

Public Utility Regulatory Policies Act

1. What is the Public Utility Regulatory Policies Act (PURPA)?

PURPA is a federal law enacted in 1978 in reaction to an energy crisis and implemented by state public service commissions for rate-regulated electric utilities. PURPA's goals are to encourage competition, conservation, reliability and efficiency in generating and delivering electricity. One of the ways PURPA was set up to accomplish its goals was by establishing a new class of power generation facilities - known as qualifying facilities (QFs) - which would receive a special rate for selling their electricity back to the local electric utility and related regulatory treatment. PURPA imposed an obligation on local ("host") utilities to purchase power from QFs in an effort to promote competition and achieve the other policy goals embodied in the federal law.

2. What is a Qualifying Facility?

Qualifying facilities are **independent producers of power** that fall into two categories:

- A small power production facility, whose primary energy source is renewable (hydro, wind or solar), biomass, waste, or geothermal resources.
- A cogeneration facility that 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.

Today, Michigan utilities are required to buy power generated by a qualifying facility smaller than 20 MW, and are bound by law to pay a set price, based on the utility's "avoided cost."

3. What is avoided cost?

"Avoided cost" is the amount an electric utility would pay to a qualifying facility 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**. In other words, the utility has avoided the cost of generating or buying the power itself.

4. Why is there a debate over avoided cost?

Avoided cost determines how much the utility will pay the QF. Utilities generally argue for a lower avoided cost which would reduce the amount of payments to QFs. Conversely, QFs argue for a higher avoided cost because they want to receive a higher payment from utilities. Actual avoided cost must reflect the costs that utility companies would otherwise pay for energy and capacity, giving QFs an opportunity to produce power and be compensated accordingly if they can do it at the avoided cost rate.

5. What is the Michigan Public Service Commission's role?

Federal rules require state public service commissions and non-regulated utilities (primarily rural cooperatives and municipalities not regulated by state commissions) to **set rates for the host utility to buy power from a QF**. In the 1980s, the MPSC approved avoided cost rates which were the basis for contracts entered into between utility companies and QFs at that time, most of which were for terms of 30 years.

6. Why is there activity related to PURPA today?

Because some PURPA contracts entered into in the 1980s and 1990s are expiring, and potential new QFs are inquiring about avoided cost rates and other factors, the MPSC issued an order on October 27, 2015, establishing the PURPA Technical Advisory Committee to evaluate the MPSC's implementation of PURPA. In addition, on April 20, 2017, Public Act 341 of 2016 took effect, which requires the MPSC to review avoided costs no less than every five years.

7. How did the MPSC address avoided costs in recent PURPA cases?

In the Consumers Energy case, Case No. [U-18090](#), the MPSC used an approach that relies on a **combination of determining the construction and operating costs of a representative power plant as well as the costs of procuring electricity from energy markets**. Avoided capacity costs are based on a natural gas combustion turbine (CT), which is the type of electric generation unit that would likely be built to meet capacity needs today. Avoided energy costs are based on the forecasted variable costs of a natural gas combined cycle (NGCC) unit, which tends to have higher capacity costs than a CT unit, but produces cheaper energy. The difference between the capital costs of an NGCC unit and CT unit is added to the energy cost (fixed "investment cost attributable to energy" adder). The MPSC has adopted or is considering alternative avoided cost methodologies for smaller electric utilities, based on their unique circumstances.

8. There is an avoided cost rate for energy and for capacity. What is the difference and what does it mean for different types of qualifying facilities?

"Energy" is the amount of electricity produced to serve customers, and is measured in MWh. "Capacity" represents the potential to produce energy at a specific time, and is measured in MW. **Even though the avoided cost rate for capacity is the same for all types of QFs (biomass, waste-to-energy, wind, solar, hydro, etc.), the amount of money different types of QFs will receive varies based on the QF's operating characteristics or, more specifically, its "capacity value."** This is because some generators are more consistently able to generate electricity during peak times of electricity consumption such as hot, humid summer days. As a result, these QFs get more credit for the capacity they provide based on federal requirements. Other QFs provide very little capacity value. For example, run-of-the-river hydro-electric facilities typically produce more when overall demand for electricity is at its lowest in the spring and fall. In the Consumers Energy case, the MPSC used the same system for determining capacity value by generator type as the federal requirements.

9. What is a standard offer contract, and how did the MPSC's decision affect standard offer terms?

The standard offer is a tariffed rate paid to the QFs through a standard contract with the utility. The availability of a standard offer contract reduces transaction costs for individual projects, thus reducing barriers to entry, especially for developers of smaller QFs.

The MPSC's decision made several changes, including offering QFs the choice between 5, 10, 15, and 20 year contract lengths; increasing the size of QFs for which standard offer contracts are available from 100 kW or less to 2 MW or less; providing several options for what price QFs will be paid; and allowing Renewable Energy Credits (RECs) to be assigned to the QF.

10. What does the MPSC's decision mean?

Avoided costs haven't been reviewed by the MPSC in over 25 years, so it was necessary to update avoided costs to reflect the changing electric system. In the past, avoided costs were set using the costs of coal-fired power plants. Lower-cost natural gas plants are more reflective of the costs of energy and capacity that utilities avoid paying for when entering into contracts with QFs today.

As a result, **the new avoided cost rates established by the MPSC are lower than those approved previously.** For many QFs that have been operating within set revenues for decades, 30 years of industry cost declines will occur essentially overnight. This is in contrast to an entity like a utility with a large generation portfolio that has experienced a smoothing effect with individual units phasing in and out over the same period. This means that smaller QFs, like biomass plants and hydro facilities, that have benefited from contract prices above what utility companies could procure in today's market or by building themselves will need to adjust their cost structures in order to remain competitive going forward. The QF can also attempt to negotiate with the utility or another entity to enter into a power purchase contract for capacity and/or energy in lieu of the pre-approved avoided cost. New, lower-cost contracts with QFs should also lower utility costs that are passed through to utility customers for recovery.

At the same time, the MPSC's decision regarding standard offer contracts – increasing the threshold from 100kw to 2MW and increasing the length to 20 years – should help to provide additional certainty as distributed energy resources, like solar energy systems, continue to be deployed.

11. What's next?

The MPSC has several pending PURPA cases. **Each PURPA case is subject to biennial review by the MPSC.** A report to the Michigan Legislature and the Governor on the status of qualifying facilities in the state, the status of power purchase agreements of each qualifying facility, and the MPSC's efforts to comply with the requirements of PURPA, is due April 20, 2018, and every two years thereafter.

Pending PURPA Cases:

- [U-18089](#) – Alpena Power Co.
- [U-18091](#) – DTE Electric Co.
- [U-18092](#) – Indiana Michigan Power Co
- [U-18093](#) – Northern States Power Co.
- [U-18094](#) – Upper Peninsula Power Co.
- [U-18095/U-18096](#) – Upper Michigan Energy Resources Co.

Where to find out more about PURPA:

www.michigan.gov/energylegislation
[Sec. 6v of Public Act 341 of 2016](#)

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