

Instructions for Completing the Self-Directed EO Annual Report (2015)

Dates to remember:

- The report is due no later than March 1, 2016
- Utility notification of deficiencies should be mailed by March 23, 2016
- Final report, with deficiencies remedied should be submitted by April 13, 2016

Step 1

Complete "Summary Table" Tab. Some of this information may be copied from your original plan form. Only enter data for 2015.

When pasting from original plan form, be sure to use 'Paste Values' rather than generic paste to assure values, and not formulas/formats are copied to the new spreadsheet.

Row numbering may be repaired on all sheets except the Savings Calculations tab by copying and pasting cell A2 down the sheet or dragging the corner of a previous cell.

Terminations and Amendments - Prorate minimum and planned savings using the "Prorated Savings Worksheet". Insert the prorated values in the Summary Table.

- Example: Prorated Savings = (original savings) x (days/365) + (amended savings) x (1-days/365). Days = days from January 1 to the date of termination approval.
- For assistance see the "Prorated Savings Worksheet" tab.

Step 2

Complete "Detail Table" Tab (one row per project or measure). Site description and account information can be copied from your original plan form "Detail Table".

Rows may be added or deleted to include more or fewer projects as covered by your report. Verify cells calculate and total as intended when adding rows.

- First insert a row in the middle of the table then copy and paste an entire row from the row just above that location to obtain the correct formatting.

Step 3, If excess savings are available to carry forward from projects implemented in 2012 and will be carried forward past one additional year, please fill out the Carry Forward Worksheet.

Step 4 Provide Reliable Estimates of Energy Savings For Each Measure:

A) Overview: Provide energy savings and calculations for each measure (project) using one of the three methods described in Step 3B. Label each calculation with an Attachment Ref. number and include the attachment number on the "Detail Table". Include company name, and date. Attachments should be clearly labeled using the convention A09, B09, C09 etc. for Plan Year 2009 and A10, B10, C10 etc. for Plan Year 2010. Provide formulas used for calculating savings: Example: Lighting
KWh Saved = (watts before - watts after) * operating hours/1000

B) Documentation may be done in three ways or in any combination:

1. Provide the calculation for each measure using the forms provided, see "Savings Calculations" tab. Free format for each measure can include text, calculations and tables.
2. Provide the calculations by inserting an additional worksheet according to instructions below. Please include company name, Ref number, and date.
3. If option 1 or 2 above is not your preference, please provide the calculations as separately labeled attachments. Please include company name, Ref number, and date.

C) Measure Life: provide an estimate of useful life based in years. See examples in the "Measure Life Reference" tab.

D) Calculations should be developed using acceptable engineering calculation techniques supported by site-specific operating and equipment performance documentation and or test measurements. Include documentation such as model numbers, load, efficiency, operating hours that supports your base line (before) energy use. For guidance, see your utilities Energy Optimization Program Policies and Procedures Manual Guidelines for Calculating and Documenting Energy Savings of Custom Measures. This document may be found on your utilities Web site for Energy Efficiency programs, look for Custom Measures. Information can also be found in the manual that supports the use of building modeling software.

E) Editing within the "Savings Calculation" tab

- Rows may be added or deleted to include more or fewer calculations as covered by your plan.
- Verify cells calculate as intended.

F) Adding a Worksheet: You may need to copy Excel worksheets from other documents. Below are instructions for doing this.

- To copy/move calculation sheet from other workbook.

- 1) Make sure you are in workbook with the worksheet you want to move or copy.
- 2) Right-click on tab of worksheet you want to move or copy.
- 3) In the menu that pops up, select "Move or copy..."
- 4) In the pop-up window, under "To Book:" use the pull down menu and select the name of the workbook you want to move the worksheet to.
- 5) In the same pop-up window, under "Before Sheet:" use the pull down menu and select "Custom Calculations"
- 6) In the same pop-up window, if you would like to maintain a copy of this worksheet in the existing file, check the "Copy" box.
- 7) Hit "OK"

Note: if you didn't get the tab in the right spot, click and hold the cursor over the tab you want to move and move left or right to the spot desired (location is indicated by little black arrow that appears).

G) Proof of Purchase (optional) - Attach invoices or other documentation with attachment reference number and company name on top of each.

Step 5

Sign and date the report (see "Summary Table"). The report must be signed by an official of the customer having knowledge of the report content and responsibility for its implementation and administration attesting that the information provided is true and accurate to the best of their knowledge.

Savings Evaluation: The MPSC may request additional information from the provider or customer as necessary to validate savings as provided by MCL 460.1093(10).

If the Commission has reason to believe that the information provided is incomplete or inaccurate, the Commission may initiate a contested case proceeding in accordance with . MCL 460.1093(11)

Printing: To coordinate page numbering, use the following print options: >File>print>entire work book

A. Filing Requirements for Self-Directed Customers

- 1) By March 1 of each year, self-directed customers shall file completed annual reports with the electric provider using this template. Self-directed customers shall comply with the Self-Direct Energy Optimization Plan reporting requirements to retain the exemption from energy optimization surcharges.
- 2) In order to verify energy savings achieved by the plan, the MPSC may require submission of copies of invoices, vouchers, contracts or other documentation of energy efficient equipment or services obtained by the customer. A customer may attach copies of these documents to its annual report.
- 3) Projected incremental energy savings shall be presented on a calendar year basis for savings measures implemented that year. Measures implemented part-way through the year may be annualized for calculating energy savings accrued for the year.
- 4) Excess savings from energy optimization measures installed in 2011 or later, may be claimed in, or deferred to, a successive plan year not to exceed four consecutive years following the plan year in which the savings occurred. Measures eligible for deferral shall have a measure life of six or more years and shall not constitute changes in maintenance only, or changes in operating practices that are not accompanied by new physical energy management controls or systems. Excess savings deferred to a future plan year must begin with the first successive year and shall be used in the shortest time period possible. Excess savings shall not be deferred to years that exceed the term of the self directed plan. Excess savings shall expire upon termination of an entire self-direct plan. The customer shall report the distribution of excess savings in the first annual report to the provider following installation of the eligible measure. Once declared, the savings distribution shall not be revised. Providers may claim deferred savings of eligible self- directed electric customers in the provider's incremental savings goal consistent with the distribution provided in plans and reports of eligible self-directed electric customers.
- 5) The annual report must be signed by an official of the customer having knowledge of the report content and responsibility for its implementation and administration attesting that the information provided is true and accurate to the best of his or her knowledge.

Self Direct Energy Optimization (EO) Annual Report - 2015

Submit complete form by March 1, 2016

Qualifications: _____ 1 MW single site or, _____ 1 MW sites aggregated, # of sites aggregated _____
Legal Name of business: _____ **Plan # (if provided):** _____
Mailing Address of Signatory: _____
Business phone number: _____ **Fax number:** _____ **e-mail:** _____

Summary Table

Plan Year	Minimum EO Performance Standard (%)	*Minimum Incremental Annual Savings to meet the EO Performance Standard (MWh) (a)	*Planned (targeted) Incremental Annual Energy Savings in MWh (normalized) (b)	Reported Annual Energy Savings in MWh. (value should be > (a) to avoid penalties). Fills from "Detail Table"
2015	1.00%			0.0

**Completed By
Provider:**

Actual Savings
Exceeds Minimum
Annual Savings
(Yes/No)

* Check here if sites were terminated or savings were amended during the reporting period and complete the "Prorated Savings Worksheet". Include a copy of the worksheet with your report and insert prorated values for (a) and (b). Otherwise insert values for (a) & (b) as submitted in your plan.

Remedy of Report Deficiency: The provider will notify the customer of any deficiency. The customer must remedy the deficiency by April 13, 2016. Please work with your provider as soon as possible as often it takes several interactions to correct the deficiency.

Customer:
 Authorized Name (print): _____
 *Signature: _____
 Title: _____
 Date: _____
 e-mail: _____ fax: _____

Energy Optimization Service Company, if any
 Authorized Name (print): _____
 *Signature: _____
 Title: _____
 Date: _____
 e-mail: _____ fax: _____
 Phone: _____

* This signature is an affirmation that: I am responsible for the plan implementation, the information provided herein is true and correct to the best of my knowledge, and I acknowledge that the Commission may request additional information for validation purposes in accordance with MCL 460.1093.

Additional Customer Contact (optional):
 Name: _____
 Title: _____
 e-mail: _____ fax: _____
 Phone: _____

Provider Contact Information: (optional):
 Name: _____
 Title: _____
 e-mail: _____ fax: _____
 Phone: _____

Prorated Energy Savings Worksheet - 2015

(Complete this worksheet if you had a termination or amended a plan in 2015)

Plan Terminations and Amendments Year 2015

Description	Minimum Annual Savings to meet the EO Performance Standard (MWh)	Planned (targeted) Annual Energy Savings (MWh)	* Start Date	** End Date	Number of Days Active	Prorated Minimum Annual Savings to meet the EO Performance Standard (MWh)	Prorated Planned Annual Energy Savings in MWh
Savings targets in effect as of January 1, 2015 ***			1/1/2015		0.0	0.00	0.00
Amendment Number 1 or Full Termination in 2015					0.0	0.00	0.00
Amendment Number 2 or Full Termination in 2015					0.0	0.00	0.00

TOTAL (input data to be inserted into the "summary table" items (a) and (b) = 0.0 0.00 0.00

* Start date is the first day of the year or the earlier of one of the following: 1) the date a termination was approved or 2) the date a plan amendment was approved.

** End date is the last day of the year or the earlier of one of the following: 1) the day before a termination was approved or 2) the day before a plan amendment was approved.

*** The initial savings target can be from a plan amendment or your original plan which ever was in effect at the beginning of the year.

Terminated Site List

+ Site Description: (Name, Service Address, for each site terminated)	*Account (A-..) and/or Meter (M-..) Number(s) and electric rate code (R-..)	Date of Termination

+ List any partial terminations (individual sites). For full termination the "site description" should say "Full Termination" site specific data is not required.

Customer Name: _____

Plan # (if provided): _____

2015 Implemented Energy Savings Measures (Minimum Performance Standard 1.0%)

ID	Site Description: (Name, Service Address, for each site)	*Account (A-..) and/or Meter (M-..) Number(s) and electric rate code (R- ..) of each site	Description of the Energy Savings Measure	** Date of Project Implementation (became operable).	Estimated Life of the Energy Savings Measure (Years)	Savings Calculation Attachment Reference Number (A09, B09, etc.)	Actual Annual Energy Savings as Provided on the Attachment in MWh
Excess Savings Carried Forward to 2015 from prior years (see your 2012, 2013 and/or 2014 Annual Reports)							
1							
2							
3							
4							
Total Savings 2015 (Actual + Excess Savings Carried Forward to 2015)							0.0
Excess Savings to be Carried Forward to 2016 (Use Carry Forward Worksheet if savings will be carried forward past one additional year), see note 2							
Reported Savings 2015 (=Total - Excess from 2015)							0.0

* Check with provider. Consumers Energy requires Account numbers (A-..). Detroit Edison requires electric Account and Meter numbers (M-..). All require rate code (R-..). Information may be found on your utility bill.

NOTE:

1) Site and Account can be copied and pasted from your original application for 2015

2) Excess savings may be carried forward to a successive plan year not to exceed four consecutive years following the plan year in which the savings occurred. Excess savings must be used in the shortest time period possible. To be eligible, excess savings must come from projects having a measure life of six or more years.

3) See Instructions Tab, Step 2, to insert additional rows for more sites.

**** Savings are incremental for each year. Projects must be implemented (become operable) in the year savings are claimed to be counted.**

2015 Excess Savings Carry Forward Worksheet

(Complete this worksheet if you are carrying savings forward past one additional year)

Excess savings deferred to a future plan year must begin with the first successive year and shall be used in the shortest time period possible. Excess savings shall not be deferred to years that exceed the term of the self-directed plan. Excess savings shall expire upon termination of an entire self-directed plan. The customer shall report the distribution of excess savings in the first annual report to the provider following installation of the eligible measure. Once declared, the savings distribution shall not be revised.

Excess Savings to Carry Forward From Projects Implemented in 2015

As Declared in 2016

2015 Total of Excess Savings to be Carried Forward (Not more than 4 additional years from implementation)* =	0
Excess Savings to be Carried Forward to 2016 =	
Excess Savings to be Carried Forward to 2017 =	
Excess Savings to be Carried Forward to 2018 =	
Excess Savings to be Carried Forward to 2019 =	
Total Excess =	0

Project Savings Calculations

Customer Name: _____ **Plan # (if provided):** _____

(Review the "Instructions" tab, step 3, on Project Savings Calculations before you begin)

Proof of Purchase (optional) - Attach invoices with reference numbers.

Attachment Ref: _____

(Ref # convention A09, B09, C09 etc. for Plan Year 2009 and A10, B10, C10 etc. for Plan Year 2010)

Project Description:

Describe Base Line Conditions (before):

Key Assumptions:

Calculation:

Project Savings Calculations

Customer Name: _____ **Plan # (if provided):** _____

Attachment Ref: _____

Proof of Purchase (optional)- Attach invoices with reference numbers.

(Ref # convention A09, B09, C09 etc. for Plan Year 2009 and A10, B10, C10 etc. for Plan Year 2010)

Project Description:

Describe Base Line Conditions (before):

Key Assumptions:

Calculation:

Energy Conservation measure/Equipment Median Service Life (years)

Measure	ASHRAE Value (1995)	CPUC (2001)	MI Deemed Savings Value (2010)	Measure	ASHRAE Value	CPUC (2001)	MI Deemed Savings Value (2010)	Measure	ASHRAE Value	CPUC (2001)	MI Deemed Savings Value (2010)
Building Envelope				Domestic Hot Water				Furnaces			
Air curtain 10	10			Heat-pump water heater	10		15	gas - or oil-fired	18	20	15
Blanket insulation 24	24	20		Point-of-use water heater	12		15	Heat Exchangers			
Molded insulation 20	20	20		Solar water heater	15		20	shell and tube	24		
Solar shade film 7	7	10	10	HE Gas water heater		15	15	Heat Pumps			
Tinted and reflective coating 14	14	20	20	Water Heater Controls		15	15	Commercial air-to-air	15	15	15
Electric Transformers				Standard Hot Water Boiler		20	20	Commercial water-to-air	19	15	15
Electric Transformers	30			Air Washers				Residential air-to-air	15	15	15
Air Conditioners				Air Washers	17			Valve Actuators			
Commercial through-the-wall	15	15	15	Air Terminals				Hydraulic 15	15		
Residential single or split pkg	15	15	15	Diffusers, grilles, and registers	27			Pneumatic 20	20		
Roof-top multizone	15	15	15	Induction and fan-coil units	20			Self contained	10		
Roof-top single-zone	15	15	15	Low-leakage damper	9			Pumps			
Water-cooled package	15	15	15	V A V and double-duct boxes	20			Base mounted	20		15
Window unit	10		12	Variable inlet vane dampers	20			Condensate	15		15
Condensers				Ductwork	30			Pipe mounted	10		15
Air-cooled	20		15	Air side economizer	10			Sump and well	10		15
Evaporative	20	20	15	Dampers	20			Thermal Energy Storage Systems			
Cooling Towers				Coils				Ice	19		
Ceramic or FRP	34			DX, water, or steam	20			Water	20		
Galvanized metal	20			Electric	15			Heat Recovery			
Var.-pitch cooling tower fan	13			Turbines and Boilers Hot Water				Heat recovery from refrigeration Condensers	11		
Wood	20			Cast iron	35		20	Plate-typelheat-pipe recovery system	14		
Chiller strainer cycle economizer	15			Electric	15		20	Rotary-type wheel heat recovery system	11		
Water side economizer	11			Steel fire-tube	25	20	20	Makeup air unit for exhaust hood	10		
Lighting Peripherals				Steel water-tube	24	20	20	Package Chillers			
Dimming systems	20			Burners	21			Absorption	23		
Ballast - all types	12	16		Turbines and Boilers Steam				Centrifugal	23	20	20
Lighting fixture - fluorescent - HID - ETC	20	16	12	Cast iron	15			Reciprocating	20	20	20
Motion sensor	10	8		Electric	15			Scroll or screw	20	20	20
On-off switching	7			Steel fire-tube	25			Radiant Heaters			
LED Exit		16	12	Steel water-tube	24			Electric or gas	10		
Delamping		16	12	Burners	21			Hot water or steam	25		
T8 Fixture		16	12	Steam traps	7			Compressors and Engines			
Photocell		9		Steam turbines	30			Compressors	20		
Timer Controls		8		Fans				Engines	20		
T5 Fixture		16	12	Axial	20			Unit Heaters			
Induction Fixture		16		Centrifugal	25			Electric or gas	13		
Lighting Controls		16		High-inlet/low-discharge-type air destratification	15			Hot water or steam	20		
Daylighting Controls		16		Paddle-type air destratification	10			Motors and Drives			
Lighting Power Density		16		Propeller	15			Motor starters	18		
Lighting				Ventilating roof-mounted	20			Standard electric motor	15		15
Incandescent	1,000			Refrigeration				Variable-speed DC motor	18		
Compact Fluorescent	10,000	8	2	Automatic cleaning system for condenser tubes	15			Variable-speed drive-belt type	10		
Standard Fluorescent-8'	12,000			Condenser floating head pressure control	10	16	15	Variable-speed drive-solid state	15	15	15
Standard Fluorescent-4'	20,000			Hot gas bypass defrost	10			Roofing			
High Pressure Sodium	18,000			Polyethylene strip curtain	3	4	4	Natural Slate	60.3		
Metal Halide	20,000			Refrigeration case cover	11			Clay Tile	46.7		
Pulse-Start Metal Halide	20,000			Unequal parallel refrigeration	14			Metal Panel	26.4		
Ceramic Metal Halide	9,000			Auto Closer for Cooler/Freezer		8		Coal-tar Organic BUR	23		
Induction	100,000			Door Gaskets		4		Coal-tar Glass BUR	11.2		
LED	100,000			Heatless Door		16		Asphalt Glass Shingles	17.7		
Halogen Lamp		0.6		Humidistat Control for Anti-Sweat Heater		12		Asphalt Organic Shingles	17.5		
Other				Insulation on Refrigeration Suction Line		11		Asphalt Glass BUR	16.7		
Cooking Equipment		12		Night Covers for Display Cases		5		SBS Modified Asphalt	15.9		
Thermal Night Curtains		5						Aspalt Organic BUR	14.7		

Information	1	PSC Evaporator Motor – Walk-in/Display	16	EPDM	14.2		
High Efficiency Motors	15	Refrigeration Case Doors – Glass/Acrylic	12	PVC	13.8		
Variable Frequency Drives	15	Refrigerator Case with Doors	16	CSPE-CPE	12.8		
Process Overhaul	20	Refrigerator Condensate Evaporator – Elec/Non Elec	8	EP-TPO	12.7		
Pump Test	15	Strip Curtains for Walk-Ins	4	Polyisobutylene	10.6		
System Controls	15	Ballast: Electronic, for display case	16	Cool Roof			20
Plug Load Sensor	10	Defrost	16	Controls			
High Efficiency Engine	15	FHP & EFF Conditioner	16	Computer-logic EMS	13	15	15
Kiln/Oven/Furnace	20	High-efficiency Liquid Suction Heat Exchangers	16	Deadband thermostat	13		
Thermal Night Curtains	5	Night Shields on Refrigerator and Freezer Cases	16	Electric controls	16		
Custom Measures – SPC	15	Refrigerator: Evaporative Fan Controller	5	Electronic controls	15		
Local Government Initiatives	11	Supermarket Systems	14	Pneumatic controls	20		
Extrusion Equipment	15	Thermal Night Curtains	5	Time clocks	10		
Audits	3						