August 1, 2023

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, MI 48917

Re: Case No. U-15805 - In the matter, on the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for CONSUMERS ENERGY COMPANY to fully comply with Public Acts 286 and 295 of 2008.

Dear Ms. Felice:

Enclosed for filing please find **Consumers Energy Company's 2022 Renewable Energy Annual Report** filed in accordance with the Commission's Order issued March 2, 2010, pursuant to Section 51 of 2008 Public Act 295 and following the format approved by the MPSC Staff. This is a paperless filing and is therefore being filed only in a PDF format.

Sincerely,

Digitally signed by
Anne M. Uitvlugt
Date: 2023.08.01
09:40:26 -04'00'

Anne M. Uitvlugt

cc: Julie Baldwin, MPSC Staff
Paul Proudfoot, MPSC Staff

Renewable Energy Annual Report

Revised July 2023

Electric Provider:
Reporting Period: Calendar Year 2022

- Section 51(1) of 2008 PA 295, as amended by 2016 PA 342, requires the filing of this document with the Michigan Public Service Commission.
- The purpose of this annual report is to provide information regarding activities that occurred within calendar year 2022.
- 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)

- MPSC Case No. U-21197: Consumers Energy Company's Application, dated August 1, 2022, for 2021 Renewable Cost Reconciliation;
- MPSC Case No. U-15805: Consumers Energy Company filed an application requesting ex parte approval of an amendment to a contract previously approved by the Commission—Amendment 2 to the renewable energy purchase agreement between Consumers Energy and River Fork Solar, LLC;
- MPSC Case No. U-20833: Consumers Energy Company filed an Application on March 2, 2022 requesting ex parte approval of a PPA with STS Hydropower, LLC for the output of the Morrow Hydro Plant; and
- MPSC Case No. U-21347: On December 16, 2022, Consumers Energy filed an Application requesting approval of Large Customer Renewable Energy Program Tariff Revisions pursuant to Section 61 of 2016 PA 342.

b. Summary of actions taken during reporting period

- Maintained contracts in existence prior to enactment of 2008 PA 295 with renewable energy suppliers;
- Continued renewable energy credit certification and tracking activities;
- Consumers Energy had 91.71% of its 4.45 MW Solar Gardens Program subscribed in 2022;
- Consumers Energy had 99.99% of its 119.6 MW Large Customer Renewable Energy Program subscribed in 2022;
- On April 25, 2022, the Commission approved the PPA between Consumers Energy Company and

STS Hydropower, LLC, for the output of the Morrow Hydro Plant;

- On June 2, 2022, the COD for DTE Garden Solar 2 1.35 MW was fulfilled; and
- On December 21, 2022, the Commission approved the amendment to the PPA between Consumers Energy and River Fork Solar, LLC.

Section 51(2)(a).

Within this section, list the combined total number of vintage 2022 renewable energy credits and incentive credits, generated or purchased during the reporting period, including those credits transferred from a wholesale electric supplier. This data may be found in the MIRECS report titled: My Credit Transfers using the transfer tabs indicated below and filtering the report by date (**only activity occurring in 2022).**

Credits From	Combined Renewable Energy Credits and Incentive Credits 2022 Vintage Only
Generated (Intra-Account Transfer, only "Issued" in the Action column)	2,104,413
Purchased (Inter-Account Transfer, only "Confirm" or "Forward Transfer" in the Action column)	1,873,408
Total Credits	3,977,821

"Issued" within the Action column refers to an account holder accepting the generation data after which energy credits are created. "Confirm" within the Action column refers to both the transferee and transferor agreeing to the non-recurring transfer. "Forward Transfer" within the Action column indicates a recurring transfer of which subsequent transfers of credits do not need to be accepted by both parties.

Explain any differences between the data provided and MIRECS reports.

The total credits acquired are based on the amount of renewable energy produced or purchased by Consumers Energy in 2022. Not all of these Renewable Energy Credits ("RECs") have been delivered or created in MIRECS. As a result, the number of RECs in MIRECS will be different from what is shown in this table. Furthermore, the Company offers some limited REC management services to generators from which the Company is entitled to a majority of the RECs produced, but not all. These services are provided to ensure that the generator is registered in MIRECS and all RECs are received in a timely manner. As a result, some of the RECs in the Company's MIRECS account legally belong to other entities and are not available to the Company for statutory compliance. Finally, the Company makes both jurisdictional and non-jurisdictional sales. The RECs described above represent only the jurisdictional RECs available to the Company for use in meeting its statutory compliance obligation. Any RECs resulting from non-jurisdictional sales will reside in the Company's MIRECS account but are not available for statutory compliance.

Section 51(2)(b).

Within this section, list the type of and number of vintage 2022 energy credits sold, traded or otherwise transferred during the reporting period.

	Combined Renewable Energy Credits and Incentive Credits 2022 Vintage Only
Sold, traded or otherwise transferred	0

To get a count of energy credits that have been sold, traded or otherwise transferred data may be found in the MIRECS report titled: My credit transfers; inter-account transfer; filter by 1) year (2022) 2) transferor (the company) and 3) action ("confirm").

Section 51(2)(c).

Within this section, list each renewable energy system (RES) 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).

System Name1	System Type (RES)	Nameplate Capacity (MW)	Electricity Generated (MWh)	% of Electricity generated by RE/ACE
Alcona Hydro	RES	8.00	26,736	100
Cadillac Solar Garden - Cadillac Solar Garden	RES	0.45	662	100
Calkins Bridge Hydro (Allegan)	RES	2.55	12,882	100
Circuit West Solar	RES	0.53	533	100
Cooke Hydro	RES	9.00	26,262	100
Crescent Wind Park	RES	166.00	392,017	100
Cross Winds Energy Park	RES	110.98	353,383	100
Cross Winds Energy Park, Phase II	RES	43.70	140,595	100
Cross Winds Energy Park, Phase III	RES	75.90	253,051	100
Croton Hydro	RES	8.85	28,675	100
Five Channels Hydro	RES	6.00	23,868	100
Foote Hydro	RES	9.00	28,284	100
Grand Valley Solar Garden	RES	3.00	3,896	100
Gratiot Farms Wind Project	RES	150.00	421,367	100
Hardy Hydro	RES	31.52	81,339	100
Hodenpyl Hydro	RES	17.00	28,495	100
Lake Winds Energy Park	RES	100.80	268,901	100
Loud Hydro	RES	4.00	17,850	100
Mio Hydro	RES	4.96	14,179	100
Rogers Hydro	RES	6.76	25,393	100
Tippy Hydro	RES	20.01	58,261	100.0

Western Michigan Solar Garden	RES	1.00	1,438	100
Webber Hydro	RES	3.30	10,780	100.0
Ludington Pumped Storage	RES	2,340.00	966,868	67.14563673

[1] 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) 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	Electricity Purchased (MWh)	Energy Credits Purchased[1]	Allocation Factor and Method
Adrian Energy Associates, LLC	RES	9,724	8,246	0.99 Juris./Total Sales
Apple Blossom Wind Farm	RES	277,823	277,823	0.99 Juris./Total Sales
Calhoun Solar Energy	RES	149	160	0.99 Juris./Total Sales
Beebe Renewable Energy, LLC	RES	186,705	186,705	0.99 Juris./Total Sales
Brook View Dairy (EARP-AD)	RES	721	783	0.99 Juris./Total Sales
Cadillac Renewable Energy, LLC	RES	138,032	121,678	0.99 Juris./Total Sales
Commonwealth Power Company (Irving)	RES	1,099	964	0.99 Juris./Total Sales
Commonwealth Power Company (Middleville)	RES	1,223	1,071	0.99 Juris./Total Sales
EARP-Solar	RES	4,963	15,598	0.99 Juris./Total Sales
Gas Recovery Systems, LLC (C&C 1)	RES	4,374	3,847	0.99 Juris./Total Sales
Generate Fremont Digester	RES	12,437	13,583	0.99 Juris./Total Sales
Genesee Power Station LP	RES	162,056	135,269	0.99 Juris./Total Sales
Grayling Generating Station LP	RES	218,784	184,399	0.99 Juris./Total Sales
Green Meadow Farms Inc (EARP-AD)	RES	137	151	0.99 Juris./Total Sales
Harvest II	RES	174,078	174,078	0.99 Juris./Total Sales
DTE Garden Solar	RES	1,180	3,726	0.99 Juris./Total Sales
DTE Garden Windfarm I	RES	47,222	47,222	0.99 Juris./Total Sales
DTE Stoney Corners Windfarm I (Phase 2)	RES	30,894	30,894	0.99 Juris./Total Sales
DTE Stoney Corners Windfarm I (Phase 3)	RES	19,001	19,001	0.99 Juris./Total Sales
DTE Garden Solar II	RES	1,651	5,179	0.99 Juris./Total Sales
Michigan Wind 2	RES	260,221	260,221	0.99 Juris./Total Sales
NAC Pierson Rd 2	RES	10,121	13,055	0.99 Juris./Total Sales
NANR, Inc (Rathbun)	RES	5,490	1,205	0.99 Juris./Total Sales
NANR, Inc (Peoples)	RES	20,824	18,197	0.99 Juris./Total Sales
Scenic View Dairy (EARP-AD)	RES	2,108	2,299	0.99 Juris./Total Sales

STS Hydropower Ltd (Cascade)	RES	5,354	1,173	0.99 Juris./Total Sales
STS Hydropower Ltd (Fallasburg)	RES	317	70	0.99 Juris./Total Sales
STS Hydropower Ltd (Morrow)	RES	1,174	1,027	0.99 Juris./Total Sales
TES Filer City Station LP	RES	500,558	42,124	0.99 Juris./Total Sales
Viking Energy of Lincoln LLC	RES	132,171	121,564	0.99 Juris./Total Sales
Viking Energy of McBain LLC	RES	132,120	118,131	0.99 Juris./Total Sales
WMRE, LLC (Northern Oaks)	RES	6,818	7,459	0.99 Juris./Total Sales
WMRE, LLC (Pine Tree Acres)	RES	58,795	64,269	0.99 Juris./Total Sales
WMRE, LLC (Venice Park)	RES	9,203	8,035	0.99 Juris./Total Sales

[1] Distinguish between different types of credits (REC).

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.

System Name1	Resource (technology, RE/ACE)		Nameplate Capacity (MW)	Construction start date or acquisition date	Commercial operation date	Owned by electric provider?
Calhoun Solar Energy	RE		200	12/23/2020	12/29/2022	No
DTE Garden Solar II	RE		1.35	07/01/2011	6/02/2022	No

[1] 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.

Total Costs to Comply with Renewable Energy Standard in 2022
$190.2 million

Forecast of total expenditures for the remaining plan period of 2023-2029
$1,668 million

Total Expenditures: ICC + Transfer Cost

Total Transfer Cost for 2022 (if any)
$209.2 million

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

Total ICC for 2022
($19.5) million

Forecast of the ICC for the remaining plan period (2023-2029)	Monthly residential surcharge ($3 or less)
$1.4 million	$0.00

Capital Expenditures for 2022 (if any)
$197.7 million

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 2019-2021 retail sales or the 2022 weather normalized retail sales.

Average of 2019-2021 retail sales

The method chosen should be consistent with the method approved in the initial plan case from 2017. 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).

2019 retail sales in MWh 32,707,947
2020 retail sales in MWh 31,446,239
2021 retail sales in MWh 32,251,402
Average of 2019-2021 retail sales in MWh 32,135,196

(B) Compliance: List the energy credits used for compliance for the 2022 compliance year. This number should agree with the compliance requirement listed in the 2022 compliance subaccount in MIRECS. Take into account any energy waste reduction substitutions and limits on their use.

4,820,279

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

15.00%

Does the “energy credits used for compliance for the 2022 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 2023 generation are included?

N/A

To be used for 2023 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 2020-2022 retail sales or the 2023 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).

2020 retail sales in MWh 31,446,239
2021 retail sales in MWh 32,251,402
2022 retail sales in MWh 33,249,142
average of 2020-2022 retail sales in MWh: 32,315,594