$1.33	\$0.00204
<b>Co-op Average:</b>		<b>\$1.25</b>	<b>\$0.00192</b>
<b>Municipals</b>			
Village of Baraga	U-16688	\$0.91	\$0.00140
City of Bay City	U-16689	\$0.54	\$0.00083
City of Charlevoix	U-16690	\$0.75	\$0.00115
Chelsea Department of Electric and Water	U-16691	\$0.65	\$0.00100
Village of Clinton	U-16692	\$1.34	\$0.00206
Coldwater Board of Public Utilities	U-16693	\$1.64	\$0.00252
Croswell Municipal Light & Power Department	U-16694	\$1.10	\$0.00169
City of Crystal Falls	U-16695	\$0.95	\$0.00146
Daggett Electric Department	U-16696	\$0.10	\$0.00015
Detroit Public Lighting Department	U-16697	\$0.98	\$0.00150
City of Dowagiac	U-16698	\$0.65	\$0.00100
City of Eaton Rapids	U-16699	\$0.52	\$0.00080
City of Escanaba	U-16700	\$0.90	\$0.00138
City of Gladstone	U-16701	\$1.04	\$0.00160
Grand Haven Board of Light and Power	U-16702	\$0.90	\$0.00138
City of Harbor Springs	U-16703	\$0.81	\$0.00124
City of Hart Hydro	U-16704	\$0.85	\$0.00130
Hillsdale Board of Public Utilities	U-16705	\$1.07	\$0.00164
Holland Board of Public Works	U-16706	\$0.96	\$0.00148
Village of L'Anse	U-16707	\$1.04	\$0.00160
Lansing Board of Water & Light	U-16708	\$1.20	\$0.00185
Lowell Light and Power	U-16709	\$1.06	\$0.00163

Appendix D2: Residential Energy Optimization Surcharges and Average Monthly Totals Continued

COMPANY	Case Number	EO Residential Surcharge \$/month*	EO Residential Surcharge \$/kwh
<b>Municipals</b>			
Marquette Board of Light and Power	U-16710	\$0.71	\$0.00109
Marshall Electric Department	U-16711	\$0.00	\$0.00000
Negaunee Department of Public Works	U-16712	\$1.07	\$0.00164
Newberry Water and Light Board	U-16713	\$0.90	\$0.00138
Niles Utility Department	U-16714	\$1.04	\$0.00160
City of Norway	U-16715	\$1.07	\$0.00164
City of Paw Paw	U-16716	\$0.78	\$0.00120
City of Petoskey	U-16717	\$1.18	\$0.00182
City of Portland	U-16718	\$0.86	\$0.00132
City of Sebewaing	U-16719	\$1.13	\$0.00174
City of South Haven	U-16720	\$0.51	\$0.00079
City of St. Louis	U-16721	\$0.74	\$0.00114
City of Stephenson	U-16722	\$0.83	\$0.00128
City of Sturgis	U-16723	\$0.73	\$0.00112
Traverse City Light & Power	U-16724	\$0.00	\$0.00000
Union City Electric Department	U-16725	\$0.59	\$0.00090
City of Wakefield	U-16726	\$0.79	\$0.00122
Wyandotte Department of Municipal Service	U-16727	\$0.96	\$0.00148
Zeeland Board of Public Works	U-16728	\$1.17	\$0.00180
<b>Municipal Average:</b>		<b>\$0.85</b>	<b>\$0.00131</b>
Retail Rate-Regulated Natural Gas Providers	Case No.	EO Residential Surcharge \$/month^	EO Residential Surcharge \$/Mcf
Consumers Energy Company (joint filing)	U-16670	\$1.83	\$0.22010
Michigan Consolidated Gas Company	U-16730	\$1.88	\$0.22570
Michigan Gas Utilities Corporation	U-16731	\$1.75	\$0.21040
Northern States Power Co-Wisc.(joint filing)	U-16674	\$0.15	\$0.01816
SEMCO Energy, Inc.	U-16733	\$1.49	\$0.17890
Wisconsin Public Serv. Corp.(joint filing)	U-16676	\$0.11	\$0.01370
<b>Natural Gas Provider Average:</b>		<b>\$1.20</b>	<b>\$0.14449</b>
<b>2012 STATE OVERALL AVERAGE:</b>		<b>\$1.21</b>	<b>\$0.04</b>

\* 650 kwh/month customer

^ 83.3 Ccf/month customer

## Appendix D3: Energy Optimization Program Spending

Actual Spending	Total Spend		Residential		Low Income		C&I		Admin & Eval/Carryover	
	2009-2011	2012	2009-2011	2012	2009-2011	2012	2009-2011	2012	2009-2011	2012
<b>Electric IOUs</b>										
1 Alpena	\$711,512	\$510,504	\$174,659	\$130,866	\$58,763	\$19,786	\$338,568	\$147,756	\$198,285	\$231,882
2 Consumers	\$104,546,754	\$67,369,007	\$28,788,757	\$26,057,953	\$5,968,167	\$1,563,654	\$52,743,204	\$32,622,220	\$23,014,793	\$8,688,834
3 DTE Energy Electric	\$117,539,193	\$69,600,000	\$49,522,449	\$32,687,000	\$9,435,000	\$6,240,000	\$52,679,412	\$27,673,000	\$15,337,332	\$9,240,000
4 Indiana Michigan	\$5,432,573	\$4,420,319	\$1,618,532	\$1,650,457	\$369,293	\$227,813	\$2,566,635	\$1,656,801	\$1,247,406	\$1,113,060
5 UP Power	\$2,555,556	\$1,967,085	\$591,824	\$500,839	\$250,427	\$125,234	\$1,058,627	\$616,578	\$905,105	\$849,667
6 Wisconsin Electric	\$983,889	\$931,154	\$218,785	\$231,229	\$86,231	\$51,308	\$394,928	\$231,502	\$370,176	\$468,422
7 WPSCorp	\$553,620	\$381,404	\$126,592	\$82,475	\$38,909	\$16,527	\$230,261	\$162,255	\$196,767	\$136,675
8 Xcel Energy Electric	\$299,179	\$234,475	\$74,242	\$74,511	\$38,319	\$13,420	\$124,042	\$92,803	\$100,895	\$67,161
<b>Subtotal Electric IOUs</b>	<b>\$232,622,276</b>	<b>\$145,413,948</b>	<b>\$81,115,840</b>	<b>\$61,415,331</b>	<b>\$16,245,109</b>	<b>\$8,257,742</b>	<b>\$110,135,677</b>	<b>\$63,202,916</b>	<b>\$41,370,759</b>	<b>\$20,795,702</b>
<b>Electric Coops</b>										
9 Alger Delta	\$201,039	\$148,468	\$153,474	\$43,758	\$23,582	\$3,474	\$43,147	\$8,662	\$4,418	\$96,048
10 Bayfield	\$1,043	\$866	\$700	\$463	\$39	\$31	\$0	\$0	\$343	\$403
11 Cherryland	\$439,729	\$174,515	\$117,837	\$98,649	\$86,858	\$20,806	\$137,375	\$55,060	\$184,517	\$20,806
12 Cloverland/Edison Sault	\$1,327,578	\$904,920	\$460,618	\$274,538	\$87,421	\$28,166	\$529,348	\$440,316	\$337,612	\$190,066
13 Great Lakes	\$2,656,920	\$1,503,475	\$1,094,762	\$727,161	\$208,197	\$51,179	\$531,504	\$475,197	\$1,030,654	\$301,117
14 Midwest	\$1,327,889	\$841,983	\$608,473	\$347,277	\$105,548	\$23,729	\$427,840	\$241,887	\$291,576	\$252,819
15 Ontonagon	\$122,508	\$45,447	\$59,341	\$16,538	\$12,336	\$1,984	\$7,181	\$6,337	\$55,986	\$22,572
16 Presque Isle	\$707,182	\$313,565	\$358,203	\$136,626	\$89,820	\$9,887	\$100,390	\$50,483	\$248,589	\$126,456
17 Thumb	\$375,517	\$227,833	\$213,832	\$132,350	\$49,086	\$13,634	\$59,599	\$31,094	\$102,086	\$64,389
18 Tri-County	\$814,853	\$378,650	\$379,222	\$186,307	\$98,371	\$14,655	\$213,850	\$82,317	\$221,781	\$110,026
<b>Subtotal Electric Coops</b>	<b>\$7,974,258</b>	<b>\$4,539,722</b>	<b>\$3,446,462</b>	<b>\$1,963,667</b>	<b>\$761,258</b>	<b>\$167,545</b>	<b>\$2,050,234</b>	<b>\$1,391,353</b>	<b>\$2,477,562</b>	<b>\$1,184,702</b>
<b>Municipals</b>										
19 Baraga	\$42,794	\$48,700	\$2,981	\$6,643	\$6,507	\$3,636	\$16,623	\$19,948	\$23,190	\$22,109
20 Bay City	\$779,774	\$469,307	\$296,398	\$239,588	\$147,344	\$60,017	\$278,440	\$198,694	\$204,936	\$31,025
21 Charlevoix	\$124,543	\$68,757	\$40,956	\$14,127	\$4,771	\$2,002	\$67,663	\$49,970	\$15,924	\$4,660
22 Chelsea	\$174,424	\$72,410	\$38,292	\$20,313	\$0	\$0	\$124,106	\$44,951	\$12,026	\$7,146
23 Clinton	\$15,365	\$9,465	\$8,954	\$5,992	\$417	\$127	\$2,414	\$1,823	\$3,997	\$1,650
24 Coldwater	\$329,201	\$536,800	\$46,003	\$191,000	\$27,372	\$78,400	\$207,386	\$244,200	\$75,812	\$101,600
25 Croswell	\$74,315	\$43,500	\$16,752	\$5,507	\$5,838	\$2,555	\$38,175	\$31,946	\$19,388	\$6,047
26 Crystal Falls	\$82,466	\$43,440	\$13,354	\$12,643	\$13,466	\$2,391	\$41,827	\$11,680	\$27,285	\$19,117
27 Daggett	\$3,199	\$2,469	\$1,222	\$1,118	\$91	\$172	\$1,501	\$301	\$476	\$1,049
28 Detroit PLD	\$527,650	\$141,860	\$6,230	\$600	\$296	\$550	\$217,071	\$72,180	\$304,349	\$69,080
29 Dowagiac	\$179,237	\$66,347	\$33,814	\$10,122	\$15,431	\$407	\$117,683	\$48,546	\$27,740	\$7,679
30 Eaton Rapids	\$99,978	\$67,040	\$34,236	\$13,839	\$3,677	\$352	\$53,631	\$47,397	\$12,111	\$5,804
31 Escanaba	\$271,926	\$191,237	\$75,310	\$32,571	\$16,727	\$2,546	\$196,616	\$94,476	\$0	\$64,190
32 Gladstone	\$106,122	\$79,460	\$19,920	\$21,287	\$145	\$6,127	\$28,620	\$22,791	\$57,582	\$35,382
33 Grand Haven	\$601,512	\$228,811	\$200,808	\$34,626	\$4,971	\$638	\$363,505	\$181,452	\$37,199	\$12,733
34 Harbor Springs	\$80,329	\$43,205	\$37,400	\$9,284	\$1,314	\$176	\$34,686	\$30,195	\$8,243	\$3,726
35 Hart Hydro	\$65,815	\$38,926	\$15,139	\$4,177	\$824	\$0	\$43,705	\$31,040	\$6,971	\$3,709
36 Hillsdale	\$218,169	\$214,108	\$46,296	\$54,805	\$21,250	\$9,980	\$127,118	\$97,056	\$44,755	\$62,247
37 Holland	\$2,056,460	\$1,066,505	\$528,727	\$236,736	\$64,521	\$50,293	\$1,261,281	\$743,040	\$266,452	\$86,729
38 L'Anse	\$37,661	\$31,114	\$5,927	\$8,949	\$1,065	\$2,218	\$31,399	\$10,788	\$335	\$11,378
39 LBWL	\$5,457,314	\$3,260,845	\$1,665,523	\$1,129,792	\$301,950	\$200,559	\$3,038,274	\$1,817,240	\$753,517	\$313,813
40 Lowell	\$147,825	\$63,247	\$46,048	\$12,499	\$3,010	\$1,425	\$72,579	\$39,416	\$29,198	\$11,332
41 Marquette	\$701,097	\$488,019	\$197,065	\$104,486	\$37,281	\$9,383	\$326,399	\$236,045	\$177,633	\$147,488
42 Marshall	\$137,457	\$55,902	\$30,044	\$9,320	\$936	\$0	\$90,187	\$32,477	\$17,226	\$14,105
43 Negaunee	\$93,777	\$65,940	\$21,282	\$23,690	\$6,936	\$3,127	\$13,986	\$12,584	\$58,509	\$29,666
44 Newberry	\$43,332	\$31,159	\$13,527	\$19,808	\$2,166	\$3,467	\$17,722	\$7,918	\$12,083	\$3,433
45 Niles	\$300,065	\$129,103	\$118,485	\$29,346	\$4,543	\$1,637	\$154,070	\$90,086	\$27,510	\$9,671
46 Norway	\$98,179	\$72,560	\$25,360	\$25,782	\$7,406	\$4,041	\$39,746	\$19,170	\$33,073	\$27,608
47 Paw Paw	\$64,413	\$55,998	\$20,863	\$9,285	\$2,722	\$0	\$33,798	\$42,895	\$9,752	\$3,818
48 Petoskey	\$170,584	\$96,140	\$47,863	\$13,599	\$1,955	\$0	\$108,032	\$76,149	\$14,689	\$6,392
49 Portland	\$80,819	\$41,497	\$37,339	\$16,071	\$754	\$407	\$30,430	\$21,430	\$13,050	\$3,996
50 Sebewaing	\$119,312	\$43,577	\$14,141	\$12,687	\$14,062	\$3,482	\$76,212	\$26,211	\$28,959	\$4,679
51 South Haven	\$281,730	\$260,203	\$81,448	\$54,283	\$5,694	\$10,486	\$166,626	\$94,290	\$33,656	\$111,629
52 St. Louis	\$86,583	\$53,446	\$25,123	\$8,332	\$8,757	\$424	\$45,059	\$39,990	\$16,401	\$5,124
53 Stephenson	\$16,467	\$7,799	\$6,089	\$2,593	\$1,037	\$215	\$6,167	\$2,656	\$4,211	\$2,550
54 Sturgis	\$462,458	\$242,340	\$103,305	\$33,340	\$4,706	\$1,344	\$326,932	\$198,609	\$32,221	\$10,391
55 Traverse City	\$865,596	\$612,250	\$189,610	\$100,341	\$8,889	\$6,236	\$561,296	\$386,186	\$114,690	\$125,723
56 Union City	\$18,295	\$11,577	\$4,155	\$7,635	\$758	\$201	\$11,268	\$3,092	\$2,872	\$850
57 Wakefield	\$18,908	\$6,186	\$8,481	\$2,766	\$3,478	\$442	\$5,410	\$3,214	\$5,017	\$206
58 Wyandotte	\$714,828	\$238,925	\$289,522	\$77,888	\$18,985	\$23,366	\$365,224	\$134,100	\$60,082	\$26,937
59 Zeeland	\$618,228	\$285,371	\$129,192	\$67,538	\$8,012	\$260	\$437,109	\$204,925	\$51,927	\$12,908
<b>Subtotal Municipals</b>	<b>\$16,368,207</b>	<b>\$9,585,545</b>	<b>\$4,540,203</b>	<b>\$2,678,366</b>	<b>\$773,557</b>	<b>\$489,452</b>	<b>\$9,163,353</b>	<b>\$5,451,209</b>	<b>\$2,621,857</b>	<b>\$1,407,271</b>
<b>Subtotal Statewide Electric</b>	<b>\$256,964,741</b>	<b>\$159,539,215</b>	<b>\$89,102,505</b>	<b>\$66,057,364</b>	<b>\$17,779,924</b>	<b>\$8,914,739</b>	<b>\$121,349,264</b>	<b>\$70,045,477</b>	<b>\$46,470,178</b>	<b>\$23,387,674</b>
<b>Gas Companies</b>										
60 Consumers	\$87,207,089	\$48,148,786	\$38,864,179	\$32,165,503	\$24,365,558	\$10,463,836	\$12,462,747	\$10,009,069	\$35,880,163	\$5,973,888
61 DTE Energy Gas	\$48,112,540	\$28,600,000	\$24,356,516	\$19,374,000	\$10,892,000	\$5,993,000	\$6,921,644	\$5,773,000	\$16,834,380	\$3,453,000
62 MGU	\$5,308,430	\$3,671,084	\$1,960,017	\$1,943,767	\$764,999	\$416,556	\$1,245,562	\$884,387	\$2,102,851	\$842,930
63 SEMCO Energy	\$10,285,456	\$6,242,032	\$3,989,488	\$2,628,947	\$1,403,470	\$611,891	\$2,554,121	\$1,733,469	\$3,741,847	\$1,879,616
64 WPSCorp	\$169,938	\$91,685	\$68,671	\$58,964	\$19,956	\$16,886	\$52,118	\$63,143	\$49,149	-\$29,023
65 Xcel Energy Gas	\$218,623	\$109,531	\$58,975	\$44,701	\$40,426	\$15,870	\$60,776	\$29,649	\$98,872	\$35,181
<b>Subtotal Statewide Gas</b>	<b>\$151,302,076</b>	<b>\$86,863,118</b>	<b>\$69,297,846</b>	<b>\$56,214,482</b>	<b>\$37,486,409</b>	<b>\$17,518,040</b>	<b>\$23,296,968</b>	<b>\$18,492,717</b>	<b>\$58,707,262</b>	<b>\$12,155,593</b>
<b>Total Gas and Electric</b>	<b>\$408,266,817</b>	<b>\$246,402,333</b>	<b>\$158,400,351</b>	<b>\$122,271,846</b>	<b>\$55,266,333</b>	<b>\$26,432,779</b>	<b>\$144,646,232</b>	<b>\$88,538,195</b>	<b>\$105,177,440</b>	<b>\$35,543,267</b>

## Appendix E1: Commission Selected Administrator - Efficiency United Funding

Minimum Payments to Efficiency United							
% of Revenue Year	0.75% 2009	1% 2010	1.5% 2011	2% 2012	2% 2013	2% 2014	2% 2015
Alpena*	\$200,594	\$228,990	\$354,942	\$510,504	\$519,207	\$503,660	\$517,181
Baraga	-	-	-	\$48,700	\$48,300	\$48,860	\$48,860
Bayfield	\$240	\$336	\$668	\$866	\$961	\$972	\$972
Crystal Falls	-	-	-	\$43,440	\$45,580	\$45,400	\$45,400
Daggett	\$870	\$1,160	\$1,764	\$2,469	\$2,656	\$2,384	\$2,384
Dowagiac	-	-	-	-	\$136,901	\$136,901	\$136,901
Edison Sault*	\$279,998	\$378,335	\$605,075	-	-	-	-
Gladstone	-	-	-	\$79,460	\$86,480	\$83,600	\$83,600
Harbor Springs	-	-	-	-	\$73,460	\$70,153	\$70,153
Hillsdale	-	-	-	\$214,108	\$212,978	\$240,359	\$240,359
Indiana Michigan	\$1,442,706	\$1,859,141	\$2,706,738	\$4,420,319	\$4,611,002	-	-
L'Anse	-	-	-	\$31,114	\$29,300	\$30,560	\$30,560
Negaunee	-	-	-	\$65,940	\$67,240	\$61,360	\$61,360
Northern States Xcel	\$89,002	\$115,837	\$177,509	\$234,474	\$255,362	\$264,730	\$267,057
Norway	-	-	-	\$72,560	\$71,460	\$75,800	\$75,800
South Haven	-	-	-	\$260,203	\$263,001	\$276,317	\$279,771
UP Power	\$719,362	\$971,884	\$1,433,567	\$1,967,085	\$2,053,607	\$2,100,133	\$2,192,220
Wisconsin Electric*	\$264,328	\$321,835	\$562,277	\$931,154	\$988,197	\$1,020,208	\$1,020,208
WPSCorp	\$139,495	\$215,224	\$289,914	\$381,401	\$408,016	\$416,618	\$410,199
MGU (Gas)	\$1,532,721	\$2,427,332	\$2,983,018	\$3,671,084	\$3,538,718	\$2,491,145	\$2,571,150
SEMCO Energy (Gas)	\$3,218,624	\$4,798,745	\$5,842,220	\$6,242,032	\$6,295,017	-	-
WPSCorp (Gas)	\$49,087	\$72,674	\$93,687	\$91,685	\$97,001	\$77,881	\$87,500
Northern States Xcel (Gas)	\$60,440	\$100,711	\$128,215	\$109,531	\$109,606	\$90,940	\$90,940
<b>Total</b>	<b>\$7,997,466</b>	<b>\$11,492,203</b>	<b>\$15,179,594</b>	<b>\$19,378,129</b>	<b>\$19,914,051</b>	<b>\$8,037,982</b>	<b>\$8,232,575</b>

\*Self-direct deducted in appropriate years

2015 payments are estimates

## Appendix E2: Commission Selected Administrator - Efficiency United Savings Targets

Electric Utilities Incremental Energy Savings Targets (MWh)							
% of Sales Year	0.30% 2008-2009	0.50% 2010	0.75% 2011	1% 2012	1% 2013	1% 2014	1% 2015
Alpena°	973	1,613	2,419	3,244	3,219	3,297	3,373
Baraga	-	-	-	188	184	187	188
Bayfield	0.5	1.0	1.4	1.9	2	2	2
Crystal Falls	-	-	-	164	162	162	162
Daggett	4.6	7.5	11.2	15	14	12	12
Dowagiac	-	-	-	-	634	660	652
Edison Sault°	2,014	3,350	5,026	-	-	-	-
Gladstone	-	-	-	328	321	325	327
Harbor Springs	-	-	-	-	375	375	376
Hillsdale	-	-	-	1,275	1,212	1,205	1,196
Indiana Michigan	9,159	14,952	22,427	29,403	28,743	-	-
L'Anse	-	-	-	137	132	127	123
Negaunee	-	-	-	217	221	222	223
Northern States Xcel	413	687	1,031	1,377	1,392	1,409	1,412
Norway	-	-	-	300	294	293	293
South Haven	-	-	-	1,312	1,315	1,347	1,368
UP Power	2,509	4,242	6,363	8,272	8,137	8,141	8,142
Wisconsin Electric°	8,414	13,200	19,800	26,358	26,709	27,728	26,782
WPSCorp	876	1,395	2,093	2,739	2,734	2,833	2,862
<b>Total</b>	<b>24,362</b>	<b>39,448</b>	<b>59,171</b>	<b>75,334</b>	<b>75,800</b>	<b>48,325</b>	<b>47,493</b>

°Includes self-direct goal in appropriate years

Gas Utilities Incremental Energy Savings Targets (Mcf)							
% of Sales Year	0.10% 2008-2009	0.25% 2010	0.50% 2011	0.75% 2012	0.75% 2013	0.75% 2014	0.75% 2015
MGU	30,172	75,150	150,300	219,898	216,038	210,757	214,838
SEMCO Energy	55,781	140,079	280,158	409,480	402,955	-	-
WPSCorp **	1,544	3,758	7,515	10,946	10,748	11,366	11,652
Northern States Xcel **	885	2,241	4,481	6,499	6,265	6,018	6,032
<b>Total</b>	<b>88,382</b>	<b>221,227</b>	<b>442,454</b>	<b>646,823</b>	<b>636,006</b>	<b>228,141</b>	<b>232,522</b>

\*\* Converted from therms assuming 10 Th = 1 Mcf

2015 targets are estimates

## Appendix F: Process for Updating the Michigan Energy Measures Database

