Energy Optimization 2016 Annual Report for Michigan Electric Municipal Utilities

Introduction

Pursuant to 2008 Public Act 295 (PA 295), the municipal utilities are filing this annual energy optimization (EO) report with the Michigan Public Service Commission (MPSC). This EO annual report consists of two 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 2016.

SECTION 1: PA 295 SECTION 97 AND SECTION 71 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.

Each municipal electric provider has continued to offer Energy Optimization programs to all customer classes. Attachment A provides a list of EO programs offered by each provider and the implementation contractors if applicable.

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.

The number of energy optimization credits (in megawatt hours) generated for 2016 and the targets for 2017 are shown in Attachment B for the municipal utilities. The expenditures for 2016 for the Low Income, Residential, Commercial/Industrial programs and Administration/EM&V can be found in Attachment C. The EO Residential surcharge for each municipal in cost per kilowatt hour (or cost per meter) along with the responsible party for administration of programs is listed in Attachment D.

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.

Each municipal electric utility will submit a copy of this annual report to its governing body; make it available at its office; on its website and a summary to its customers.

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.

The verification of the incremental gross energy savings for each municipal electric utility was performed where funding allowed.

SECTION 2: SUMMARY OF EO PROGRAMS IMPLEMENTED IN 2016

Residential Low Income Services

All the municipal electric utilities continued to offer low income programs to their customers in 2016.

Residential Solutions

All the municipal electric utilities offered programs to their residential customers, examples of the types of programs are listed below.

- Efficient Lighting Program
- Appliance Turn-In and Recycling Program
- Residential Education Services
- Residential HVAC and Appliances
- Audit and Weatherization
- Farm Services
- Residential Home Energy
- New Construction
- Residential Multi-Family In-Unit Efficiency
- Electric Water Heater Savings Kits
- Pilot/Emerging Technology Program

Business Solutions

All the municipal electric utilities offered programs to their commercial and industrial customers, examples of the types of programs are listed below.

- Commercial and Industrial Prescriptive Incentive Program
- Commercial and Industrial Custom Incentive Program
- Multi-Family Common Area Program
- Small Business Direct Install
- New Construction & Remodeling
- Business Education Services
- Pilot/Emerging Technology Program

		1			
Utility	Sector		Program Type	Year Imp.	Implementation Contractors
		1	Residential Low Income	2009	Internally
	Residential	2	Efficient Lighting Program	2009	Internally
Village of		3	Residential Education Services Residential Appliances & HVAC	2009 2009	Internally Internally
Clinton		1	Business Services	2009	Internally
	C & I	2	Education Services	2009	Internally
		Eval	Evaluation & Verification	2009	Local Police Officer
		1	Residential Low Income	2009	Internally
		2	Efficient Lighting Program	2009	Internally
	Residential	3	Appliance Recycling	2009	In transition
	Residential	4	Residential Education Services	2009	Internally
Coldwater		5	Residential Appliances & HVAC	2009	Internally
Board of Public Utilities		7	Residential Pilot Programs Prescriptive Incentive	2009 2009	Internally Internally
		2	Custom Incentive	2009	Internally
	C & I	3	Education Services	2009	Internally
		4	Pilot Programs	2009	Internally
		Eval	Evaluation & Verification	2010	E3M Solutions
		1	Residential Low Income	2009	MEO & Internally
	Residential	2	Efficient Lighting Program	2009	MEO/WECC
		3	Appliance Recycling	2009	MEO/WECC
		4	Residential Appliances & HVAC	2010	MEO/WECC
ansing Board		5	Residential Multi-Family In-Unit Efficiency Residential Education Services	2010 2009	MEO/WECC Internally
of Water &		7	Residential Pilot Programs	2009	Internally
Light	C & I	1	Prescriptive Incentive	2009	Franklin Energy
-		2	Custom Incentive	2009	Franklin Energy
		3	Small Business Direct Install	2011	Franklin Energy
		4	Education Services	2009 2010	Internally
		5 Eval	Pilot Programs Evaluation & Verification	2010	Internally DNV-GL
	Residential	1	Residential Low Income	2009	Internally
		2	Residential Services Residential Education Services	2009 2009	Internally Internally
City of	C & I	1	Prescriptive Incentive	2009	Internally
Marshall		2	Custom Incentive	2009	Internally
		3	Education Services	2009	Internally
		Eval	Evaluation & Verification	2010	Internally
		1	Residential Low Income	2009	Internally
		2	Residential Services	2009	Internally
	Residential	3	Residential Education Services	2009	Internally
		4	Residential Pilot	2010	Internally
Sebewaing		5	Residential Appliances & HVAC Prescriptive Incentive	2010 2009	Internally Internally
		2	Custom Incentive	2009	Internally
	C & I	3	Education Services	2009	Internally
		4	Pilot Programs	2010	Internally
		Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2009	Internally
Union City	Residential	2	Efficient Lighting Program	2009	Internally
Union City Electric		3	Residential Education Services	2009	Internally
Department	001	1	Prescriptive Incentive Program	2009	Internally
	C&I	2 Eval	Education Services Evaluation & Verification	2009 2009	Internally Local Police Officer
				2009	
		1	Residential Low Income	2009	Internally
	Residential	2	Residential Services	2009	Internally
City of		3	Residential Education Services	2009	Internally
Wakefield	~~1	1	Business Services	2009	Internally
	C&I	2	Education Services	2009	Internally

			MECA COLLABORATIVE		
Utility	Sector		Program Type	Year Imp.	Implementation Contractors
		1	Income Qualified	2016	WECC
		2	High Efficiency Products	2016	WECC
	Residential	3	Education Services	2016	WECC
Daggett		4	Pilot Programs	2016	WECC
Electric		5	General Business Services	2016	WECC
Department	C & I	6	Education Services	2016	WECC
	0 0 1	7	Pilot Programs	2016	WECC
		Eval	Evaluation & Verification	2016	DNV-GL
		1	Income Qualified	2009	WECC
		2	High Efficiency Products	2009	WECC
		3	Appliance Recycling	2009	WECC
	Residential	4	Efficient HVAC	2009	WECC
Escanaba		5	Audit & Weatherization / New Construction	2009	WECC
Electric		6	Education Services	2009	WECC
Department		7	Pilot Programs	2009	WECC
· ·		1	General Business Services	2009	WECC
		2	Education Services	2009	WECC
	C & I	3	Pilot Programs	2009	WECC
		Eval	Evaluation & Verification	2009	DNV-GL
		4	Posidential Law Income	2000	WECC
		1	Residential Low Income	2009 2009	WECC WECC
		3	High Efficiency Products	2009	WECC
	Desidential		Appliance Recycling		
Morguette	Residential	4	Efficient HVAC	2009	WECC
Marquette Board of Light		5	Audit & Weatherization / New Construction	2009	WECC
Board of Light & Power		6	Education Services	2009	WECC
a rower		7	Pilot Programs	2009	WECC
		1	General Business Services	2009	WECC WECC
	C&I	2	Education Services Pilot Programs	2009 2009	WECC
		3 Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2009	WECC
		2	High Efficiency Products	2009	WECC
		3	Appliance Recycling	2009	WECC
	Residential	4	Efficient HVAC	2009	WECC
Newberry		5	Audit & Weatherization / New Construction	2009	WECC
Water & Light		6	Education Services	2009	WECC
Board		7	Pilot Programs	2009	WECC
		1	General Business Services	2009	WECC
	C&I	2	Education Services	2009	WECC
	Odi	3	Pilot Programs	2009	WECC
		Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2016	WECC
		2	High Efficiency Products	2010	WECC
		3	Appliance Recycling	2016	WECC
	B	4	Efficient HVAC	2016	WECC
O suth 11	Residential	5	Audit & Weatherization / New Construction	2016	WECC
South Haven		6	Farm Services	2016	WECC
Dept. of Public		7	Education Services	2016	WECC
Works		8	Pilot Programs	2016	WECC
ľ		1	General Business Services	2016	WECC
		2	Education Services	2016	WECC
	C & I	3	Pilot Programs	2016	WECC
		Eval	Evaluation & Verification	2016	DNV-GL
			Desidential Law Income	0000	
		1	Residential Low Income High Efficiency Products	2009 2009	WECC WECC
		3		2009	WECC
	Pooldontial		Appliance Recycling		
	Residential	4	Efficient HVAC	2009	WECC
			Audit & Weatherization / New Construction	2009	WECC WECC
City of			Education Sorvices		
City of Stephenson		6	Education Services	2009	
-		6 7	Pilot Programs	2009	WECC
		6 7 1	Pilot Programs General Business Services	2009 2009	WECC WECC
	C & I	6 7	Pilot Programs	2009	WECC

г			MPPA Collaborative		l
Utility	Sector		Program Type	Year Imp.	Implementation Contractors
		1	Residential Low Income	2009	Internally
		2	Efficient Lighting Program	2009	Internally
		3	Appliance Recycling	2009	Internally
	Residential	4	Residential Education Services	2009	Internally
		5	Residential Appliances & HVAC	2010	Internally
Bay City		6	Residential Home Energy Programs	2010	Internally
Electric Light		8	Electric Water Heater Saving Kits Residential Pilot Programs	2010 2010	Internally Internally
& Power		0	Prescriptive Incentive	2010	Franklin Energy
		2	Custom Incentive	2009	Franklin Energy
		3	Small Business Direct Install	2003	Franklin Energy
	C & I	4	Education Services	2009	Internally
		5	Pilot Programs	2010	Internally
		Eval	Evaluation & Verification	2009	DNV-GL
		1			F
		1	Residential Low Income	2009	Franklin Energy (2015)
	Desident in t	2	Efficient Lighting Program	2009	Franklin Energy
	Residential	3	Appliance Recycling	2009	Franklin Energy
Citv of		4	Residential Education Services Residential Appliances & HVAC	2009 2010	Franklin Energy (2015) Franklin Energy
City of Charlevoix		5	Prescriptive Incentive	2010	Franklin Energy
Chanevula		2	Custom Incentive	2009	Franklin Energy
	C & I	3	Small Business Direct Install	2009	Franklin Energy
	Car	4	Education Services	2009	Franklin Energy (2015)
		Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2009	Franklin Energy (2015)
	Residential	2	Efficient Lighting Program	2009	Franklin Energy
		3	Appliance Recycling	2009	Franklin Energy
		4	Residential Education Services	2009	Franklin Energy (2015)
Chelsea		6	Residential Appliances & HVAC	2010	Franklin Energy
Electric		7	Residential Pilot Programs	2010	Franklin Energy (2015)
Department		1	Prescriptive Incentive	2009	Franklin Energy
		2	Custom Incentive Small Business Direct Install	2009 2011	Franklin Energy Franklin Energy
	C & I	4	Education Services	2011	Franklin Energy (2015)
		5	Pilot Programs	2000	Franklin Energy (2015)
		Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2009	Internally
		2	Efficient Lighting	2009	Internally
	Residential	3	Appliance Recycling	2009	Franklin Energy
	reconcential	4	Efficient Appliances & HVAC	2009	Franklin Energy
Croswell Light		5	Residential Pilot Programs	2009	Internally
& Power		6	Educational Services	2009	Internally Frenklin Energy
		-	Prescriptive Incentive Custom Incentive	2009	Franklin Energy
	C & I	2	Small Business Direct Install	2009 2011	Franklin Energy Franklin Energy
	Udi	4	Education Services	2011	Internally
		4 Eval	Education Services	2009	DNV-GL
		1	Residential Low Income	2009	Franklin Energy (2015)
		2	Efficient Lighting Program	2009	Franklin Energy
		3	Appliance Recycling	2009	Franklin Energy
	Residential	4	Residential Education Services	2009	Franklin Energy (2015)
		5	Residential Pilot Programs	2010	Franklin Energy (2015)
City of Eaton		6	Residential Appliances & HVAC	2010	Franklin Energy
Rapids -		7	Residential Home Energy Program	2012	Franklin Energy (2015)
		1	Prescriptive Incentive	2009	Franklin Energy
		2	Custom Incentive	2009	Franklin Energy
	C & I	3	Small Business Direct Install	2011	Franklin Energy
		4	Education Services Pilot Programs	2009 2010	Internally Internally

			MPPA Collaborative (continu	ied)	-
Utility	Sector		Program Type	Year Imp.	Implementation Contractors
		1	Residential Low Income	2009	МСААА
		2	Efficient Lighting Program	2009	Franklin Energy
		3	Appliance Recycling	2009	Franklin Energy
	Residential	4	Residential Education Services	2009	Internally
		_	Residential Home Energy Program	2012	Internally
Grand Haven		6 7	Residential Appliances & HVAC Residential Multi-Family In-Unit Efficiency	2010	Franklin Energy
Board of Light		8	Residential Pilot Programs	2010 2010	Franklin Energy (2015) Internally
& Power		0	Prescriptive Incentive	2010	Franklin Energy
		2	Custom Incentive	2009	Franklin Energy
	C & I	3	Small Business Direct Install	2011	Franklin Energy
		-	Education Services	2009	Internally
		5 Eval	Pilot Programs Evaluation & Verification	2010	Internally DNV-GL
				2009	DNV-GL
		1	Residential Low Income	2010	Franklin Energy (2015)
		2	Efficient Lighting Program	2009	Franklin Energy
	Residential	3	Appliance Recycling	2009	Franklin Energy
		4	Residential Education Services	2009	Franklin Energy (2015)
City of Hart		5	Residential Appliances & HVAC	2010	Franklin Energy
Hydro Electric		1	Prescriptive Incentive	2009	Franklin Energy
		2	Custom Incentive	2009	Franklin Energy
	C & I	3	Small Business Direct Install	2011	Franklin Energy
		4	Education Services	2009	Internally
		Eval	Evaluation & Verification	2009	DNV-GL
	Residential				Lakeshore Habitat for Humanity, Community
					Action House, Salvation Army, Ottawa
		1	Residential Low Income	2009	Count Community Action Agency
		2	Efficient Lighting Program	2009	Internally (2013)
		3	Appliance Recycling	2009	PADNOS (2015)
		4	Residential Multi-Family In-Unit Efficiency	2009	Internally
		5	Residential Appliances & HVAC	2009	Internally & Franklin Energy
Holland Board		6	Home Energy	2012	Internally
of Public Works		7	Residential Education Services	2009	Internally, National Energy Foundation, West Michigan Environmental Action Council
		1		2003	Internally, Ottawa County Community Action
		8	Residential Pilot Programs	2009	Agency
		1	Prescriptive Incentive	2009	Internally (2015)
		2	Custom Incentive	2009	Internally (2015)
	C & I	3	Small Business Direct Install	2011	Internally (2015)
	Odi	4	Education Services	2009	Internally
		5	Pilot Programs	2009	Internally
		Eval	Evaluation & Verification	2009	DNV-GL
		1	Residential Low Income	2009	Internally
		2	Efficient Lighting Program	2009	Internally
	Residential	3	Appliance Recycling	2009	Franklin Energy
		4	Residential Education Services	2009	Internally
		5	Residential Appliances & HVAC	2010	Franklin Energy
Lowell Light		6	Residential Pilot Programs	2009	Internally
and Power		1	Prescriptive Incentive	2009	Franklin Energy
		2	Custom Incentive	2009	Franklin Energy
	C & I	3	Small Business Direct Install	2011	Franklin Energy
		4	Education Services Pilot Programs	2009	Internally
		5 Eval	Evaluation & Verification	2009	Internally DNV-GL
		Eval 1	Residential Low Income	2009	Franklin Energy (2015)
		2	Efficient Lighting Program	2010	Franklin Energy
	Residential	3	Appliance Recycling	2009	Franklin Energy
	Residential	4	Residential Education Services	2009	Franklin Energy (2015)
		5	Residential Appliances & HVAC	2009	Franklin Energy
Niles Utilities		1	Prescriptive Incentive	2009	Franklin Energy
Niles Utilities Department					
Niles Utilities Department		2	Custom Incentive	2009	Franklin Energy
	C & I	2	Custom Incentive Small Business Direct Install	2009	Franklin Energy Franklin Energy
	C & I	2 3 4	Custom Incentive Small Business Direct Install Education Services	2009 2011 2009	Franklin Energy Franklin Energy Franklin Energy (2015)

MPPA Collaborative (continued)						
Utility	Sector		Program Type	Year Imp.	Implementation Contractors	
		1	Residential Low Income	2009	Franklin Energy (2015)	
		2	Efficient Lighting Program	2009	Franklin Energy	
		3	Appliance Recycling	2009	Franklin Energy	
	Residential	4	Residential Multi-Family In-Unit Efficiency	2009	Franklin Energy	
		5	Residential Education Services	2009	Franklin Energy (2015)	
/illage of Paw		6	Residential Appliances & HVAC	2010	Franklin Energy	
Paw		1	Prescriptive Incentive	2009	Franklin Energy	
		2	Custom Incentive	2009	Franklin Energy	
	C & I	3	Small Business Direct Install	2011	Franklin Energy	
		4	Education Services	2009	Franklin Energy (2015)	
		Eval	Evaluation & Verification	2009	DNV-GL	
		1	Residential Low Income	2009	Franklin Energy (2015)	
		2	Efficient Lighting Program	2009	Franklin Energy	
	Residential	3	Appliance Recycling	2009	Franklin Energy	
		4	Residential Education Services	2009	Franklin Energy (2015)	
0		5	Residential Appliances & HVAC	2010	Franklin Energy	
City of		6	Pilot Programs	2010	Franklin Energy (2015)	
Petoskey		1	Prescriptive Incentive	2009	Franklin Energy	
		2	Custom Incentive	2009	Franklin Energy	
	C & I	3	Small Business Direct Install	2011	Franklin Energy	
		4	Education Services	2009	Franklin Energy (2015)	
		5 Eval	Pilot Programs Evaluation & Verification	2010	Franklin Energy (2015) DNV-GL	
		Eval		2009	DINV-GL	
		1	Residential Low Income	2009	Franklin Energy (2015)	
	Residential	2	Efficient Lighting Program	2009	Franklin Energy	
		3	Appliance Recycling	2003	Franklin Energy	
		4	Residential Education Services	2009	Franklin Energy (2015)	
Portland Light		5	Residential Appliances & HVAC	2010	Franklin Energy	
and Power		1	Prescriptive Incentive	2009	Franklin Energy	
Board	C & I	2	Custom Incentive	2009	Franklin Energy	
		3	Small Business Direct Install	2011	Franklin Energy	
		4	Education Services	2009	Franklin Energy (2015)	
		Eval	Evaluation & Verification	2009	DNV-GL	
		1	Residential Low Income	2009	Franklin Energy (2015)	
		2	Efficient Lighting Program	2009	Franklin Energy	
	Residential	3	Appliance Recycling	2009	Franklin Energy	
	Residential	4	Residential Education Services	2009	Franklin Energy (2015)	
		5	Residential Appliances & HVAC	2010	Franklin Energy	
City of St.		6	Residential Pilot Programs	2010	Internally	
Louis		1	Prescriptive Incentive	2009	Franklin Energy	
		2	Custom Incentive	2009	Franklin Energy	
	C & I	3	Small Business Direct Install	2011	Franklin Energy	
		4	Education Services	2009	Franklin Energy (2015)	
		5	Pilot Programs	2010		
		Eval	Evaluation & Verification	2009	DNV-GL	
		1	Residential Low Income Efficient Lighting Program	2009	Franklin Energy (2015)	
	Residential	2	<u> </u>	2009 2012	Franklin Energy	
	Residential	3	Residential Home Energy Program Residential Education Services	2012	Internally Franklin Energy (2015)	
		4 5	Residential Appliances & HVAC	2009	Franklin Energy (2015)	
City of Sturgis		5	Prescriptive Incentive	2010	Franklin Energy	
Sity of Sturyis		2	Custom Incentive	2009	Franklin Energy	
		3	Small Business Direct Install	2009	Franklin Energy	
	C & I	4	Pilot Programs	2011	Internally	
				2010	Franklin Energy (2015)	
		5	Education Services	7009	IF FANKIIN ENERGY (2015)	

-	MPPA Collaborative (continued)							
Utility Sector			Program Type		Implementation Contractors			
		1	Residential Low Income	2009	Franklin Energy (2016)			
		2	Efficient Lighting Program	2009	Franklin Energy (2016)			
	Residential	3	Appliance Recycling	2009	Franklin Energy (2016)			
	Residential	4	Residential Education Services	2009	Franklin Energy (2016)			
Traverse Citv		5	Residential Appliances & HVAC	2009	Internally & Franklin Energy			
Light and		6	Residential Pilot Programs	2009	Internally & Franklin Energy (2015)			
Power		1	Prescriptive Incentive	2009	Franklin Energy (2016)			
Power		2	Custom Incentive	2009	Franklin Energy (2016)			
	C & I	3	Small Business Direct Install	2011	Franklin Energy (2016)			
	Cal	4	Education Services	2009	Franklin Energy (2016)			
		5	Pilot Programs	2009	Franklin Energy (2016)			
		Eval	Evaluation & Verification	2009	DNV-GL			
•			-	÷				
	Residential	1	Residential Low Income	2009	Internally			
		2	Efficient Lighting Program	2009	Internally			
		3	Appliance Recycling	2009	Franklin Energy			
		4	Residential Education Services	2009	Internally			
Wyandotte		5	Residential Pilot Programs	2009	Internally			
Municipal		6	Residential Appliances & HVAC	2010	Franklin Energy			
Services		1	Prescriptive Incentive	2009	Franklin Energy			
		2	Custom Incentive	2009	Franklin Energy			
	C & I	3	Pilot Programs	2009	Internally			
		4	Education Services	2009	Internally			
		Eval	Evaluation & Verification	2009	DNV-GL			
		1	Residential Low Income	2009	Franklin Energy (2015)			
		2	Efficient Lighting Program	2009	Franklin Energy			
	Residential	3	Appliance Recycling	2010	Franklin Energy			
	Residential	4	Residential Education Services	2009	Internally			
Zeeland Board		5	Residential Appliances & HVAC	2010	Franklin Energy			
of Public		6	Residential Pilot Programs	2009	Internally			
Works		1	Prescriptive Incentive	2009	Franklin Energy			
		2	Custom Incentive	2009	Franklin Energy			
	C & I	3	Small Business Direct Install	2011	Franklin Energy			
		4	Education Services	2009	Internally			
		Eval	Evaluation & Verification	2010	DNV-GL			

MWh Data

		1.00%		
Electric Municipals	2016 Target	2016 Actual	% Achieved	2017 Target
Bay City Electric Light & Power	2,714	3,562	131%	2,437
City of Charlevoix	413	378	92%	649
Chelsea Electric Department	909	1,143	126%	727
Village of Clinton	191	192	100%	216
Coldwater Board of Public Utilities	2,858	3,208	112%	3,536
Croswell Light & Power Department	328	541	165%	142
Daggett Electric Departmemt	11	16	141%	11
City of Eaton Rapids	282	186	66%	641
Escanaba Electric Department	1,393	1,800	129%	1,406
Grand Haven Board of Light and Power	2,735	4,013	147%	1,457
City of Hart Hydro Electric	368	418	114%	383
Holland Board of Public Works	8,153	13,235	162%	5,763
Lansing Board of Water & Light	16,469	26,167	159%	16,791
Lowell Light and Power	654	1,222	187%	540
Marquette Board of Light and Power	2,998	3,528	118%	3,015
City of Marshall Electric Department	1,050	1,053	100.3%	1,058
Newberry Water & Light Board	174	177	102%	174
Niles Utilities Department	1,251	1,212	97%	1,346
Village of Paw Paw	22	384	1745%	33
City of Petoskey	930	1,288	138%	772
Portland Light and Power Board	139	482	347%	19
Sebewaing Light & Water Dept.	228	819	359%	227
South Haven Dept. of Public Works	1,348	1,609	119%	1,349
City of St. Louis	163	105	129%	433
City of Stephenson	60	77	128%	60
City of Sturgis	1,946	3,047	157%	1,177
Traverse City Light & Power	3,381	5,053	149%	1,646
Union City	132	229	173%	120
City of Wakefield				
Wyandotte Municipal Services	1,607	1,036	64%	3,599
Zeeland Board of Public Works	2,187	2,529	116%	2,821

ATTACHMENT C

Actual 2016 Expenditures

Electric Municipals	Total	Residential	Residential	C&I	Low Income	Admin &
Electric Municipals	2016	W/O Low Income	W/Low Income			Eval
Bay City Electric Light & Power	\$483,679	\$171,262	\$223,126	\$234,173	\$51,864	\$26,380
City of Charlevoix	\$70,024	\$20,434	\$26,650	\$38,864	\$6,216	\$4,510
Chelsea Electric Department	\$137,078	\$25,211	\$29,066	\$102,280	\$3,855	\$5,732
Village of Clinton	\$20,269	\$7,825	\$8,017	\$9,952	\$192	\$2,300
Coldwater Board of Public Utilities	\$306,179	\$20,249	\$22,274	\$185,081	\$2,025	\$98,824
Croswell Light & Power Department	\$43,031	\$841	\$934	\$38,667	\$93	\$3,430
Daggett Electric Department	\$2,356	\$854	\$1,148	\$822	\$294	\$386
City of Eaton Rapids	\$81,125	\$21,556	\$26,792	\$49,813	\$5,236	\$4,520
Escanaba Electric Department	\$200,334	\$56,998	\$63,656	\$130,266	\$6,658	\$6,412
Grand Haven Board of Light and Power	\$460,912	\$145,962	\$155,748	\$285,642	\$9,786	\$19,522
City of Hart Hydro Electric	\$55,703	\$7,762	\$10,840	\$41,086	\$3,078	\$3,777
Holland Board of Public Works	\$972,127	\$210,606	\$245,818	\$655,545	\$35,212	\$70,764
Lansing Board of Water & Light	\$4,292,040	\$1,154,983	\$1,373,923	\$2,312,594	\$218,940	\$605,523
Lowell Light and Power	\$108,249	\$16,304	\$17,288	\$83,399	\$984	\$7,562
Marquette Board of Light and Power	\$436,013	\$133,303	\$142,169	\$279,982	\$8,866	\$13,862
City of Marshall Electric Department	\$57,393	\$14,906	\$15,353	\$30,145	\$448	\$11,895
Newberry Water & Light Board	\$26,285	\$7,635	\$8,108	\$15,134	\$473	\$3,043
Niles Utilities Department	\$185,144	\$83,672	\$93,757	\$84,131	\$10,085	\$7,256
Village of Paw Paw	\$89,558	\$18,147	\$23,096	\$62,531	\$4,949	\$3,931
City of Petoskey	\$160,906	\$33,310	\$43,489	\$110,987	\$10,179	\$6,430
Portland Light and Power Board	\$74,887	\$35,073	\$37,337	\$33,931	\$2,264	\$3,619
Sebewaing Light & Water Dept.	\$60,352	\$9,994	\$13,033	\$41,919	\$4,082	\$5,400
South Haven Dept. of Public Works	\$194,657	\$61,651	\$64,509	\$121,016	\$2,858	\$9,132
City of St. Louis	\$64,676	\$17,411	\$21,347	\$39,292	\$3,936	\$4,037
City of Stephenson	\$12,503	\$6,401	\$6,928	\$4,379	\$527	\$1,196
City of Sturgis	\$309,302	\$88,134	\$100,107	\$198,022	\$11,973	\$11,173
Traverse City Light & Power	\$500,689	\$80,601	\$83,917	\$409,363	\$3,316	\$7,409
Union City	\$17,622	\$5,063	\$5,219	\$8,978	\$157	\$3,425
City of Wakefield						
Wyandotte Municipal Services	\$269,562	\$75,517	\$88,532	\$170,273	\$13,015	\$10,757
Zeeland Board of Public Works	\$353,324	\$56,748	\$67,528	\$274,464	\$10,780	\$11,332

Energy Optimization Administration and Residential Surcharges for 2016							
			EO Residential				
Electric Municipals	Docket No.	Administration	Surcharge per				
	DOCKET NO.	2016	\$/kWh or Per				
			Meter				
Bay City Electric Light & Power	U-17382	MPPA	0.000825				
City of Charlevoix	U-17383	MPPA	\$0.00178				
Chelsea Electric Department	U-17384	MPPA	\$0.00100				
Village of Clinton	U-17385	Independently	\$0.00000				
Coldwater Board of Public Utilities	U-17386	Independently	\$0.00252				
Croswell Light & Power Department	U-17387	MPPA	\$0.00169				
Daggett Electric Department	U-17389	MECA	\$0.01280				
City of Eaton Rapids	U-17392	MPPA	\$0.00080				
Escanaba Electric Department	U-17393	MECA	\$0.00216				
Grand Haven Board of Light and Power	U-17395	MPPA	\$0.00180				
City of Hart Hydro Electric	U-17397	MPPA	\$0.00130				
Holland Board of Public Works	U-17399	MPPA	\$0.00166				
Lansing Board of Water & Light	U-17401	Independently	\$0.00185				
Lowell Light and Power	U-17402	MPPA	\$0.00163				
Marquette Board of Light and Power	U-17403	MECA	\$0.00171				
City of Marshall Electric Department	U-17404	Independently	\$0.00000				
Newberry Water & Light Board	U-17406	MECA	\$0.00137				
Niles Utilities Department	U-17407	MPPA	\$0.00000				
Village of Paw Paw	U-17409	MPPA	\$0.00120				
City of Petoskey	U-17410	MPPA	\$0.00182				
Portland Light and Power Board	U-17411	MPPA	\$0.00132				
Sebewaing Light & Water Dept.	U-17412	Independently	\$0.00174				
Southhaven Dept. of Public Works	U-17413	MECA	\$0.00161				
City of St. Louis	U-17414	MPPA	\$0.00114				
City of Stephenson	U-17415	MECA	\$0.00224				
City of Sturgis	U-17416	MPPA	\$0.00191				
Traverse City Light & Power	U-17417	MPPA	\$0.00000				
Union City	U-17418	Independently	\$0.00090				
City of Wakefield	U-17419	Independently	\$0.00170				
Wyandotte Municipal Services	U-17420	MPPA	\$0.00197				
Zeeland Board of Public Works	U-17421	MPPA	\$1.00 Per Meter				