

Renewable Energy Annual Report

Revised March 2014

Electric Provider: Lansing Board of Water & Light

Reporting Period: Calendar Year 2013

- Section 51(1) of 2008 PA 295 requires the filing of this document with the Michigan Public Service Commission.
- Many of the requested figures are available from MIRECS reports; names of which are noted within this template. If your figures agree with those within MIRECS, you may submit the MIRECS report as an attachment to this annual report. If your figures differ from those within MIRECS, please explain any discrepancies. Staff from the MPSC and MIRECS Administrator, APX, Inc., are available to help reconcile.

Section 51(1).

Within this section, list and describe actions taken by the electric provider to comply with the renewable energy standards.

a. Filings to the Commission (case numbers)

U-16619

b. Summary of actions taken during reporting period

- Filed the Renewable Energy Plan Biennial Review (U-16619) on June 28, 2013 as required by PA 295; and on December 19, 2013 the MPSC issued an order that found the BWL's plan complies with PA 295.
- Plans for considering biomass test burns have been put on hold until technology advances and availability of product increases.
- Installed 13 kW of solar on the new REO Town Cogeneration Plant in summer of 2013.
- Entered into a power purchase agreement for 8 wind turbines located in Gratiot County. Expected delivery of this wind power is fall of 2014.
- Planning an extension of 100 kW of solar to the existing solar array in summer 2014.
- In June of 2014, the BWL issued a RFP for up to 5 MW of solar energy.
- The BWL continues to perform maintenance and refurbishment work on the 100+ year old South turbine in order to increase reliability and boost efficiency.

Section 51(2)(a).

Within this section, list the number of energy credits obtained and, if bundled credits, the MWh of electricity generated or otherwise acquired during the reporting period. This data may be found in MIRECS reports titled: My Generation Report and My Credit Transfers.

Credits From	Renewable Energy Credits	Incentive Credits	MWh Electricity Generated/Acquired
Generated (My Generation Report)	337	58	337.5
Purchased (My Credit Transfers)	86,315	8,050	86,158
Total Credits	86,652	8,108	86,495.5

Explain any differences between the data provided and MIRECS reports.

The MWh readings are taken from the accounting system. By contractual agreement with Tower Kleber, the financial reporting may not reflect the actual meter reads at the generator or the information entered into MIRECS.

Within this section, list the type of and number of energy credits sold, traded or otherwise transferred during the reporting period.

	Renewable Energy Credits	Incentive Credits
Sold, traded or otherwise transferred	442	0
Expired (not in compliance sub-account)	16,328	1,848

This data may be found in MIRECS reports titled: My Sub-Accounts (filtered by Michigan eligibility and its end date) and My Credit Transfers.

Section 51(2)(b).

Within this section, list the number of advanced cleaner energy credits obtained and, if bundled, the MWh of advanced cleaner energy generated or otherwise acquired during this reporting period. This data may be found in MIRECS reports titled: My Generation Report and My Credit Transfers.

	Advanced Cleaner Energy Credits	MWh Electricity Generated/Acquired
Generated (My Generation Report)	NA	NA
Purchased (My Credit Transfers)	NA	NA
Total Credits acquired	NA	NA

Did the percentage limits in Section 27(7) affect development of advanced cleaner energy by the electric provider? How so?

No

Section 51(2)(c).

Within this section, list each renewable energy system (RES) and advanced cleaner energy system (ACES) owned, operated or controlled by the electric provider. List the capacity of each system, the amount of electricity generated by each system and the percentage of electricity which was generated from renewable energy (RE) or advanced cleaner energy (ACE).

System Name¹	System Type (RES or ACES)	Nameplate Capacity (MW)	Electricity Generated (MWh)	% of Electricity generated by RE/ACE
Cedar Street Solar Facility	RES-Solar	0.54	13.0	100%
Moore's Park Dam	RES-Hydro	.5	324.5	100%

¹System name should agree with the project name listed within MIRECS.

This data may be found in the Project Management module within MIRECS.

Within this section, list the renewable energy system (RES) and advanced cleaner energy systems (ACES) the electric provider is purchasing energy credits from. These include purchase power agreements. However, unbundled (credit only) purchases do not need to be listed here. Projects (generators) serving multijurisdictional electric providers should be listed here.

System Name	System Type (RES or ACES)	Electricity Purchased (MWh)	Energy Credits Purchased ¹	Allocation Factor and Method
Granger Energy	RES-Landfill Gas	80,251	87,740	100%
Tower Kleber	RES-Hydro	5,908	6,625	100%

¹Distinguish between different types of credits (REC or ACEC).

Allocation Factor and Method: For use if 100% of system output is not purchased. For instance, a system selling to multiple parties: list how the energy and credits are allocated – if by percentage, list the percentage as well.

Allocation Factor and Method: If used by multijurisdictional electric providers please include which percentage of energy and credits are to be distributed to Michigan (list allocation method as well, for example: system load).

Section 51(2)(d).

Within this section, list whether, during the reporting period, the electric provider entered into a contract for, began construction on, continued construction of, acquired, or placed into operation a renewable energy (RE) system or advanced cleaner energy (ACE) system.

System Name ¹	Resource (technology, RE/ACE)	Nameplate Capacity (MW)	Construction start date or acquisition date	Commercial operation date	Owned by electric provider?
REO Co-gen Plant*	RE-Solar	.013 MW	Summer 2013	Winter 2013-14	Yes
Beebe 1 B**	RE-Wind	19.2 MW	Summer 2014	Late Fall 2014	No

¹System name should agree with the project name listed within MIRECS. Dates may be forecast.

*BWL installed a 13 kW solar system on the REO Co-gen plant in fall of 2013. Generation metering began in the winter of 2014

**BWL entered into a contract with Exelon Generation for wind in the fall of 2013. The construction and commercial operation date will be in mid-late 2014.

Section 51(2)(e).

Within this section, list the expenditures incurred during the reporting period to comply with the renewable energy standards or the forecasted expenditures for the remaining plan period. Also, electric providers with an approved or planned renewable energy surcharge (as per Section 45), list the incremental cost of compliance (ICC) incurred during the reporting period.

Total Costs to Comply with Renewable Energy Standard in 2013
\$6,976,851

Forecast of total expenditures for the remaining plan period of 2014-2029
\$167,237,622*

Total Expenditures: ICC + Transfer Cost

*Total expenditures are for the approved plan period of 2014-2028.

Total Transfer Cost for 2013 (if any)
NA

Transfer Cost: The component of renewable energy and capacity revenue recovered from PSCR clause.

Total ICC for 2013 (if had an approved or planned renewable energy surcharge in 2013)
\$1,835,130

Forecast of the ICC for the remaining plan period (2014-2029)	Monthly residential surcharge (\$3 or less)
\$51,047,333*	\$2.50

*Total expenditures are for the approved plan period of 2014-2028.

Capital Expenditures for 2013 (if any)
0

Capital Expenditure: An investment in a renewable energy capital asset.

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 2010-2012 retail sales or the 2012 weather normalized retail sales.

Average of 2010-2012 retail sales
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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).

2010: 2,193,195 MWh
2011: 2,200,448 MWh
2012: 2,176,746 MWh

Total: 6,570,389
3-year average; 2,190,130

(B) Compliance: List the energy credits used for compliance for the 2013 compliance year. This number should agree with the compliance requirement listed in the 2013 compliance subaccount in MIRECS. Take into account any energy optimization or advanced cleaner energy credit substitutions and limits on their use.

76,749

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

76,749/2,190,130 = .035

Does the “energy credits used for compliance for the 2013 compliance year” figure above include any credits representing energy generated within 120 days after the start of the next calendar year? Yes/No.

No

If yes, how many credits from 2014 generation are included?

NA

To be used for 2014 Compliance Year

Similar to (A) from Section 51(2)(f) above.

List the sales in MWh based upon the same method selected above. Sales should either be the average of 2011-2013 retail sales or the 2013 weather normalized retail sales. Please show the calculation of this figure (including listing the sales of each year if the three year average method is used).

2011: 2,200,448 MWh
2012: 2,176,746 MWh
2013: 2,144,520 MWh
Total: 6,521,714

3 year average: 2,173,905