



Distributed Generation Program Report

For Calendar Year 2019

December 2020

MPSC Staff

Contents

Executive Summary	i
Introduction.....	1
Distributed Generation Program Data	2
Distributed Generation Program Tariff Implementation Status	13
Conclusion	16

This document is an annual report prepared by Staff from the Michigan Public Service Commission's Energy Resources Division, Renewable Energy Section. The main data source is annual reports filed by Michigan electric providers, though in certain instances more recent data has been included to reflect significant events that have taken place in 2020. Staff thanks the electric providers for their efforts to provide the data used in preparing this report.

To stay informed about renewable energy activities happening in Michigan, readers are invited to visit the Commission's Renewable Energy website, at <http://www.michigan.gov/renewables>.

Executive Summary

The distributed generation and legacy net metering programs (collectively DG program) enable Michigan's utility and alternative electric supplier customers to install on-site renewable energy electric generation projects to meet some or all of their electric energy needs and reduce their electric bills. Project size is limited such that the annual generation does not exceed the customer's electricity consumption from the previous 12 months. Customers reduce electricity purchases from the utility by using their generated electricity "behind the meter" and receive a credit for excess generation.

This report is based on electric provider annual reports for calendar year 2019 and Michigan Public Service Commission (Commission) activities through December 21, 2020. Public Acts 341 and 342 of 2016 require the Commission to phase out the net metering program and create a new DG program.¹ During 2019 and 2020, the Commission continued to implement the new DG program.² Legacy net metering program customers and new customers who enter the legacy net metering program during the interim period, prior to approval of their utility's new DG tariff, may continue to be served under the legacy net metering program for 10 years from the date of their initial enrollment.

Consumers Energy, DTE Electric, Indiana Michigan Power (I&M), and Upper Peninsula Power Company (UPPCO) now have Commission-approved DG program tariffs. Consumers Energy's and UPPCO's programs were temporarily closed due to enrollments reaching the statutorily required minimum participation level; however, both utilities voluntarily agreed to double the program size. Consumers Energy notified the Commission of its program expansion by filing a letter³ in the docket for Case No. U-15787⁴ on December 21, 2020. UPPCO doubled its program size as part of a rate case settlement agreement approved in May 2019. A summary of activity related to the DG tariff is provided below.

¹ The Commission issued an order on July 12, 2017 finding that the net metering program shall continue as the distributed generation program (legacy net metering program) until the new distributed generation program tariffs are approved as part of a utility's rate case. https://www.michigan.gov/documents/mpsc/u-18383_7-12-17_579158_7.pdf

² The existing net metering program is now referred to as the legacy net metering program.

³ <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000HxBB0AAN>

⁴ MPSC Case No. U-15787: <https://mi-psc.force.com/s/global-search/15787>

Summary of Distributed Generation Program Tariff Implementation

Utility	Date of Commission Order Approving New DG Program Tariff	Beginning DG Program Enrollment Date
DTE Electric ⁵	May 2, 2019	May 9, 2019
Consumers Energy ⁶	December 17, 2020	January 1, 2021
I & M ⁷	January 23, 2020	February 1, 2020
UPPCO ⁸	May 23, 2019	May 24, 2019

During the time-period of data collection for this report, DTE Electric and UPPCO had DG program tariffs in place.

Customer participation in the DG program increased from 5,219 customers and 5,379⁹ installations in 2018 to 8,147 customers and 8,331 installations in calendar year 2019.¹⁰ At the end of 2019, the total DG program capacity and installations was approximately 66,428 kilowatts (kW), an increase of 22,947 kW and 53% over the previous calendar year. As shown below, program participation has increased each year from 2006 through 2019.

⁵ MPSC Case No. U-20162: <https://mi-psc.force.com/s/global-search/20162>

⁶ MPSC Case No. U-20697: <https://mi-psc.force.com/s/global-search/20697>

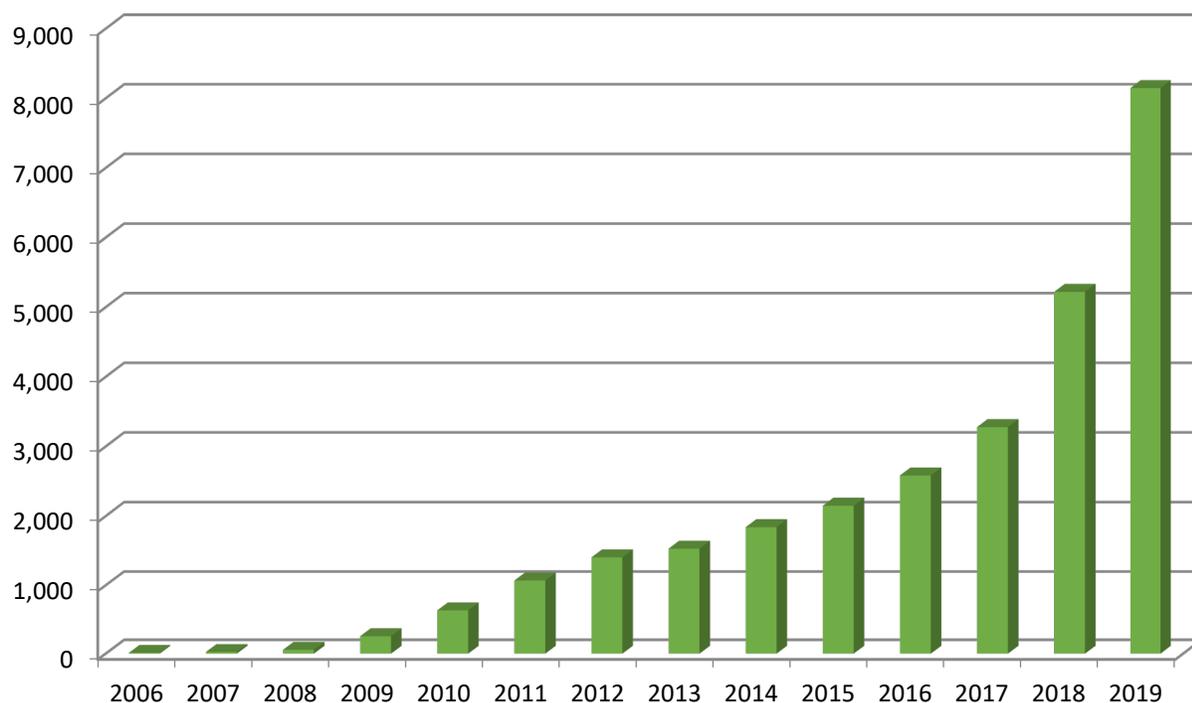
⁷ MPSC Case No. U-20359: <https://mi-psc.force.com/s/global-search/20359>

⁸ MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276>

⁹ The number of installations exceeds the number of customers due to some customers having multiple installations.

¹⁰ A complete list of Projects by utility, ZIP code, type and size is provided at the MPSC's website www.michigan.gov/documents/mpsc/2019_DG_Program_Data_707987_7.xlsx

Michigan Distributed Generation Program Customers



Source: 2019 Electric Provider Annual Program Reports, Case No. U-15787

Program participants are becoming increasingly interested in pairing their generation with a battery energy storage system. The annual reporting form scope was expanded to include the new DG tariff and batteries for DTE Electric. For the 2020 reporting year, the new reporting form will be provided to all electric providers and Staff will work toward complete information on DG program installations with batteries. At year-end 2019, DTE Electric reported 152 customers with batteries totaling 760 kW.¹¹

While this report covers DG program enrollment for 2019, the Commission is aware that several significant developments have occurred since the end of 2019. Consumers Energy filed a letter on November 19, 2020 in the docket for Case No. U-15787 notifying the Commission that it had reached the program size limits under MCL 460.1173(3) for Category 1 and Category 2 projects and was no longer accepting new Category 1 or Category 2 customers into its Net Metering/ Distributed Generation program as of that date. Consumers Energy also noted that “following [its] review of the Distributed Generation tariff approved in [Case No. U-20697], Consumers Energy

¹¹ Information about projects with batteries is included in the complete list of projects by utility, ZIP code, type and size at www.michigan.gov/documents/mpsc/2019_DG_Program_Data_707987_7.xlsx

will consider voluntarily raising its Distributed Generation program limit from the 1% limit provided for in MCL 460.1173(3) to 2% of the average in-state peak load for the preceding 5 calendar years,” and that this voluntarily increased limit, if adopted, “is expected to be effective upon the effective date of the Company’s Distributed Generation tariff approved in Case No. U-20697.”¹² The Commission, in a December 17, 2020 order in Case No. U-20697, approved Consumers Energy’s proposed Distributed Generation tariff based on the inflow-outflow tariff structure approved in the Commission’s April 18, 2018 order in Case No. U-18383.¹³ On December 21, 2020, Consumers Energy filed a letter in the docket for Case No. U-15787 notifying the Commission that it “will voluntarily raise its Distributed Generation program limit from the 1% limit provided for in MCL 460.1173(3) to 2% of the average in-state peak load for the preceding 5 calendar years. This 2% limit will be allocated as follows: (i) no more than 1% for customers with an eligible electric generator capable of generating 20 kilowatts or less; (ii) no more than 0.5% for customers with an eligible electric generator capable of generating more than 20 kilowatts but not more than 150 kilowatts; and (iii) no more than 0.5% for customers with a methane digester capable of generating more than 150 kilowatts.”¹⁴

For UPPCO, based on information provided by the company, their program for Category 1 projects under the expanded cap provided for in their settlement agreement was more than 96% enrolled as of December 1, 2020, with availability for just 53.3kW of projects before they hit their expanded cap. For Category 2 projects, they still had 399kW out of the 679kW of capacity remaining.

For DTE, based on preliminary data provided by the company in early December 2020, they had 29.5MW participating out of a program cap of 54.7MW for Category 1 projects (approximately 54% subscribed), and had 5.7MW out of 27.3MW participating for Category 2, or 21%. DTE has seen 2020 additions of approximately 4.9MW in Category 1 projects and approximately 2.5MW in Category 2 projects.

¹² <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000GbrwAAB>

¹³ MPSC Case No. U-18383: <https://mi-psc.force.com/s/global-search/18383>

¹⁴ <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000HxBB0AAN>

Introduction

The Michigan Public Service Commission (Commission) Staff (MPSC Staff) annually issues a distributed generation program (DG program) report summarizing the information filed by electric providers pursuant to Rule 40 (3) of the Commission's Electric Interconnection and Net Metering Standards. This report is based on electric provider annual reports for calendar year 2019 and Commission activities through December 21, 2020.

The distributed generation and legacy net metering programs (collectively DG program) enable Michigan's utility and alternative electric supplier customers to install on-site renewable energy electric generation projects to meet some or all of their electric energy needs and reduce their electric bills. During the time-period of data collection for this report, DTE Electric and UPPCO had DG program tariffs in place.

DG projects are grouped into three size categories with differing billing, metering, and interconnection requirements. Project size is limited such that the annual generation does not exceed the customer's electricity consumption from the previous 12 months. Customers reduce electricity purchases from the utility by using their generated electricity "behind the meter" and receive a credit for excess generation.

Category 1: DG program for projects 20 kW and smaller (certified equipment)

The Category 1 DG program is available to any customer meeting the generator size requirements (20 kW and under) and using an Underwriters Laboratory (UL) 1741 certified inverter. Typically, residential customers would fit within this size category.

Program features:

- Billing based on net usage with the credit for excess generation equal to the full retail rate for customers participating in the legacy net metering program.
- Billing based on an inflow and outflow mechanism for customers of utilities with the new DG tariff in place. Inflow represents kWh delivered by the utility and is billed at the full retail rate. Outflow represents kWh generated by the customer but not used on-site. The outflow credit is equal to the power supply component of the full retail rate and may have transmission costs subtracted.
- A generator meter is available at cost, if requested by the customer. (The generator meter allows the customer to monitor the amount of generation. Utilities are not obligated to read a customer's generator meter.)
- A maximum program and interconnection application processing fee of \$50. Customers pay all interconnection costs.

Category 2: DG program for projects over 20 kW and as large as 150 kW

The Category 2 DG program is available to any customer meeting the generator size requirements. Typically, these customers would be commercial, industrial, or institutional customers.

Program features:

- Billing based on an inflow and outflow mechanism. Inflow represents kWh delivered by the utility and is billed at the full retail rate. Outflow represents kWh generated by the customer but not used on-site. The outflow credit is equal to the power supply component of the full retail rate and may have transmission costs subtracted.
- Engineering review (if required) for the interconnection is done at no cost for legacy net metering customers.
- A maximum program and interconnection application processing fee of \$50. Customers pay all interconnection costs.

Category 3: Limited to Methane Digesters over 150 kW and as large as 550 kW

- Same as category 2, except that customers may be subject to standby charges.

Distributed Generation Program Data

Customer participation in the DG program increased from 5,219 customers and 5,379¹⁵ installations in 2018 to 8,147 customers and 8,331 installations in calendar year 2019.¹⁶ At the end of 2019, the total capacity of DG program installations was approximately 66,428 kilowatts (kW), an increase of 22,947 kW and 53% over the previous calendar year. As shown below, program participation has increased each year from 2006 through 2019. While the program continues to grow, it still represents only 0.07% of Michigan's total retail electricity sales.¹⁷

Table 1 summarizes DG program customers and capacity by electric provider for all three program size categories.¹⁸ The DG program category 1 is available to new customers until the program size reaches

¹⁵ The number of installations exceeds the number of customers due to some customers having multiple installations.

¹⁶ A complete list of Projects by utility, ZIP code, type and size is provided at the MPSC's website www.michigan.gov/documents/mpsc/2019_DG_Program_Data_707987_7.xlsx

¹⁷ The Energy Information Administration reports 2019 retail sales of 101,249,293 MWh for Michigan. See Michigan Electricity Profile: <https://www.eia.gov/electricity/state/michigan/>. A 13% capacity factor was assumed for the program generators.

¹⁸ Category 1: Projects up to 20 kW incorporating IEEE 1547 certified inverters. Category 2: Projects greater than 20 kW and no larger than 150 kW and non-inverter based 20 kW and under projects. Category 3: Methane Digester projects up to 550 kW.

0.5% of the electric provider's average in-state peak load for the preceding five calendar years.¹⁹ As of year-end 2019, Consumers Energy and DTE Electric had 15.7 megawatts (MW) or 41% and 30 MW or 55% of category 1 program space remaining, respectively.²⁰ The DG program category 2 is available to new customers until the program size reaches 0.25% of the electric provider's average in-state peak load for the preceding five calendar years. Consumers Energy and DTE Electric had 10 megawatts (MW) or 54% and 24 MW or 88% of category 2 program space remaining, respectively.²¹ Tables 2 and 3 show peak load and program size information for each rate-regulated electric provider for category 1 and category 2, respectively, through the end of 2019. Category 3 has limited participation with only three current customers.

During this reporting period electric providers reported a combined total of 196 customers participating in the category 2 size range, which is an increase from 136 customers reported last year. Even with the growth in category 2 projects, category 1 projects still account for 79% of the total program installed capacity.

The state's two largest utilities, Consumers Energy and DTE Electric, host 89% of the statewide total program capacity. Ninety-six percent of program installations are solar projects as opposed to wind turbines or hydroelectric projects.

¹⁹ UPPCO's Category 1 program reached its program size cap and was closed on July 22, 2016. <https://mi-psc.force.com/s/filing/a00t0000005pZWIAAM/u157870235>. However, the Commission approved a settlement in UPPCO's last rate case which doubled the program size and reopened the program. MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276>

²⁰ As noted in the Executive Summary, Consumers has since notified the Commission that it has reached its cap for both Category 1 and 2 projects.

²¹ As noted in the Executive Summary, Consumers has since notified the Commission that it has reached its cap for both Category 1 and 2 projects.

Table 1: Distributed Generation Program Data

Company	Category 1 Customers	Category 1 Nameplate Capacity (kW)	Category 2 Customers	Category 2 Nameplate Capacity (kW)	Category 3 Customers	Category 3 Nameplate Capacity (kW)
Rate Regulated Utilities (Act 295 Statewide DG Program)						
Alpena	21	89				
Consumers Energy	3,258	22,447	119	8,790	1	190
DTE Electric	3,794	24,560	51	3,221		
I & M	137	1,041	11	364		
UPPCo	186	1,124	7	280		
UMERC	49	303	1	23		
Xcel	4	25				
Total	7,449	49,589	189	12,678	1	190
Member-Regulated Cooperative Utilities with Programs for Small Scale Distributed Generation						
Alger Delta*	33	155	1	90		
Cherryland*	31	94				
Cloverland	36	137	1	27	1	208
Great Lakes Energy	170	1,009	2	125	1	400
Homeworks Tri-County	48	400	2	93		
Midwest	76	554				
Ontonagon	40	206				
Presque Isle	30	143				
Thumb	35	290	1	40		
Total	499	2,988	7	375	2	608
Total	7,948	52,577	196	13,053	3	798

*Alger Delta, Cherryland data is from previous reporting years.
Alternative electric supplier program data is included in utility reporting.

Source: 2019 Electric Provider Annual Program Reports, Case No. U-15787

Table 2: Distributed Generation Program Size Details
Rate Regulated Electric Providers
Category 1: 20 kW and Under

Company	No. of Customers	In-State Peak Load (5-Year Avg) (kW)	Category 1 Minimum Required Program Size For 2020 0.5% of Peak Load (kW)	Current Participating Nameplate Capacity (12/31/2019) (kW)	Space Remaining (12/31/2019) (kW)	% Remaining (12/31/2019)
Alpena	21	64,800	324	89	235	73%
Consumers Energy	3,258	7,624,300	38,122	22,447	15,675	41%
DTE Electric	3,794	10,936,800	54,684	24,560	30,124	55%
I & M	137	815,600	4,078	1,041	3,037	74%
UPPCo²²	186	135,700	1,357	1,124	233	17%
UMERC	49	170,000²³	850	303	547	64%
Xcel	4	26,600	133	25	108	81%

Source: 2019 Electric Provider Annual Program Reports, Case No. U-15787 and Utility MPSC P-521 Annual Reports

²²UPPCO's Category 1 program reached its program size cap was closed on July 22, 2016. <https://mi-psc.force.com/s/filing/a00t0000005pZWIAAM/u157870235>. However, the Commission approved a settlement in UPPCO's last rate case which doubled the program size and reopened the program. MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276>. Table 2 reflects the doubled program size.

²³ UMERC is a new utility and its in-state peak load is based on an average of 2017 and 2018 data only.

Table 3: Distributed Generation Program Size Details
Rate Regulated Electric Providers
Category 2: >20 kW to 150 kW

Company	No. of Customers	In-State Peak Load (5-Year Avg) (kW)	Category 2 Minimum Required Program Size For 2020 0.25% of Peak Load (kW)	Participating Nameplate Capacity (12/31/2019) (kW)	Space Remaining (12/31/2019) (kW)	% Remaining (12/31/2019)
Consumers Energy	119	7,624,300	19,061	8,790	10,271	54%
DTE Electric	51	10,936,800	27,342	3,221	24,121	88%
I & M	11	815,600	2,039	364	1,675	82%
UPPCo²⁴	7	135,700	679	280	399	59%
UMERC	1	170,000²⁵	425	23	402	95%

Source: 2019 Electric Provider Annual Program Reports, Case No. U-15787 and Utility MPSC P-521 Annual Reports

Program participants are becoming increasingly interested in pairing their generation with a battery energy storage system. The annual reporting form scope was expanded to include the new DG tariff and batteries for DTE Electric. For the 2020 reporting year, the new reporting form will be provided to all electric providers and Staff will work toward complete information on DG program installations with batteries. At year-end 2019, DTE Electric reported 152 customers with batteries totaling 760 kW.²⁶

²⁴ UPPCO's Category 1 program reached its program size cap was closed on July 22, 2016.

<https://mi-psc.force.com/s/filing/a00t0000005pZWIAAM/u157870235>. However, the Commission approved a settlement in UPPCO's last rate case which doubled the program size and reopened the program. MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276> Table 2 reflects the doubled program size.

²⁵ UMERC is a new utility and its in-state peak load is based on an average of 2017 and 2018 data only.

²⁶ Information about projects with batteries is included in the complete list of projects by utility, ZIP code, type and size at www.michigan.gov/documents/mpsc/2019_DG_Program_Data_707987_7.xlsx

Figures 1 through 3 show DG program participation information.

Figure 1: Distributed Generation Program Installations by Technology

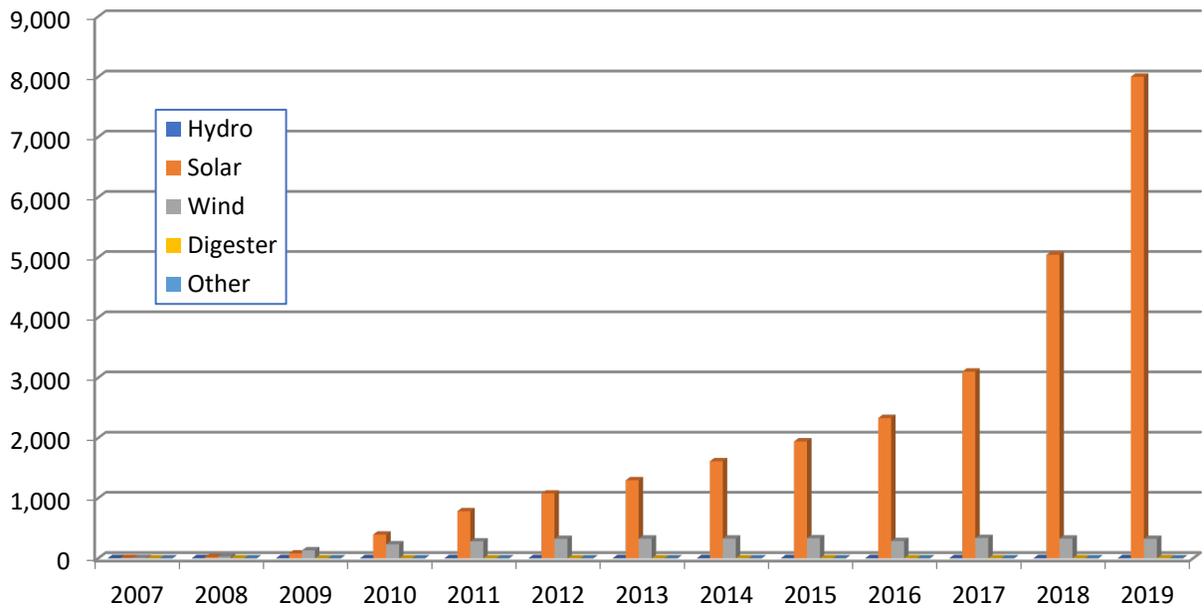


Figure 2: Total Distributed Generation Program Customers

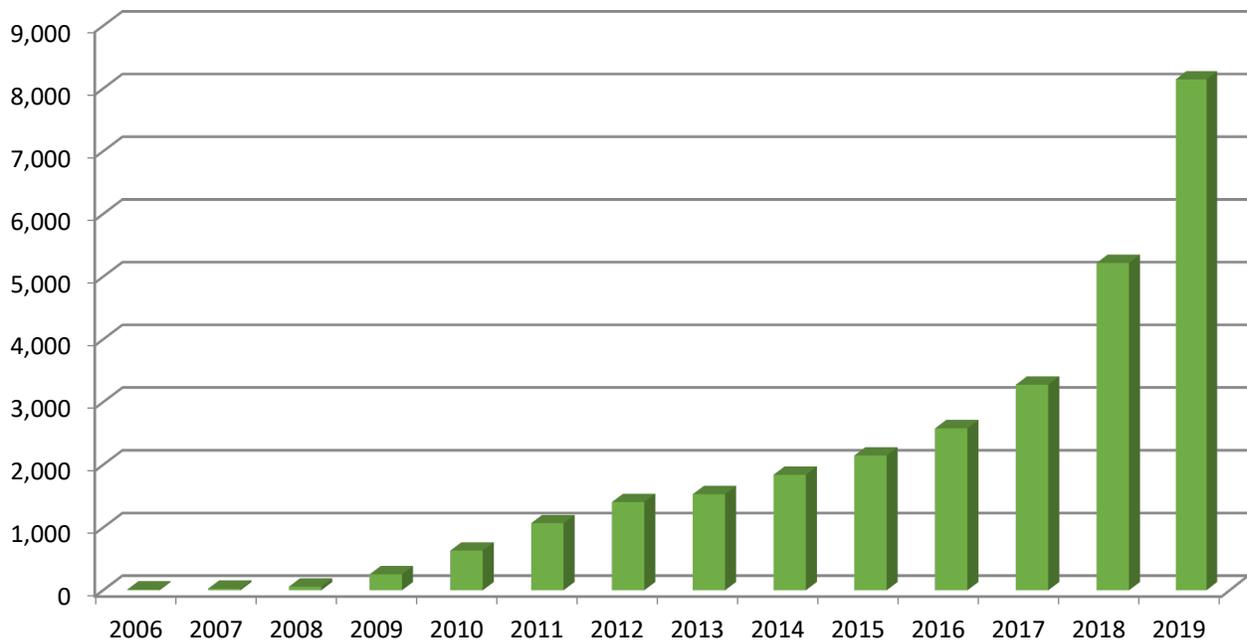
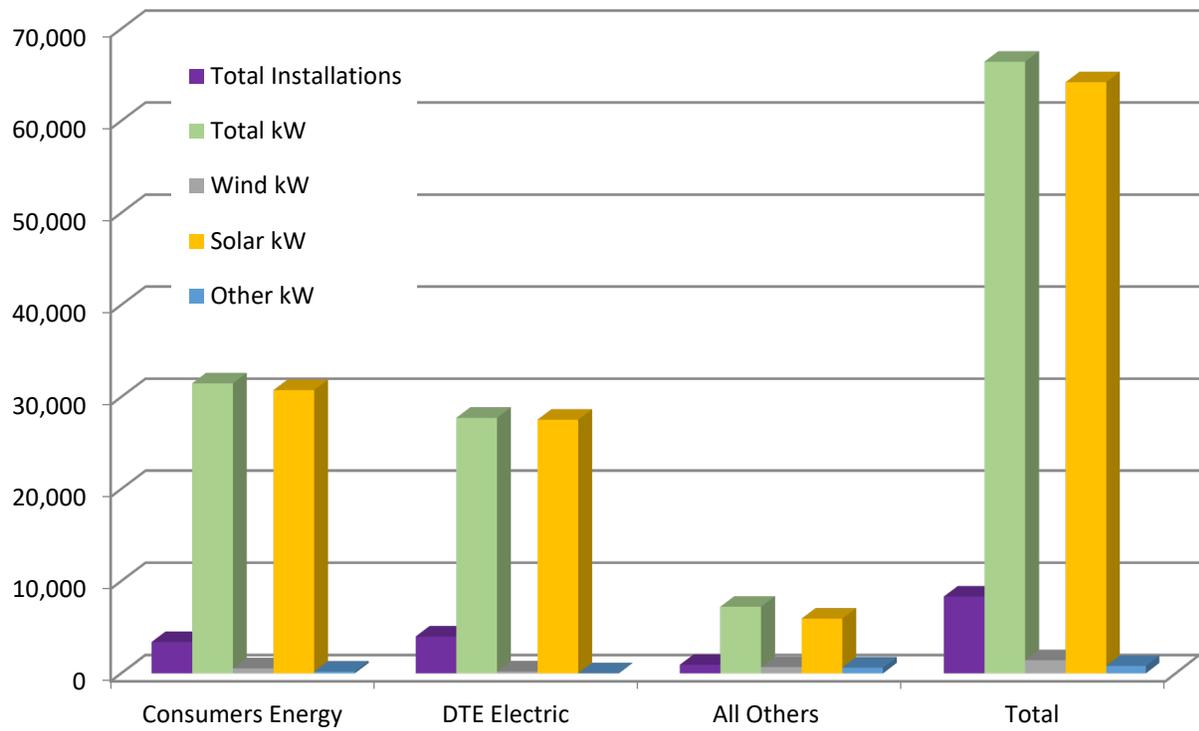
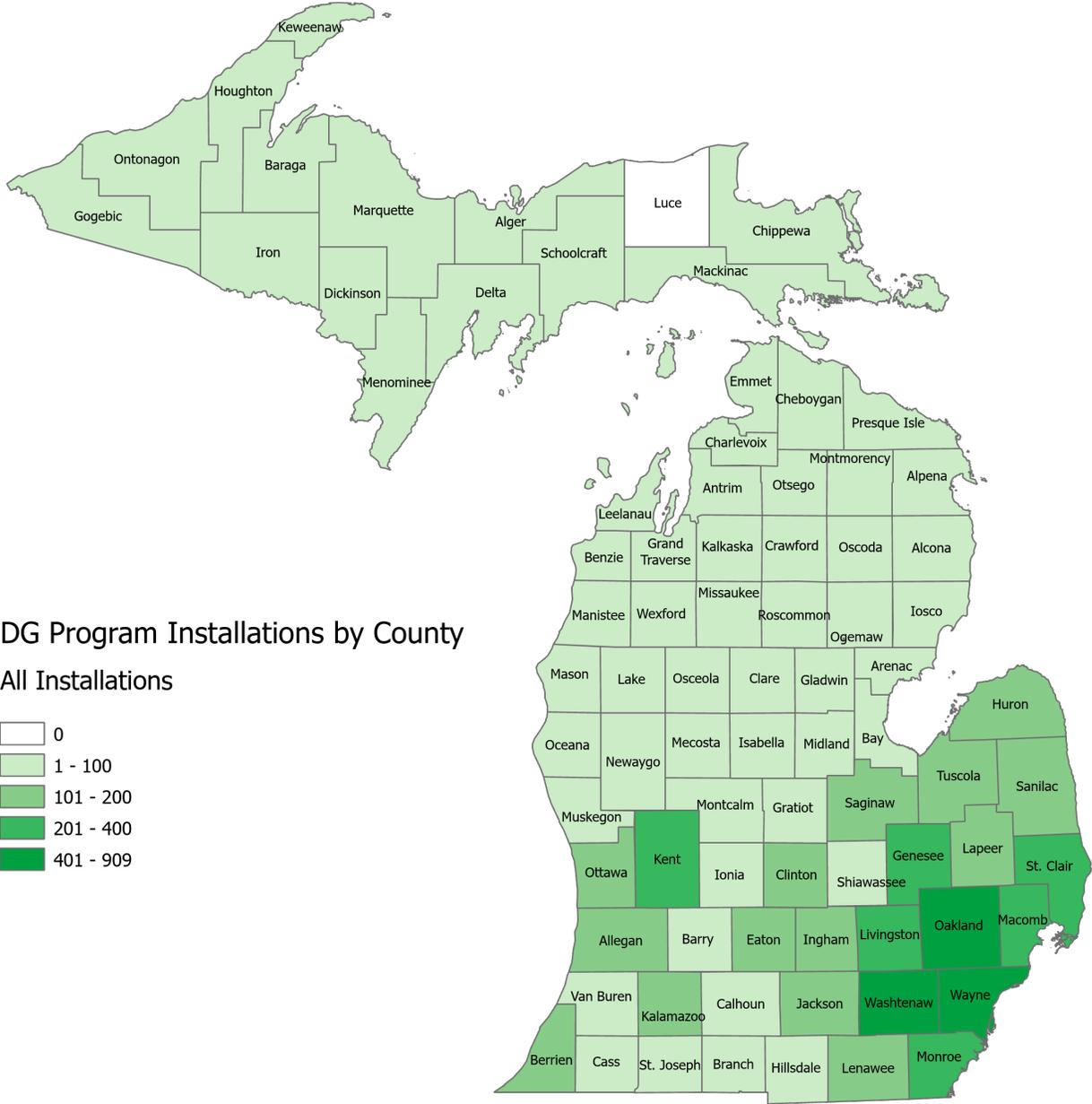


Figure 3: Distributed Generation Program Nameplate Capacity (kW) & Number of Installations



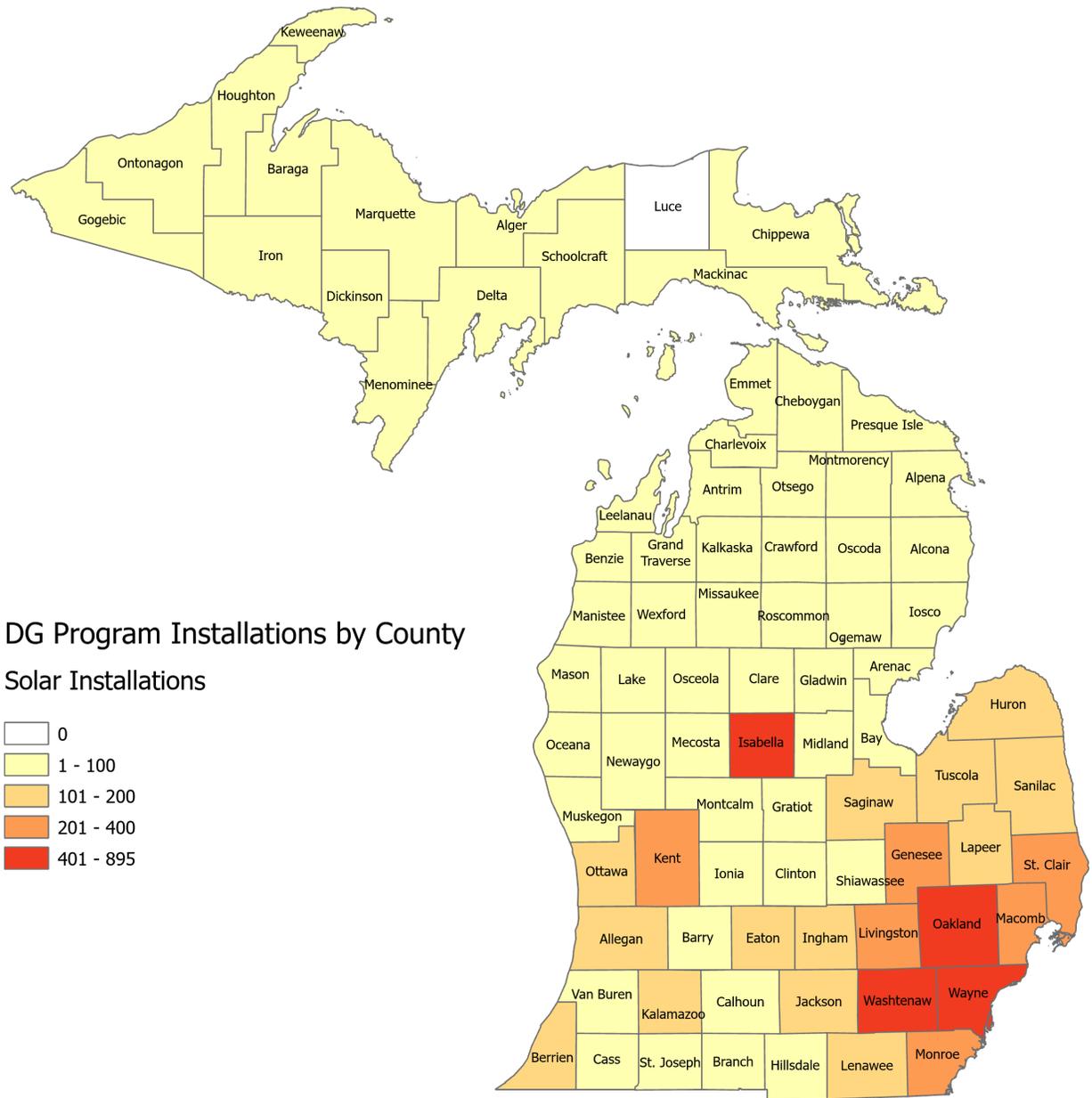
Figures 4 through 6 display maps showing location information, based on ZIP code and county, for the total DG program, solar only and wind only customers.

Figure 4: Distributed Generation Program Customers by County



Source: ZIP codes of participating customers are provided to MPSC Staff by Michigan electric providers. Customer identification information (name, address, account number, etc.) is confidential and protected from disclosure.

Figure 5: Solar Distributed Generation Program Customers by County



Source: ZIP codes of participating customers are provided to MPSC Staff by Michigan electric providers. Customer identification information (name, address, account number, etc.) is confidential and protected from disclosure.

Figures 7 through 9 show a histogram breakdown of DG program project sizes.

Figure 7: Histogram of Distributed Generation Program Installations by Project Size

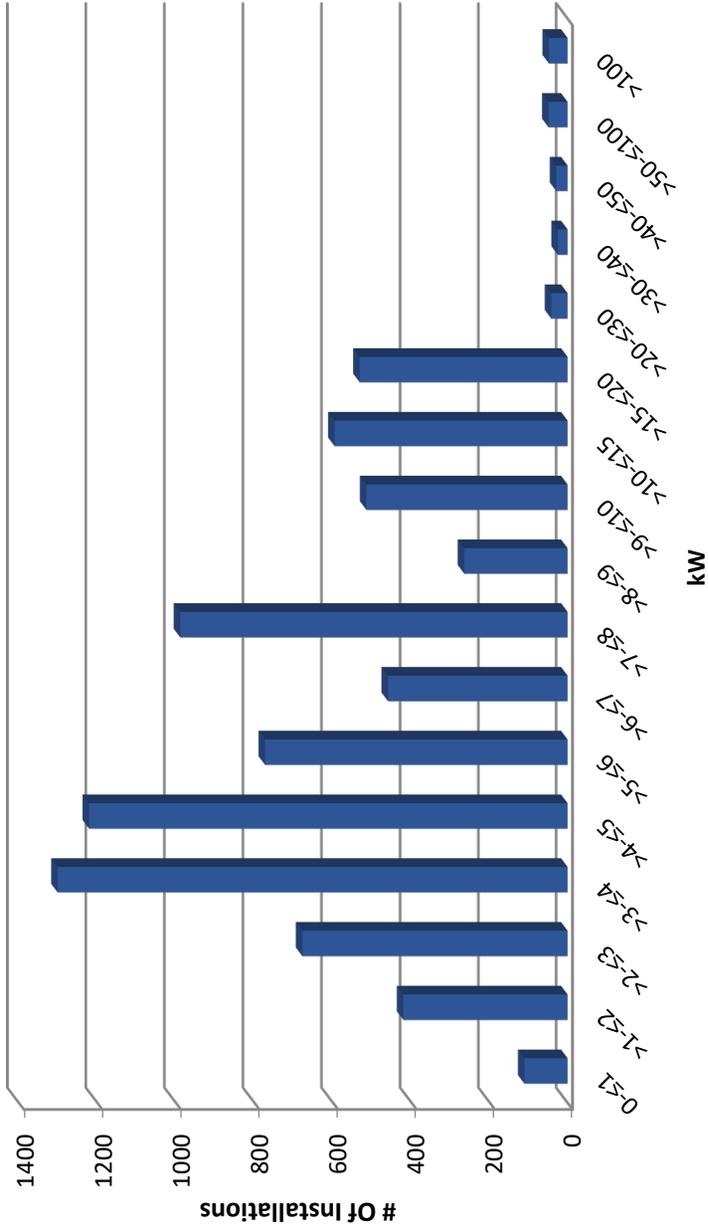


Figure 8: Histogram of Solar Distributed Generation Program Installations by Project Size

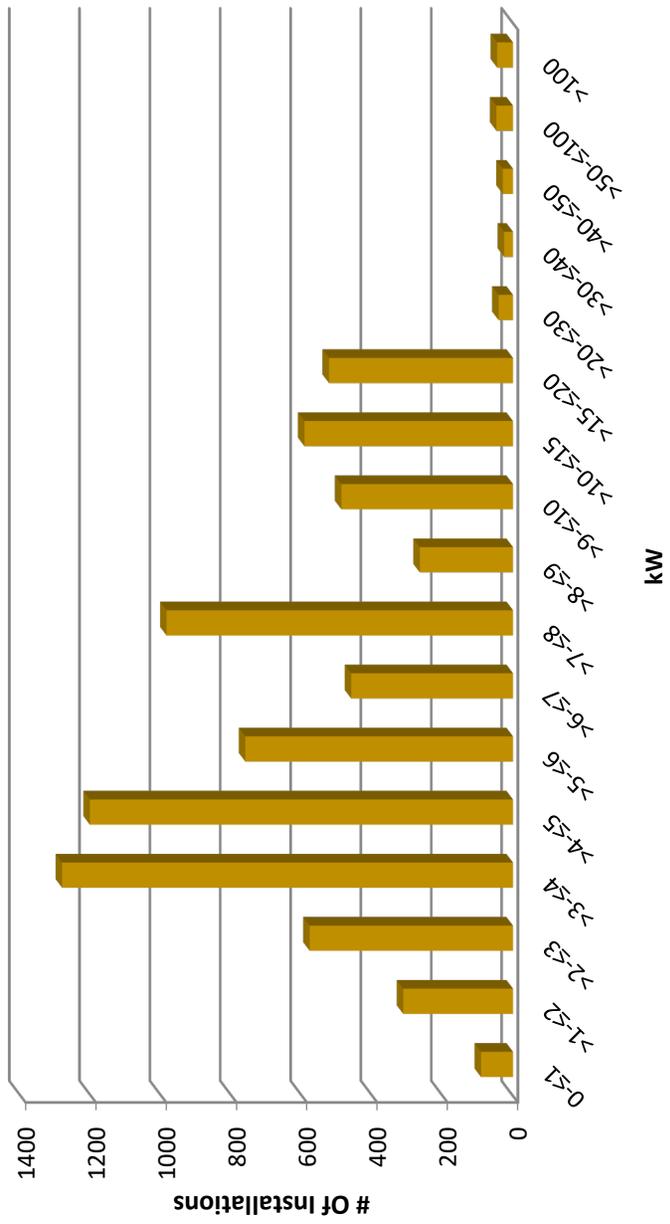
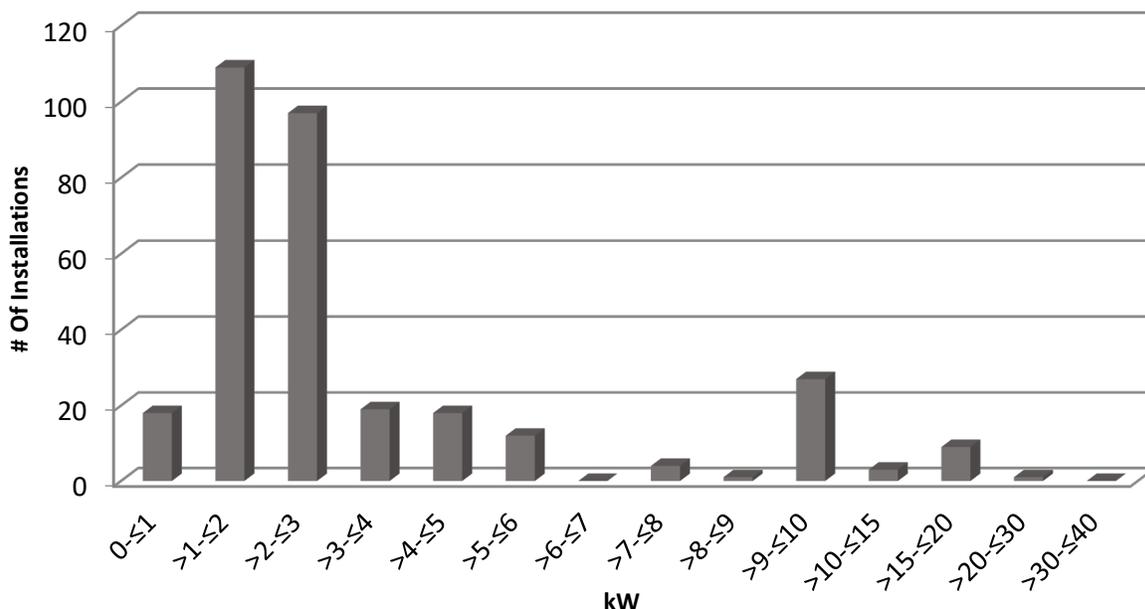


Figure 9: Histogram of Wind Distributed Generation Program Installations by Project Size



Distributed Generation Program Tariff Implementation Status

PA 341 and 342 of 2016 provide for the Commission to implement a new DG program. The Commission issued an order on July 12, 2017 finding that the net metering program shall continue as the distributed generation program (legacy net metering program) until the new DG program tariffs are approved as part of a utility’s rate case.²⁷ Existing legacy net metering customers and new customers who enter the legacy net metering program during this interim period may continue to net meter under the legacy net metering program for 10 years from the date of their initial enrollment. A summary of activity related to the DG tariff is provided in Table 5.

Consumers Energy, DTE Electric, I & M, and UPPCO now have Commission-approved DG program tariffs. Consumers Energy’s and UPPCO’s programs were temporarily closed due to enrollments reaching the statutorily required minimum participation level; however, both utilities voluntarily agreed to double the program size. Consumers Energy notified the Commission of its program expansion by filing a letter in the docket for Case No. U-15787 on December 21, 2020.²⁸ UPPCO doubled its program size as part of a rate case settlement agreement approved in May 2019.

²⁷ https://www.michigan.gov/documents/mpsc/u-18383_7-12-17_579158_7.pdf

²⁸ <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000HxBB0AAN>

Table 5: Summary of DG Program Tariff Implementation

Utility	Date of Commission Order Approving New DG Program Tariff	Beginning DG Program Enrollment Date
DTE Electric ²⁹	May 2, 2019	May 9, 2019
Consumers Energy ³⁰	December 17, 2020	January 1, 2021
I & M ³¹	January 23, 2020	February 1, 2020
UPPCO ³²	May 23, 2019	May 24, 2019

During the time-period of data collection for this report, DTE Electric and UPPCO had DG program tariffs in place.

Consumers Energy Company

On December 17, 2020, the Commission issued an order in Consumers Energy’s rate case, which included approving the Company’s DG program tariff utilizing the inflow/outflow billing method. The Company’s proposal includes billing the inflow portion based on standard retail rates and the outflow credit based on power supply less transmission charges (i.e., the credit represents Consumers Energy’s full retail power supply costs for capacity and energy). The Company DG tariff will become effective on January 1, 2021. In addition, as noted above, Consumers Energy filed a letter on November 19, 2020 in the docket for Case No. U-15787 notifying the Commission that it had reached the program size limits under MCL 460.1173(3) for Category 1 and Category 2 projects and was no longer accepting new Category 1 or Category 2 customers into its Net Metering/ Distributed Generation program as of that date. Consumers Energy also noted that “following [its] review of the Distributed Generation tariff approved in [Consumers’ rate case], Consumers Energy will consider voluntarily raising its Distributed Generation program limit from the 1% limit provided for in MCL 460.1173(3) to 2% of the average in-state peak load for the preceding 5 calendar years.”³³ On December 21, 2020, Consumers Energy filed a letter in the docket for Case No. U-15787 notifying the Commission that it “will voluntarily raise its Distributed Generation program limit from the 1% limit provided for in MCL 460.1173(3) to 2% of the average in-state peak load for the preceding 5 calendar years. This 2% limit will be allocated as follows: (i) no more than 1% for customers with an eligible electric generator capable of generating 20 kilowatts or less; (ii) no more than 0.5% for customers with an eligible electric generator capable of generating

²⁹ MPSC Case No. U-20162: <https://mi-psc.force.com/s/global-search/20162>

³⁰ MPSC Case No. U-20697: <https://mi-psc.force.com/s/global-search/20697>

³¹ MPSC Case No. U-20359: <https://mi-psc.force.com/s/global-search/20359>

³² MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276>

³³ <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000GbrwAAB>

more than 20 kilowatts but not more than 150 kilowatts; and (iii) no more than 0.5% for customers with a methane digester capable of generating more than 150 kilowatts.”³⁴

DTE Electric

DTE Electric’s rate case including a proposed distributed generation program tariff was filed on July 6, 2018 and an order was issued on May 2, 2019.³⁵ The order adopted an inflow/outflow billing method. The inflow portion is billed based on standard retail rates. The outflow credit is based on power supply less transmission charges (i.e., the credit represents DTE Electric’s full retail power supply costs for capacity and energy). The Commission prepared an [Issue Brief](#) describing DTE Electric’s distributed generation program tariff.³⁶

I & M

I & M filed its rate case including a proposed distributed generation program tariff on June 24, 2019. The Commission approved the new DG tariff on January 23, 2020 and customers could enroll beginning February 1, 2020,³⁷ The order adopted an inflow/outflow billing method. The inflow portion is billed based on standard retail rates. The outflow credit is based on the customer’s specific rate schedule’s power supply charges.

On April 3, 2020, I & M filed an application requesting to temporarily revise its DG tariff. I & M stated that the waiver is necessary so that it may implement necessary billing system modifications to support the original tariff language approved in Case No. U-20359, which does not allow the outflow credits to be applied to the monthly customer service charge. The Commission approved the waiver on May 19, 2020 and directed I & M to file tariff sheets to reinstate the original tariff language within 30 days of notifying the Staff that its billing system has been updated.³⁸

UPPCO

UPPCO filed a rate case including a proposed DG program tariff on September 21, 2018.³⁹ An order approving a settlement for this case was issued on May 23, 2019. In the settlement, UPPCO agreed to expand the size of its program to 2% of its average in-state peak load for the preceding five years. Within the 2% program capacity, 1% will be reserved for category 1 DG customers. The remaining 1% will be split evenly, with 0.5% allocated to category 2 DG customers and 0.5% allocated to category 3 DG customers. The settlement included a DG program tariff based on the inflow/outflow billing method. The inflow portion will be billed based on standard retail rates. The outflow credit is equal to the power supply component of the retail rate.

³⁴ <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000HxBB0AAN>

³⁵ MPSC Case No. U-20162: <https://mi-psc.force.com/s/global-search/20162>

³⁶ https://www.michigan.gov/documents/mpsc/DTE_DG_Issue_Brief_05-02-2019_653973_7.pdf

³⁷ MPSC Case No. U-20359: <https://mi-psc.force.com/s/global-search/20359>

³⁸ MPSC Case No. U-20756: <https://mi-psc.force.com/s/global-search/20756>

³⁹ MPSC Case No. U-20276: <https://mi-psc.force.com/s/global-search/20276>

Conclusion

The DG program size increased 53% during 2019 to 66,428 kW and nearly 3,000 customers were added bringing total customer participation to 8,147 customers. While the program continues to grow, it still represented only 0.07% of Michigan's total retail electricity sales at the end of 2019. Ninety-six percent of participants have installed solar projects as opposed to wind turbines or hydroelectric projects.

The new DG program tariff has been approved for Consumers Energy, DTE Electric, I & M, and UPPCO. The Commission is continuing the process of implementing the distributed generation program as required by Public Acts 341 and 342 of 2016.

The Commission also continues to closely monitor ongoing developments relating to DG programs, including that Consumers has reached its cap for both Category 1 and Category 2 customers, that the Company has voluntarily agreed to double its cap based on the resolution of the DG tariff in its recently-decided rate case, and that UPPCO has almost no room in its expanded cap for Category 1 projects. The Commission expects further action on this topic in 2021, including evaluation of rate design elements as part of a study requested under Senate Resolution 142, continued evaluation of DG-related issues as part of the MI Power Grid workgroup on New Technologies and Business Models, and continued legislative and other discussions on the future of DG programs in Michigan.