

**Lansing Board of Water & Light
Renewable Energy Plan Annual Report for 2011
MPSC Case No. U-16619**

SECTION 1: PA 295 SECTION 51 SUBSECTIONS 1-3 REQUIREMENTS

Section 51. (1) By a time determined by the commission, each electric provider shall submit to the commission an annual report that provides information relating to the actions taken by the electric provider to comply with the renewable energy standards. By that same time, a municipally-owned electric utility shall submit a copy of the report to the governing body of the municipally-owned electric utility, and a cooperative electric utility shall submit a copy of the report to its board of directors.

The BWL has taken the following actions to comply with the REP standards:

- Filed the Renewable Energy Plan Biennial Review (U-16619) on July 1, 2011 as required by PA 295; and on October 4, 2012 the MPSC issued an order that found the BWL’s plan complies with PA 295.
- Continuing to pursue a biomass test burn in our existing generation boilers through a co-firing process.
- Pursuing potential wind energy options and installed a wind monitoring system in October of 2011 to measure wind speed and direction at multiple elevations.
- Evaluating refurbishment of BWL owned hydro facilities.

(2) An annual report under subsection (1) shall include all of the following information:

(a) The amount of electricity and renewable energy credits that the electric provider generated or acquired from renewable energy systems during the reporting period and the amount of renewable energy credits that the electric provider acquired, sold, traded, or otherwise transferred during the reporting period.

Electricity	Renewable Energy Generated or Acquired Including Michigan Incentive REC	REC Sold, Traded or Otherwise Transferred
MWh	REC	REC
87,676	98,514	0

(b) The amount of electricity that the electric provider generated or acquired from advanced cleaner energy systems pursuant to this act during the reporting period.

Electricity	Advanced Cleaner Energy Credits Generated or Acquired	ACEC Sold, Traded or Otherwise Transferred
MWh	ACEC	ACEC
0	0	0

(c) The capacity of each renewable energy system and advanced cleaner energy system owned, operated, or controlled¹ by the electric provider, the total amount of electricity generated by each renewable energy system or advanced cleaner energy system during the reporting period, and the percentage of that total amount of electricity from each renewable energy system that was generated directly from renewable energy.

For reporting purposes, the Project Names used in this report should match the Project Name used for reporting data to MIRECS (Michigan Renewable Energy Certification System).

Renewable Energy Systems Owned by Electric Provider					
Project Name	System Technology Type	Nameplate Capacity	Electricity Generated	Percentage Generated from Renewable Energy	REC Generated
		MW	MWh	%	REC
Cedar Solar	Solar	0.054	55.33	100.0	184
Moore's Park Hydro	Hydro	0.5	220	100.0	240
Total		0.554	275.33		424

¹ For the purposes of this report, the term “controlled” refers to renewable or advanced cleaner energy systems providing, under contract, REC or ACEC with or without nameplate capacity or energy.

Renewable Energy Systems Under Contract						
Project Name	System Technology Type	Nameplate Capacity	Electricity Generated	Percentage Generated from Renewable Energy	REC Generated	Is This a REC-Only Contract?
		MW	MWh	%	REC	Y or N
Granger	Landfill Gas	9.0	81,725	100.0	91,891	N
Tower Kleber	Hydro	1.7	5,676	100.0	6,199	N
Total		10.7	87,401		98,090	

If the electric provider is not purchasing 100% of the Project output, a pro-rata Nameplate Capacity may be reported if applicable.

For REC-only contracts, provide Project Name, System Technology Type, Nameplate Capacity, Electricity Generated, and Percentage Generated from Renewable Energy data if available.

Advanced Cleaner Energy Systems Owned by Electric Provider				
Project Name	System Technology Type	Electricity Generated	Percentage Generated from Advanced Cleaner Energy	ACEC Generated
		MWh	%	ACEC
None				
	Total			

Advanced Cleaner Energy Systems/ ACEC Purchased Under Contract					
Project Name	Source	Electricity Generated	Percentage Generated from Advanced Cleaner Energy	ACEC Generated	Is This an ACEC-Only Contract?
		MWh	%	ACEC	Y or N
None					
Total					
For ACEC-only contracts, provide Project Name, Source, Electricity Generated, and Percentage Generated from Advanced Cleaner Energy data if available.					

(d) Whether, during the reporting period, the electric provider began construction on, acquired, or placed into operation a renewable energy system or advanced cleaner energy system.²

Renewable Energy Systems					
Project Name	System Technology Type	Nameplate Capacity	Construction Start Date Or Acquisition Date (May be forecast)	Commercial Operation Date (May be forecast)	Is Project Owned by Electric Provider?
		MW			Y or N
None					

² Report information for projects owned by the electric provider and projects where the provider is purchasing renewable or advanced cleaner energy credits with or without energy or capacity.

Advanced Cleaner Energy Systems					
Project Name	System Technology Type	Nameplate Capacity	Construction Start Date Or Acquisition Date (May be forecast)	Commercial Operation Date (May be forecast)	Is Project Owned by Electric Provider?
		MW			Y or N
None					

(e) Expenditures made in the past year and anticipated future expenditures to comply with this subpart.

Include all expenditures to be recovered via the revenue recovery mechanism (renewable energy surcharge). Electric providers without a renewable energy surcharge may leave this table blank. The figures below should include only the incremental costs of compliance and not transfer price data.

2011 Actual Expenditures	2012 Anticipated Expenditures
\$1,253,631	\$3,597,388

Section 51(2)(f).

Within this section, list the method and the retail sales in MWh for the reporting period.

List the Method: either average of 2009-2011 retail sales or the 2011 weather normalized retail sales.

Average of 2009 – 2011 retail sales

The method chosen should be consistent with the method approved in the initial plan case from 2009. All sales are retail (net of wholesale).

(A) List the sales in MWh based on the method selected above. Please show the calculation of this figure (including listing the sales of each year if the three year average method is used).

2009: 2,055,200 MWh
2010: 2,193,195
2011: 2,200,448
Total: 6,448,843 / 3 = 2,149,614

(B) List the energy credits available to use for compliance. This number may differ from the inventory figure given in **Section 51(2)(a)** above. Take into account green pricing program credits and energy optimization or advanced cleaner energy credit substitutions and limits on use. List the green pricing program, energy optimization and advanced cleaner energy credits separately.

284,700 – the sum of all RECs for 2008, 2009, & 2011.

Calculate the estimated renewable energy compliance calculation. Figure above divided by sales in MWh above (B divided by A).

$284,700 / 2,149,614 = 0.1324$

(C) As in (B) above, list the energy credits available to use for compliance that were generated or obtained during the reporting year. Take into account green pricing program credits and energy optimization or advanced cleaner energy credit substitutions and limits on use. List the green pricing program, energy optimization and advanced cleaner energy credits separately.

Only Reporting Period Vintage Credits (C)

98,514

Calculate the estimated renewable energy compliance calculation. Figure above (C) divided by sales in MWh above (A).

Compliance based on current year (C divided by A)

$98,514 / 2,149,614 = 0.0458$