

## Renewable Energy Annual Report

Electric Provider: DTE Electric Company

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)

<b>Case Number</b>	<b>File Date</b>	<b>Description</b>
U-17302	06/03/2013	DTE Electric Company Application for Biennial Review and Approval of Its Amended Renewable Energy Plan and a Proof of Service
U-17322	08/30/2013	DTE Electric Company Renewable Cost Reconciliation Application with Testimony and Exhibits along with DTE Electric Company 2012 Renewable Energy Annual Report
<b>Filings Under Case No. U-16582:</b>		
Document Number	File Date	Description
0136	04/17/2013	Request for ex parte approval of Long-Term Non-Firm Renewable Energy Credit and Renewable Power Purchase between DTE Electric and Pheasant Run Wind, LLC
0136	04/17/2013	Request for ex parte approval of Long-Term Non-Firm Renewable Energy Credit and Renewable Power Purchase Agreement between DTE Electric and Pheasant Run Wind II, LLC
0136	04/17/2013	Request for ex parte approval of an Option Agreement between DTE Electric and Pheasant Run Wind Holdings II, LLC granting DTE Electric an option to acquire the Pheasant Run Wind II project
0153	08/12/2013	Request for ex parte approval of Long-Term Non-Firm Renewable Energy Credit and Renewable Power Purchase Agreement between DTE Electric and Big Turtle Wind Farm, LLC

b. Summary of actions taken during reporting period

**Solar Projects:**

- 2013: DTE Energy completed 2.9 MW of utility-owned projects at University of Michigan – IST (Ann Arbor), Riopelle Farms (Harbor Beach), Hartland Schools, St. Clair RESA (Marysville) and Liepprandt Orchards (Pigeon).

**Company owned Wind Projects:**

- May 17, 2013: The MPSC approved an Option Agreement between DTE Electric and Pheasant Run Wind Holdings II, LLC granting DTE Electric an option to acquire the Pheasant Run Wind II project
- November 2013: Echo Wind II Park began delivering test energy from commissioning activities, but did not reach commercial operation until 2014

**Power Purchase Agreements:**

- May 17, 2013: The MPSC approved 20-year renewable energy contract between DTE Electric and Pheasant Run Wind, LLC to purchase 74.8 MW of wind-generation capacity
- May 17, 2013: The MPSC approved 20-year renewable energy contract between DTE Electric and Pheasant Run Wind II Wind, LLC to purchase 74.8 MW of wind-generation capacity
- September 10, 2013: The MPSC approved 20-year renewable energy contract between DTE Electric and Big Turtle Wind Farm, LLC to purchase 20.0 MW of wind-generation capacity
- November 2013: The Tuscola Bay Wind II farm, a 100 MW project operated by NextEra Energy Resources, began delivering energy to the Company
- December 2013: The Pheasant Run I wind farm, a 74.8 MW project operated by NextEra Energy Resources, began delivering energy to the Company

**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.

<b>Credits From</b>	<b>Renewable Energy Credits</b>	<b>Incentive Credits</b>	<b>MWh Electricity Generated/Acquired</b>
<b>Generated (My Generation Report) 2013 vintage</b>	680,381	207,457	1,252,149
<b>Purchased (My Credit Transfers) 2012 vintage</b>	522,880	50,029	504,374
<b>Purchased (My Credit Transfers) 2013 vintage</b>	1,311,650	116,720	964,611
<b>Total Credits</b>	<b>2,514,911</b>	<b>374,206</b>	<b>2,721,134</b>

Explain any differences between the data provided and MIRECS reports.

Data provided above indicate generation issued and credit transfers into the RPS Inventory-33 SubAccount for the vintages reported. Credits issued from PURPA generation subject to the 4/5 allocation and transferred out of the SubAccount in 2013 are listed below.  
DTE Energy uses the annual cost reconciliation (U-17632 for 2013) as a basis for RECs, IRECs, and ACECs. Not all of these RECs have been submitted or created in MIRECS. As such, the amount of RECs in DTE Energy's 2013 RPS Inventory will be different than what is shown in this table.

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

	<b>Renewable Energy Credits</b>	<b>Incentive Credits</b>
<b>Sold, traded or otherwise transferred 2012 vintage</b>	700	59
<b>Sold, traded or otherwise transferred 2013 vintage</b>	0	0
<b>Expired (not in compliance sub-account)</b>	0	0

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.

	<b>Advanced Cleaner Energy Credits</b>	<b>MWh Electricity Generated/Acquired</b>
<b>Generated (My Generation Report)</b>	46,983	46,983
<b>Purchased (My Credit Transfers)</b>	0	0
<b>Total Credits acquired</b>	46,983	46,983

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

No
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**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).

<b>System Name<sup>1</sup></b>	<b>System Type (RES or ACES)</b>	<b>Nameplate Capacity (MW)</b>	<b>Electricity Generated (MWh)</b>	<b>% of Electricity generated by RE/ACE</b>
Greenwood - Tall Oil	RES	785	0	100%
St Clair 3 - Tall Oil	RES	168	0	100%
St Clair 3 – Biodiesel	RES	168	0	100%
St Clair 7- Biodiesel	RES	321	0	100%
River Rouge 3 - Wood Waste	RES	280	0	100%
Ludington	RES	917	0	100%
Gratiot Wind 2 - Gratiot Wind 2	RES	102.4	256,267	100%
Minden 1	RES	35	105,629	100%
Sigel 1	RES	60	232,955	100%
McKinley 1	RES	14	51,837	100%

Echo 1	RES	112	2,603	100%
BCBS - Blue Cross Blue Shield	RES	0.220	224	100%
DTE HQ - DTE Headquarters Solar	RES	0.082	63	100%
Ford Map East - Ford Map East	RES	0.250	298	100%
Ford MAP West - Ford MAP West	RES	0.250	55	100%
GM Hamtramck - General Motors Hamtramck	RES	0.500	604	100%
GM Orion - GM Orion Solar	RES	0.345	372	100%
Hartland High School - Hartland	RES	0.440	83	100%
HCMP Huron Clinton Metro Park - HCMP Indian Springs	RES	0.495	581	100%
IHM Solar - IHM Solar	RES	0.518	623	100%
Mercy - Mercy	RES	0.350	420	100%
Monroe CCC - Monroe CCC	RES	0.500	639	100%
Riopelle Farms Solar	RES	0.502	35	100%
Scio - Scio	RES	0.056	71	100%
TDC - TDC	RES	0.391	474	100%
UofM IST - UofM IST	RES	0.225	96	100%
UofM NCRC - UofM NCRC Solar	RES	0.43	367	100%
Warren Schools - Warren Schools	RES	0.190	212	100%
Wil LE Farms - Wil LE Farms Solar	RES	0.485	445	100%
River Rouge 2 - Coke Oven Gas	ACES	260	1,039,129	4.28%
River Rouge 3 - Coke Oven Gas	ACES	280	648,238	0.39%
<b>PURPA/PA2 Generators</b>				
Ann Arbor - Ann Arbor	RES		0	100%
Arbor Hills / - Arbor Hills	RES	17.3	126,488	100%
BFI-APLP Lyon Electric	RES	6.5	0	100%
Barton Dam - Barton Dam	RES	0.9	5,423	100%
Ford Lake Hydroelectric Station - Ford Lake Hydroelectric Station	RES	1.920	8,989	100%
Greater Detroit Resource Recovery Facility - Unit 1	RES	70.0	170,924	100%
Pine Tree Acres - Pine Tree Acres	RES	8.6	70,314	100%
Riverview Energy Systems - Riverview Energy Systems	RES	5.4	44,754	100%
Riverview Energy 3 - Riverview Energy 3	RES		0	100%
French Landing Dam - French Landing Dam	RES	1.800	6,659	100%
Sumpter Energy Associates - City	RES	11.8	8,836	100%

Sand				
Sumpter Energy Associates - Carleton Farms Phase I	RES	6.400	47,481	100%
Sumpter Energy Associates - Carleton Farms Phase 2	RES	5.600	35,779	100%
Superior Dam - Superior Dam	RES	0.6	3,110	100%
Wayne Energy - Wayne Energy	RES	1.2	4,400	100%

<sup>1</sup>System 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.

<b>System Name</b>	<b>System Type (RES or ACES)</b>	<b>Electricity Purchased (MWh)</b>	<b>Energy Credits Purchased<sup>1</sup></b>	<b>Allocation Factor and Method</b>
14 MW – Stoney Corners	RES	58,385	58,385	100%
8.0 MW – Garden Wind Farm	RES	22,817	22,817	100%
Blue Water Renewables	RES	26,373	26,373	100%
Eagle Valley Landfill to Gas	RES	26,483	26,483	100%
Gratiot County Wind	RES	287,970	287,970	100%
JH Warden Biomass	RES	119,370	119,370	100%
Pheasant Run Wind I	RES	25,990	25,990	100%
Tuscola Bay Wind I	RES	365,749	365,749	100%
Tuscola Bay Wind II	RES	46,755	46,755	100%

<sup>1</sup>Distinguish 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 <sup>1</sup>	Resource (technology, RE/ACE)	Nameplate Capacity (MW)	Construction start date or acquisition date	Commercial operation date	Owned by electric provider?
ECHO Wind Park	RE	112	2012	2014	Y
Tuscola Wind II	RE	100.3	2013	2013	N
Big Turtle	RE	20	2013	2014	N
Pheasant Run I	RE	74.8	2013	2013	N
Pheasant Run II <sup>1</sup>	RE	74.8	2013	2014	N
U of M – IST (Ann Arbor)	RE	0.225	2012	2013	Y
Riopelle Farms (Harbor Beach)	RE	0.502	2012	2013	Y
Hartland Schools	RE	0.44	2012	2013	Y
St. Claire RESA (Marysville)	RE	0.502	2013	2013	Y
Leipprandt Orchards (Pigeon)	RE	0.5	2013	2013	Y
McPhail Property	RE	0.818	2013	2014	Y
Domino Farms (Ann Arbor Township)	RE	1.088	2014	2015	Y
Thumb Electric (Caro)	RE	0.665	2014	2014	Y
Ford (WHQ)	RE	1.028	2014	2015	Y

Pheasant Run II was acquired by DTE Electric in May 2014 and is now being operated under the name Brookfield

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

**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.

<b>Total Costs to Comply with Renewable Energy Standard in 2013</b>
\$168,867,446

<b>Forecast of total expenditures for the remaining plan period of 2014-2029</b>
\$3,810,157,590

Total Expenditures: ICC + Transfer Cost

<b>Total Transfer Cost for 2013 (if any)</b>
\$112,263,626

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

<b>Total ICC for 2013 (if had an approved or planned renewable energy surcharge in 2013)</b>
\$56,603,819

<b>Forecast of the ICC for the remaining plan period (2014-2029)</b>	<b>Monthly residential surcharge (\$3 or less)</b>
\$474,585,385	\$3.00

<b>Capital Expenditures for 2013 (if any)</b>
\$162,413,371

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.

Weather Normalized
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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).

41,721,159
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(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.

1,751,532

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

4.20%

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?

N/A

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**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).

42,512,369