REPORT ON THE IMPLEMENTATION OF THE PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978 (PURPA)

April 20, 2022

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LICENSING AND REGULATORY AFFAIRS

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Executive Summary

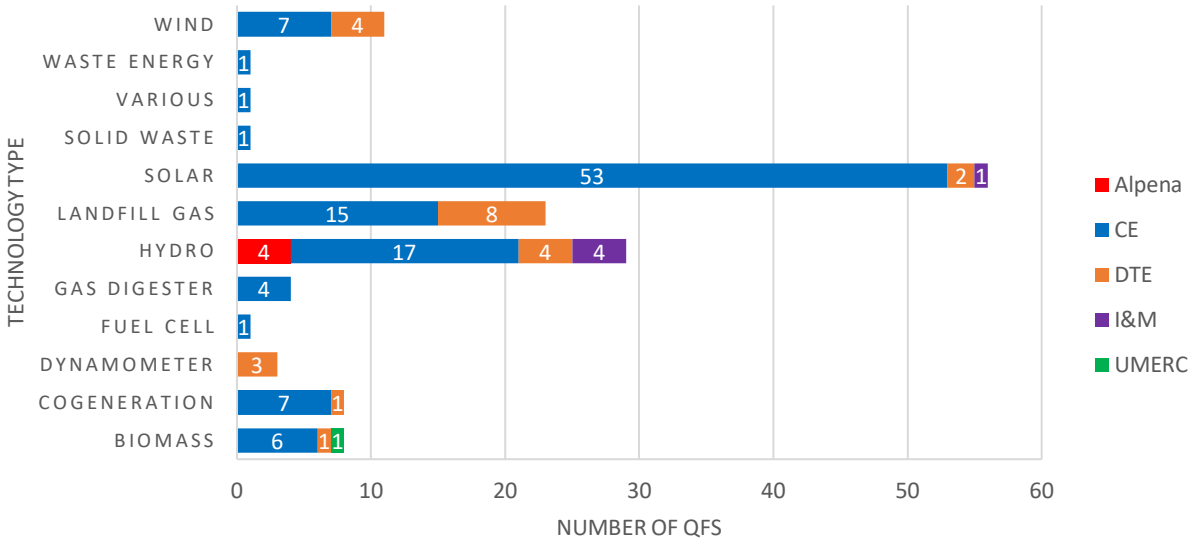
Public Act 341 of 2016 (PA 341) amended Public Act 3 of 1939 and became effective on April 20, 2017. PA 341 included new requirements for the Michigan Public Service Commission (Commission) to implement title II, section 210 of the federal Public Utility Regulatory Policies Act of 1978 (PURPA). Within one year of the effective date of PA 341, and every two years thereafter, the Commission is mandated to issue a report providing "a description and status of qualifying facilities in this state, the current status of power purchase agreements of each qualifying facility, and the commission's efforts to comply with the requirements of PURPA."

The Commission has been closely monitoring proposed changes to PURPA at the federal level. A brief summary of PURPA reforms issued by the Federal Energy Regulatory Commission (FERC) is included in this report. The Commission has also continued to work diligently to ensure that Michigan is appropriately implementing PURPA. An avoided cost fact sheet summarizing current avoided cost information for each investor-owned utility is provided in **Appendix A**.

Under PURPA, small power production facilities and cogeneration facilities, known as qualifying facilities (QFs), have a right to interconnect with and sell power to the local utility. Michigan has seen considerable growth in the number of QFs that have projects, or are planning projects, with investor-owned utilities. A summary of QF contracts approved by the Commission since 2017 is included in **Appendix B**.

Figure ES 1 shows the number of QF contracts, by utility and technology type, including QFs with contracts approved prior to 2017 and contracts for QFs not yet in operation.

Figure ES 1: Rate-Regulated Utility QFs by Technology Type, 146 Total QFs



Source: MPSC QF Survey Data Provided by Utilities, March 2022

Introduction

Report Criteria

On April 20, 2017, Public Act 341 of 2016 (PA 341) became effective. Section 6v outlines new requirements for the Commission to implement title II, section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), a federal law. PA 341 requires that the Commission conduct a proceeding at least every five years to ensure that procedures and rate schedules, including avoided cost rates, are just and reasonable based on PURPA and Federal Energy Regulatory Commission (FERC) regulations and orders implementing PURPA. Within one year of the effective date of PA 341, and every two years thereafter, the Commission shall issue a report describing the status of qualifying facilities (QFs) in the state, the current status of power purchase agreements (PPAs) for each QF, and the Commission's efforts to comply with the requirements of PURPA. This is the Commission's third report to the legislature regarding PURPA in Michigan.

Public Utility Regulatory Policies Act of 1978

In 1978, Congress passed and the President signed the Public Utility Regulatory Policies Act, commonly referred to as PURPA. The main purpose of the act was to encourage the development of renewable electric energy and cogeneration resources without adversely affecting the retail rates of electric utilities. PURPA requires that electric utilities interconnect with a QF (provided the QF pays reasonable interconnection costs), purchase energy and capacity at the utility's avoided cost, and sell supplemental, backup, maintenance, and interruptible power (standby service) to the QF on a non-discriminatory basis.[1]

PURPA's "must purchase" obligation applies to all energy and capacity made available for sale and applies to all utilities. State utility commissions and non-regulated utilities have the responsibility to determine interconnection costs, establish avoided costs, and set rates for standby service.

FERC Order 872 and 872-A[2]

On July 16, 2020, the Federal Energy Regulatory Commission (FERC) issued its final rule in Order 872 to revise and update PURPA. After requests for rehearing and clarification, FERC issued Order 872-A on November 19, 2020 to affirm and clarify the final rule. The final rule granted flexibility to state regulatory authorities on many issues.

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[1] Avoided costs means the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source. CFR §292.101(6).

[2] https://www.ferc.gov/sites/default/files/2020-07/07-2020-E-1.pdf and https://www.ferc.gov/media/order-no-872

Rates

The final rule grants to states the flexibility to determine energy rates for avoided costs using different methodologies. States have the flexibility to determine that energy rates in PPAs can vary in accordance with the purchasing utility's avoided costs at the time the energy is delivered. The final rule also grants the flexibility to determine fixed energy rates for QFs based on projected energy prices during the PPA term. States are also granted the flexibility to set as available energy rates for QFs. The final rule allows states to set energy and capacity rates for avoided cost based on competitive solicitations that adhere to the Allegheny standard[3].

One-Mile Rule

The final rule modified the one-mile rule for determining whether generation facilities are considered to form a single facility. This determination is used for classification of qualifying small power production facilities. There continues to be an irrebuttable presumption that facilities one mile apart or less form a single facility. Interested parties can make a case that facilities more than one mile apart, but within ten miles from each other, form a single facility. Facilities more than ten miles apart benefit from an irrebuttable presumption that they are separate facilities.

Obligation to Purchase

The final rule revised the regulations regarding a utility terminating its obligation to purchase from a QF that has nondiscriminatory access to certain markets. The rebuttable presumption that QFs at or below 20 MW do not have nondiscriminatory access to these markets was reduced to 5 MW for small power production facilities. Utilities must file with FERC to have this threshold lowered. The final rule did not change the purchase obligation for cogeneration facilities which remains at 20 MW.

Legally Enforceable Obligation

The final rule determined that a QF is entitled to a legally enforceable obligation with proof of commercial viability and financial commitment to construction. FERC ordered states to establish objective and reasonable criteria to determine how a QF would meet these standards.

Self-Certification

The final rule has determined that a party can protest a QF's self-certification or self-recertification without the need to file and pay for a declaratory order. Protests are permitted to new certifications and self-recertifications that have made substantive changes to an existing certification.

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[3] *Allegheny Energy Supply Company, LLC*, 108 FERC ¶ 61082 (2004)

Status of Qualifying Facilities

When PURPA was implemented in 1978, a new class of generating facilities was established. This new class, known as qualifying facilities (QFs), would receive special rate and regulatory treatment to provide access to energy markets that had previously been closed. Under PURPA, utilities have an obligation to purchase the energy and capacity output from QFs at the utility's avoided cost. FERC has two categories for QFs: qualifying small power production facilities, and qualifying cogeneration facilities. A small power production facility generates 80 MW or less. Its primary energy source is renewable (hydro, wind or solar), biomass, waste, or geothermal resources. A cogeneration facility sequentially produces electricity and another form of useful thermal energy (such as heat or steam) in a way that is more efficient than the separate production of both forms of energy. Generation facilities must meet FERC requirements in order to be designated as QFs.[4] Changes to PURPA from FERC Order 872 require FERC to excuse utilities upon request from the mandatory purchase obligation if the QF has non-discriminatory access to a wholesale electricity market such as MISO or PJM. There is a rebuttable presumption that QFs which are small power producing facilities larger than 5 MW meet this requirement. As of the date of this report, Consumers Energy Company, Indiana Michigan Power Company, Northern States Power Company, and Upper Peninsula Power Company have been granted termination of the obligation to purchase electric energy and capacity from small power producing facilities with a net capacity in excess of 5 MW. The obligation to purchase electric energy and capacity from QFs which are cogeneration facilities remains at 20 MW.

A power purchase agreement (PPA) is an agreement between a utility and a QF for the sale of energy, capacity, or both. PURPA requires utilities to make a standard offer rate available to QFs. The standard offer is a tariffed rate paid to QFs through a standard contract with the utility. By law, the standard offer must be available to QFs 100 kW and smaller. However, it may be made available to larger QFs. Consumers offers its standard offer tariff to QFs up to 2 MW. The other six rate-regulated utilities have standard offer tariffs for QFs up to 550 kW. **Appendix A** provides a summary of the avoided costs for each utility. There is also a link to each utility's standard offer tariff rates. In Michigan, not all QFs are selling power under a traditional avoided cost PURPA contract. Since the enactment of Michigan's renewable portfolio standard (RPS) in 2008, some utilities, primarily Consumers and DTE, have contracted with QFs for renewable energy to fulfill a portion of RPS requirements. As required by PA 295 of 2008, as amended, RPS contract pricing is in nearly all cases, based upon competitive bidding.

Michigan QFs

In order to have current, accurate data for this report, Commission staff issued a survey request to investor-owned utilities in Michigan to collect information about QFs with power purchase

[4] https://www.ferc.gov/qf

agreements (PPA). Specifically, each utility was asked to provide for each QF: name, technology type, nameplate capacity, contract termination date, and type of contract. Information about storage ability and capacity for each QF was also included in the survey, although none of the utilities reported any storage being utilized. The survey request excludes any net-metered facilities. QF survey results include projects used for renewable portfolio standards (RPS) compliance, as well as projects with Commission-approved PPAs that are under development or not yet generating.

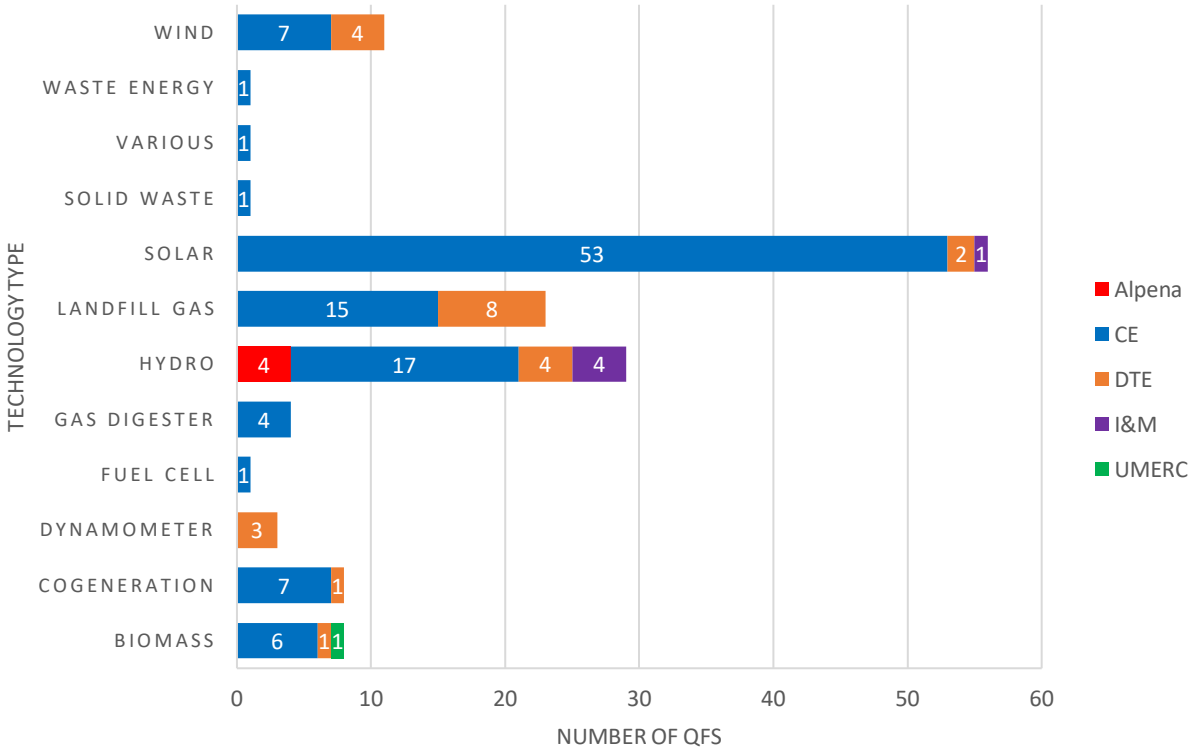
This report covers seven investor-owned electric utilities in Michigan: Alpena Power Company (Alpena), Consumers Energy Company (Consumers), DTE Electric Company (DTE), Indiana Michigan Power Company (I&M), Northern States Power-Wisconsin Company (NSP), Upper Peninsula Power Company (UPPCO), and Upper Michigan Energy Resources Corporation (UMERC). While NSP and UPPCO did not report any QFs located in Michigan, the remaining five utilities reported having at least one QF.

The two largest investor-owned utilities in Michigan, Consumers and DTE, reported 113 and 23 QFs, respectively. Consumers' QFs total approximately 2,599 MW of nameplate capacity and DTE's QFs total approximately 320 MW. Alpena reported four QFs with a total nameplate capacity of 7.53 MW. UMERC has one QF with a nameplate capacity of 56 MW. I&M has five QFs in its Michigan territory with total nameplate capacity of 2.75 MW. Data on QFs participating in the Distributed Generation Program and Consumers Energy's Experimental Advanced Renewable Program is presented each year in the Commission's annual Distributed Generation Report.[5]

Figures 1 and 2, below, provide a summary of QF contracts by technology type for rate-regulated utilities in Michigan. These figures include projects in service and under development with Commission-approved PPAs; however, the Future Solar category (depicted as one QF contract) represents 142 MW of new solar QFs where Consumers is finalizing contract negotiations with an unspecified number of solar QFs.

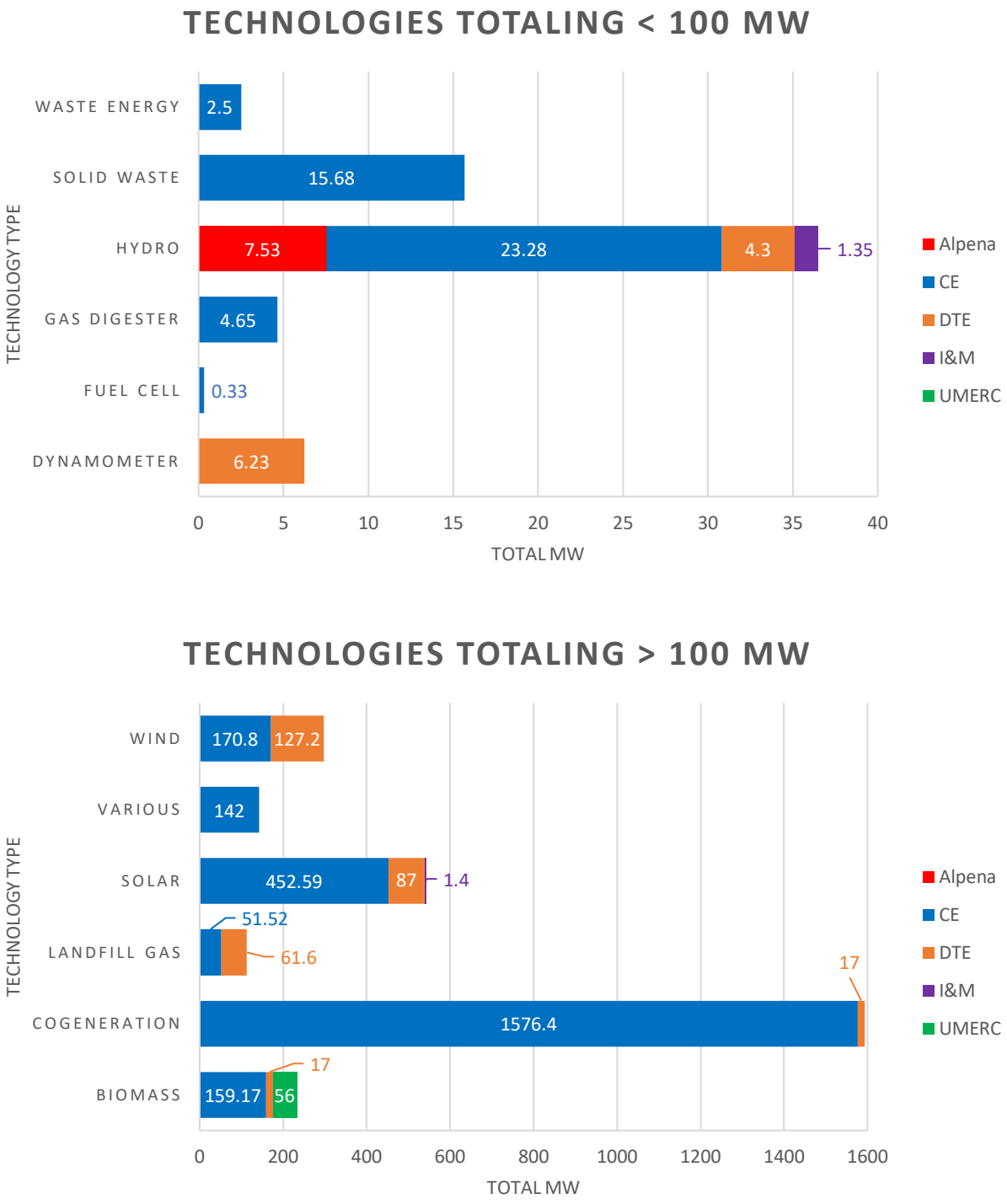
[5] https://www.michigan.gov/mpsc/regulatory/reports/other (see Distributed Generation)

Figure 1: Rate-Regulated Utility QFs by Technology Type, 146 Total QFs



Source: MPSC QF Survey Data Provided by Utilities, March 2022

Figure 2: Rate-Regulated Utility QF Nameplate Electric Generating Capacity by Technology Type, 2,986 MW Total



Source: MPSC QF Survey Data Provided by Utilities, March 2022

Potential QFs

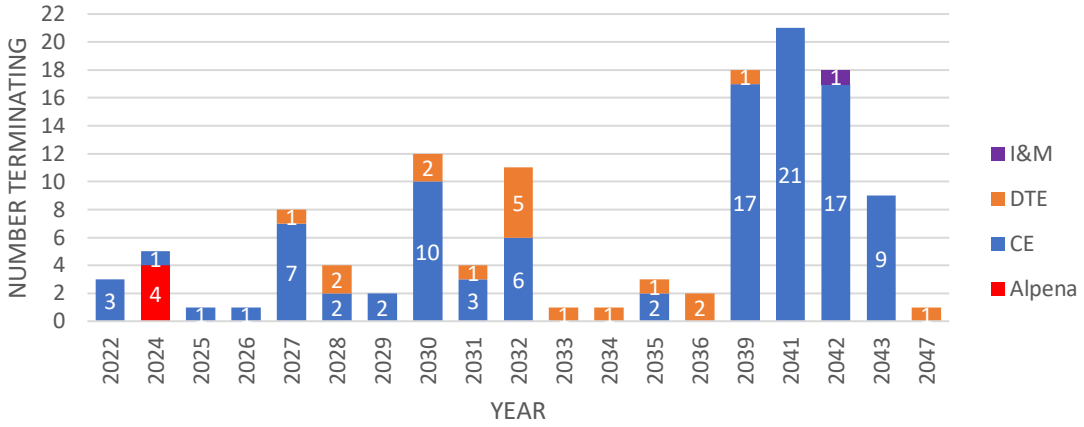
The Commission has been updating utilities' avoided cost rates and PURPA implementation for each utility.[6] Consumers and DTE have continued to experience an increase in the number of applications for interconnection and requests for PURPA contracts. The majority of the applications have been for solar projects. As of March 2022, Consumers reported 6,053 MW of pending interconnection applications. As of March 2022, DTE reported applications totaling 1,878 MW. While not all pending interconnection projects are QFs and some are likely to drop out for various reasons (interconnection costs, site control and permitting issues, etc.), the amount of pending interconnection applications indicates significant growth in QF development activity.

Status of Power Purchase Agreements

Some PURPA contracts may contribute to utilities achieving renewable energy goals. Section 35 of 2008 PA 295 allows utility ownership of four out of five renewable energy credits unless the PPA specifies otherwise. A Commission Order issued on May 31, 2017 in Case No. U-18090 stated that the amounts paid for energy and capacity do not include compensation for RECs. RECs are not automatically conveyed from a QF to the purchaser in an avoided cost contract. A QF may choose to sell its RECs to the host utility or otherwise dispose of them at the QF's option.

Figure 3, below, shows the number of PPAs terminating by year. Some utilities have contracts that do not terminate or can be renewed month-to-month depending on the terms of the PPA. PPAs with no set termination date were not included in Figure 3.

Figure 3: Number of PPAs Terminating per Year



[6] For background on ongoing Commission proceedings and initial decisions, see the MPSC's PURPA Issue Brief available at: http://www.michigan.gov/documents/mpsc/MPSC_Issue_Brief_--_PURPA_606768_7.pdf

Commission PURPA Activities

Commission PURPA Proceedings

The Commission continues to hold contested cases to review and update avoided costs for each utility. Many of the Michigan utilities have requested from the Commission to incorporate the PURPA avoided cost review into the integrated resource plan (IRP) cases. As of the date of this report, the Commission has granted those requests for CE, I&M, UPPCO, and UMERC.

Alpena Power Company

Alpena's last avoided cost review concluded with an Order issued on October 29, 2020 in Case No. U-18089 approving a settlement agreement. Alpena continues to operate under a contract wherein Alpena purchases all of its power from Consumers Energy with the exception of the four PURPA contracts. Alpena's avoided cost is based on the cost of power from Alpena's all-requirements contract with Consumers Energy. When Alpena transitions to a new all-requirements contract in 2024, the avoided cost will be updated according to the terms of the new contract.

Consumers Energy Company

On August 8, 2019, Consumers filed an application in Case No. U-20615 for Approval of a Settlement Agreement to Resolve Rights and Obligations Under the Public Utility Regulatory Policies Act of 1978. The agreement established a framework for allocating PURPA contracts to eligible QFs at the avoided cost rates set forth in Case No. U-18090. Under the framework, Consumers would enter into contracts with QFs for 170 MW of energy and capacity at the "full avoided cost" rates set forth in U-18090. Additionally, Consumers would enter into contracts with QFs for 414 MW of energy and capacity at the "energy only" avoided cost rates set forth in U-18090. The settlement included a detailed description of how the projects would be awarded contracts, based on cutoff dates within its interconnection queue. Uniform terms for the PPAs and parameters for interconnection were also included in the settlement agreement. The Commission issued an Order on September 11, 2019 approving the settlement agreement and its terms.

Consumers has fulfilled the 170 MW "full avoided cost" requirement of the settlement in Case No. U-20615. Consumers is working to finalize contract negotiations to complete the 414 MW "energy only" requirement of the same settlement. The PPAs for all of the approved projects can be accessed in the docket for Case No. U-20604. Details about these PPAs including links to each PPA document are also included in **Appendix B**.

Consumers has incorporated its avoided cost review into its IRP proceedings. Consumers' last completed IRP was Case No. U-20165. An Order approving settlement was issued in that case on June 7, 2019. Consumers has utilized this docket to update its avoided cost based on the results of competitive solicitations.

The Commission issued an Order on June 7, 2019 in Case No. U-20165 approving a settlement agreement for Consumers Energy's IRP proceeding. As part of the settlement agreement, Consumers agreed to utilize a competitive solicitation process to acquire resources specified in

the Company's preferred course of action (PCA). Consumers will utilize an independent administrator for competitive solicitation processes, as well as stakeholder involvement, and regulatory oversight and reviews. In accordance with the IRP settlement agreement, Consumers is required to file new PURPA full avoided cost rates stemming from the competitive solicitation within 30 days of the conclusion of each competitive solicitation. The PURPA full avoided cost rates stemming from each annual IRP competitive solicitation will be equal to the highest priced proposal that received a contract in the competitive solicitation. Consumers Energy's most recent avoided cost rates update in Case No. U-20165 was approved by the Commission in an Order dated January 20, 2022.

Consumers currently has an IRP proceeding in Case No. U-21090 that includes the avoided cost and PURPA implementation review.

DTE Electric

DTE's last completed avoided cost review proceeding was concluded in Case No. U-18091 with an Order issued on September 26, 2019. DTE currently has a new avoided cost proceeding in the same docket. The application for the avoided cost review was filed with the Commission on April 21, 2021 after testimony was filed on April 5, 2021.

Indiana Michigan Power Company

I&M completed its last avoided cost review proceeding in Case No. U-18092 with a Commission Order issued on March 21, 2019. I&M filed a motion with the Commission to incorporate its avoided cost review into its IRP proceeding. I&M was granted that motion and filed its IRP on February 28, 2022. The case is currently pending.

Northern States Power Company-Wisconsin

On December 20, 2018, the Commission issued an Order concluding the last avoided cost review for NSP in Case No. U-18093. NSP filed a motion to file its avoided cost review no later than 60 days following an Order from the Minnesota Public Utilities Commission in the company's pending IRP proceeding, or by June 30, 2022, whichever is sooner. The Commission granted that motion.

Upper Peninsula Power Company

UPPCO has also incorporated its avoided cost review into its IRP proceeding. The last IRP concluded in Case No. U-20350 with a Commission Order on February 6, 2020. UPPCO will file its next IRP by December 6, 2024.

Upper Michigan Energy Resources Corporation

UMERC completed its last avoided cost review in Case No. U-18095 with a Commission Order on December 20, 2018. UMERC filed a motion to incorporate its avoided cost review into its IRP proceeding. The motion was granted by the Commission. UMERC's current IRP proceeding is pending in Case No. U-21081. UMERC filed its application for this case on October 15, 2021.

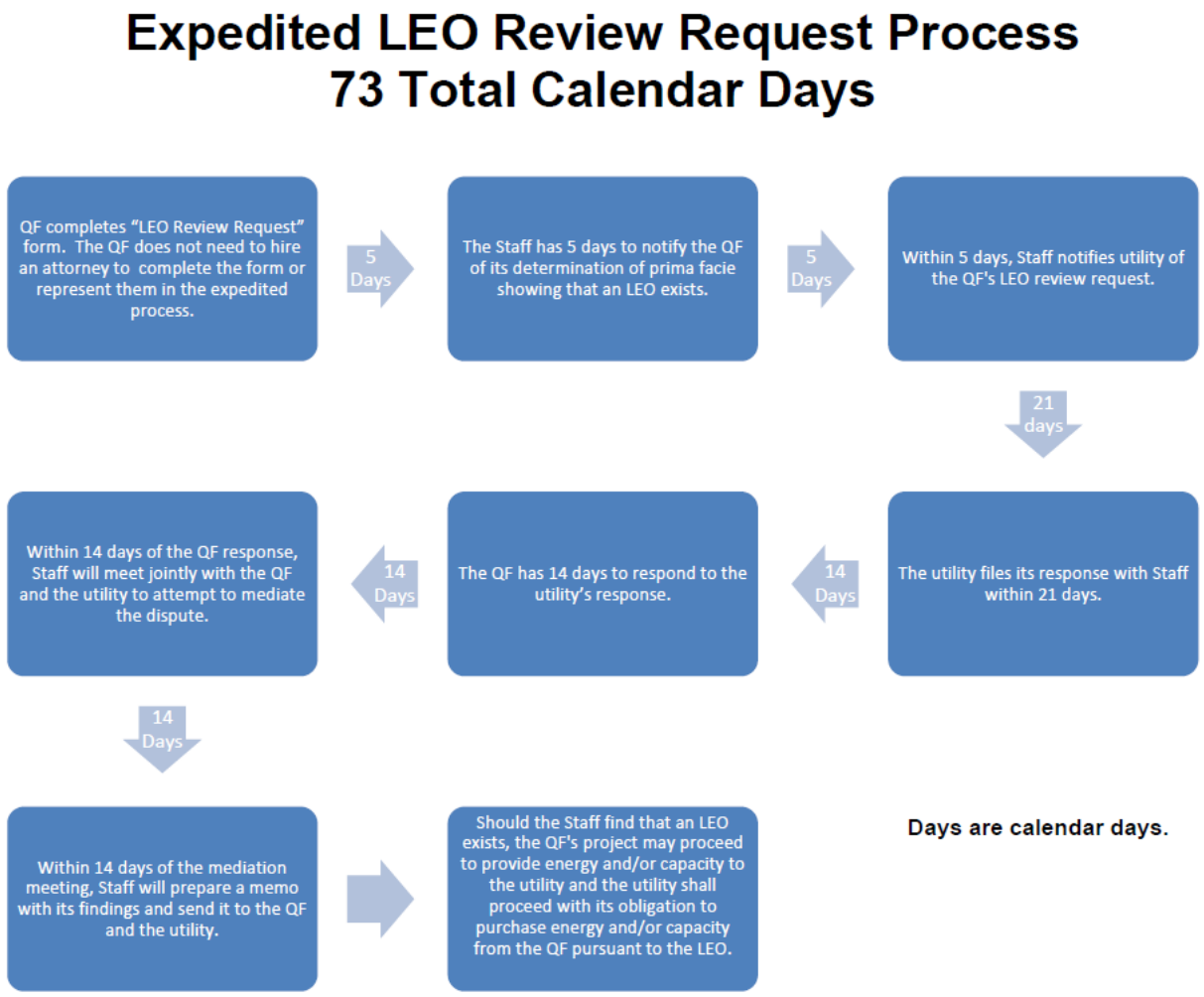
Legally Enforceable Obligation Standards

On July 2, 2021, the Commission issued a final Order in Case No. U-20905 ordering Michigan utilities to develop criteria for establishing a legally enforceable obligation (LEO) for Commission review. DTE filed its criteria in is PURPA avoided cost review proceeding in Case No. U-18091. I&M, UPPCO, UMERC, and Consumers each filed LEO criteria in new dockets (Case Nos. U-21127, U-21129, U-21130, and U-21131 respectively). Alpena was directed to file its LEO criteria as part of its next biennial avoided cost review. NSP will also file its LEO criteria in its next biennial avoided cost review.

The same July 2, 2021 Order in Case No. U-20905 detailed an expedited legally enforceable obligation review process as a forum for resolving LEO disputes between utilities and QFs. A summary of the review process is shown in Figure 4. Staff developed a standard LEO review request form that is available on the Commission's website.[7] Either party may appeal the Commission decision resulting from the expedited review process. The Commission also clarified that the LEO review process is not a prerequisite to the formal complaint process, nor does it exclude any avenue of appeal to a state or federal court.

[7] The LEO Review Request form is located here: https://mpsc_forms.apps.lara.state.mi.us/MPSC_Forms/leo

Figure 4: Flow Chart of Expedited LEO Review Process



Conclusion

The Commission appreciates the electric utilities providing the QF data needed to prepare this report issued pursuant to PA 341, Section 6v. PURPA-related activities are in progress at the Commission related to QF interconnection with the utility, establishing updated avoided costs and standard offer tariff parameters, and reviewing LEO criteria. The Commission looks forward to continuing its efforts related to PURPA implementation and providing its next report by April 20, 2024.

Avoided Cost Fact Sheet

January 20, 2022

The Public Utility Regulatory Policies Act (PURPA) encourages competition, conservation, reliability, and efficiency in generating and delivering electricity. PURPA established a class of generating facilities known as qualifying facilities (QFs). Michigan utilities are required to buy power generated by a QF smaller than 20 MW (or 5 MW with FERC approval) and are bound to compensate QFs based on the host utility's avoided cost. An electric utility's avoided cost is the amount the utility would pay to a QF in the utility's service area that is equal to the amount the utility would have to pay to generate the power itself or purchase from another source. This gives the QF an opportunity to produce power and be compensated at the appropriate avoided cost rate.

Questions about the information in this fact sheet can be sent to Merideth Hadala: HadalaM@michigan.gov

Company	Case No.	Status	Avoided Energy (per kWh)	Avoided Capacity	Standard Offer Tariff	Max Capacity Standard Offer
Consumers Energy	U-18090	1/20/2022 order in Case No. U-20165	***QFs at or below 150 kW***		Standard Offer Rate Schedules	2 MW
			Annual schedule of prices 3.1¢-5.6¢	$51,700/ZRC-year ($4,308.33/ZRC-month)		
			QFs over 150 kW			
			With Capacity Need: annual schedule of prices 3.1¢-5.6¢	With Capacity Need: $51,700/ZRC-year ($4,308.33/ZRC-month)		
			Without Capacity Need: contract rates option of i)15-year contract based on LMP, or ii)10-year contract with years 1-5 based on scheduled energy rates 2.77¢-4.23¢ & years 6-10 equal to the year 5 forecast	Without Capacity Need: MISO PRA		
DTE	U-18091	9/26/2019 Order	With Capacity Need: Years 1-5 based on forecasted energy rates 2.52¢-3.41¢, then variable rate based on actual energy cost of Bluewater Energy Center	With Capacity Need: 1.4¢/kWh	Standard Offer Rate Schedules (D78-83)	550 kW
			Without Capacity Need: contract rates option of i) Years 1-5 based on forecasted LMP energy rates 2.39¢-3.56¢, then variable rate based on actual LMP ii) Actual LMP	Without Capacity Need: MISO PRA		
Alpena Power Company	U-18089	10/29/2020 Order	Historically 3.928¢-4.425¢ (rolling average based on contract with Consumers Energy)	1.74¢-1.87¢/kWh	Standard Offer Rate Schedules (D35-41)	550 kW
			Rates are available through 2024			
Indiana Michigan Power Company	U-18092	3/21/2019 Order	Years 1-5 based on forecasted LMP energy rates 3.11¢-4.53¢, then variable rate based on actual LMP	$0	Standard Offer Rate Schedules (D68-74)	550 kW
Northern States Power Company	U-18093	12/20/2018 Order	Years 1-5 based on forecasted LMP energy rates 2.92¢-4.05¢, then variable rate based on actual LMP	$0	Standard Offer Rate Schedules (D47-47.72)	550 kW
Upper Peninsula Power Company	U-18094	2/6/2020 Order in U-20350	Years 1-5 based on forecasted LMP energy rates 2.78¢-4.32¢, then variable rate based on actual LMP	MISO PRA	Standard Offer Rate Schedules (D72.70-72.73)	550 kW
Upper Michigan Energy Resources Corporation	U-18095	12/20/2018 Order	Years 1-5 based on forecasted LMP energy rates 2.78¢-3¢, then variable rate based on previous year LMP	0.045¢ WPSC 0.059¢ WEPCO	Standard Offer Rate Schedules (D58-60.08 & 143-150)	550 kW

DISCLAIMER: This document was prepared to aid the public's understanding of certain matters before the Commission and is subject to change subsequent to Commission orders. This document is not intended to modify, supplement, or be a substitute for the Commission's orders. The Commission's orders are the official action of the Commission.

Consumers Energy: Contracts					
Developer Name	**Company**	**Quantity**	**Renewable Energy Type**	**Commission Approval**	**Term Ending**
STS Hydropower, Ltd.	Ada Hydroplant	1.4 MW	Hydroelectric	7/31/2017	5/31/2022
Viking Energy Corporation	Lincoln Plant	18 MW	Biomass	4/18/2019	5/31/2027
Viking Energy Corporation	McBain Plant	18 MW	Biomass	4/18/2019	5/31/2027
Hillman Power Company	Hillman	16.3 MW	Biomass	7/2/2019	12/31/2022
NANR	Rathbun Plant	1.6 MW	Landfill Gas	9/26/2019	5/31/2039
Commonwealth Power Company	LaBarge Hydro Plant	0.80 MW	Hydroelectric	9/26/2019	5/31/2039
Crystal Flash Renewable Energy,	Mackinaw City Plant	1.8 MW	Wind	9/9/2021	5/31/2024
Grenfell, Inc.	Belding Plant	0.3 MW	Run-of-River Hydroelectric	11/14/2019	5/31/2039
STS Hydropower, LLC	Cascade Hydro Plant	1.4 MW	Hydroelectric	7/23/2020	5/31/2039
	Fallasburg Hydro Plant	0.85 MW	Hydroelectric	7/23/2020	5/31/2039
Black River Limiter Partnership	Alverno Hydro Plant	1.2 MW	Hydroelectric	7/23/2020	5/31/2039
City of Beaverton	City of Beaverton Hydro Plant	0.5 MW	Hydroelectric	7/23/2020	5/31/2039
Elk Rapids Hydroelectric Power, LLC	Elk Rapids Hydro Plant	0.7 MW	Hydroelectric	7/23/2020	5/31/2039
Kent Co. Board of Public Works	Mass Burn Incinerator Plant	18.2 MW	Incinerator	7/23/2020	5/31/2039
Tower Kleber LP	Kleber Hydro Plant	1.2 MW	Hydroelectric	7/23/2020	5/31/2039
Tower Kleber LP	Tower Hydro Plant	0.56 MW	Hydroelectric	7/23/2020	5/31/2039
Michiana Hydroelectric Co.	Bellevue Gothic Mill Plant	0.045 MW	Hydroelectric	7/23/2020	5/31/2039
White's Bridge Hydro Co.	White's Bridge Hydro Plant	0.817 MW	Hydroelectric	7/23/2020	5/31/2039
Good Fruit Storage, LLC	Good Fruit Storage, LLC	0.179 MW	Solar	2/18/2021	5/31/2031

NextSun Energy, LLC	Workman Road Solar	2 MW	Solar	12/6/2019	9/29/2040
	Surrey Road Solar	2 MW	Solar	10/29/2020	9/29/2042
	Morey Road Solar	2 MW	Solar	10/29/2020	9/22/2041
	Lake City Solar	2 MW	Solar	10/29/2020	9/22/2041
Cypress Creek Renewables	Hazel Solar, LLC	2 MW	Solar	12/6/2019	8/18/2040
	Hendershot Solar, LLC	2 MW	Solar	12/6/2019	8/18/2040
	Jack Francis Solar, LLC	2 MW	Solar	12/6/2019	8/3/2040
	May Shannon Solar, LLC	2 MW	Solar	12/6/2019	8/3/2040
	13 Mile Solar, LLC	2 MW	Solar	12/6/2019	8/18/2040
	Angola Solar, LLC	2 MW	Solar	12/6/2019	8/18/2040
	Captain Solar, LLC	2 MW	Solar	12/6/2019	8/3/2040
	Coldwater Solar, LLC	2 MW	Solar	12/6/2019	8/3/2040
	Interchange Solar, LLC	2 MW	Solar	12/6/2019	8/18/2040
	Stoneheart Solar, LLC	2 MW	Solar	12/6/2019	12/8/2040
	Woodley Solar, LLC	0.821 MW	Solar	12/6/2019	12/8/2040
	Macbeth Solar, LLC	20 MW	Solar	12/6/2019	12/24/2041
Geronimo Energy	Bingham Solar, LLC	20 MW	Solar	12/6/2019	11/30/2040
	Temperance Solar, LLC	20 MW	Solar	12/6/2019	11/30/2040
sPower Development Company, LLC	Cement City Solar, LLC	20 MWac	Solar	1/20/2022	5/31/2042
	Letts Creek Solar, LLC	15 MWac	Solar	1/20/2022	5/31/2042
	Pullman Solar, LLC	20 MWac	Solar	1/20/2022	5/31/2042
	Thorn Lake Solar, LLC	20 MWac	Solar	1/20/2022	5/31/2042

Inman Solar Incorporated	Arthur Solar Farm, LLC Plant	1.827 MWac	Solar	4/15/2020	12/31/2040
	Golden Solar Farm, LLC Plant	1.828 MWac	Solar	4/15/2020	12/31/2040
	Robert Swift Solar Farm, LLC Plant	1.828 MWac	Solar	4/15/2020	12/31/2040
	Byrne Solar, LLC	5 MWac	Solar	4/15/2020	7/15/2041
	Aluminum Solar, LLC	8 MWac	Solar	4/15/2020	9/1/2041
	TART Solar, LLC	8.49 MWac	Solar	6/23/2021	6/30/2042
	Albion Solar, LLC	10 MWac	Solar	4/15/2020	9/15/2040
	Bamboo Solar, LLC	10 MWac	Solar	4/15/2020	10/15/2040
	Burns Park Solar, LLC	10 MWac	Solar	4/15/2020	10/15/2040
	Congo Solar, LLC	10 MWac	Solar	4/15/2020	10/15/2040
	Johnsfield Solar, LLC	10 MWac	Solar	4/15/2020	8/15/2040
	Lightfoot Solar, LLC	10 MWac	Solar	4/15/2020	10/15/2040
	Rosco Solar, LLC	10 MWac	Solar	4/15/2020	9/1/2040
	Surbrook Solar, LLC	10 MWac	Solar	4/15/2020	10/15/2040
	Allegheny, LLC	10.699 MWac	Solar	4/15/2020	10/1/2041
	Hogan Solar, LLC	12 MWac	Solar	4/15/2020	8/15/2040
	Swede Solar, LLC	12 MWac	Solar	4/15/2020	10/15/2040
	Blue Elk Solar VII, LLC	12.331 MWac	Solar	4/15/2020	5/5/2043
	Blue Elk Solar I, LLC	20 MWac	Solar	4/15/2020	5/5/2043
	Blue Elk Solar III, LLC	20 MWac	Solar	4/15/2020	5/5/2043
	Blue Elk Solar IV, LLC	20 MWac	Solar	4/15/2020	5/5/2043

	Beaverton Solar, LLC	20 MWac	Solar	4/15/2020	8/1/2041
	Cloudbreak Solar, LLC	20 MWac	Solar	4/15/2020	9/15/2040
	Lyons Road Solar Farm, LLC	20 MWac	Solar	4/15/2020	9/1/2040
	Shipsterns Solar, LLC	20 MWac	Solar	4/15/2020	5/15/2041
	Topanga Solar, LLC	20 MWac	Solar	4/15/2020	10/1/2040
	Willford Solar, LLC	20 MWac	Solar	4/15/2020	9/1/2040
	Greenstone Solar, LLC	20 MWac	Solar	4/15/2020	5/5/2043
	Midcontinent Solar, LLC	20 MWac	Solar	4/15/2020	5/5/2043
Pine Gate Renewables	Durban Solar, LLC	12 MWac	Solar	7/23/2020	5/8/2042
	Esmarelda Solar, LLC	8 MWac	Solar	7/23/2020	11/1/2041
	Shady Solar, LLC	10 MWac	Solar	7/23/2020	12/15/2041
	Geddes 2 Solar, LLC	2 MW	Solar	7/9/2020	9/14/2041
	Bullhead Solar, LLC	2 MW	Solar	7/9/2020	9/14/2041
	Geddes 1 Solar, LLC	2 MW	Solar	7/9/2020	9/14/2041
Energy Developments Byron Center, LLC	Byron Center Plant	3 MW	Landfill gas	2/4/2021	5/31/2039
Enrgy Developments Coopersville, LLC	Coopersville Plant	6.1 MW	Landfill gas	2/4/2021	5/31/2039
Energy Developments Grand Blanc, LLC	Grand Blanc Plant	3.8 MW	Landfill gas	2/4/2021	5/31/2039
Energy Developments Pinconning, LLC	Pinconning Plant	3 MW	Landfill gas	2/4/2021	5/31/2039
Midland Cogeneration Venture Limited Partnership	MCV Plant	1240 MW	Cogeneration	3/4/2021	5/31/2030
DOW	DSC Plant	0.0313	Solar	11/4/2021	9/4/2031
South Christian High School	SCHS Plant	0.55	Solar	11/18/2021	5/31/2032
Michigan Apple Packers Cooperative	MAP Plant	0.375	Solar	1/20/2022	5/31/2030

Alpena Power Company: Contracts					
Developer Name	**Company**	**Quantity**	**Renewable Energy Type**	**Commission Approval**	**Term Ending**
Thunder Bay Power Company, LLC	Hillman	0.25 MW	Hydroelectric	7/2/2021	12/31/2024
	Norway Point	4 MW	Hydroelectric	7/2/2021	12/31/2024
	Four Mile	2.4 MW	Hydroelectric	7/2/2021	12/31/2024
	Ninth Street	1.2 MW	Hydroelectric	7/2/2021	12/31/2024