STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, on the Commission's own motion, establishing the method and avoided cost calculation for **DTE ELECTRIC COMPANY** to fully comply with the Public Utility Regulatory Policies Act of 1978, 16 USC 2601 *et seq*.	)	Case No. U-18091

At the July 31, 2017 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Sally A. Talberg, Chairman
Hon. Norman J. Saari, Commissioner
Hon. Rachael A. Eubanks, Commissioner

OPINION AND ORDER

History of Proceedings

The Commission opened this docket in an order issued on May 3, 2016 (May 3 order), and directed DTE Electric Company (DTE Electric) to file proposed avoided cost calculation methods and costs in accordance with the requirements of the Public Utility Regulatory Policies Act of 1978, PL 95–617; 92 Stat 3117 (PURPA) and the May 3 order. In its filing, DTE Electric was instructed to provide avoided cost calculations using: (1) the hybrid proxy plant method proposed in the PURPA Report;[1] (2) the transfer price method developed under Act 295; and (3) another

[1] In an order issued on October 27, 2015, in Case No. U-17973, the Commission opened an investigation into issues concerning PURPA avoided costs. After a series of meetings and a round of comments, the investigation culminated on April 8, 2016, when the Commission Staff (Staff) filed a final report (PURPA Report).

method, if any, that the company wished to propose. DTE Electric was also directed to file a proposed Standard Offer tariff, including applicable design capacity.

Pursuant to the May 3 order, DTE Electric filed avoided cost methods and costs on June 17, 2016. A prehearing conference was held by Administrative Law Judge Mark E. Cummins (ALJ Cummins) on August 3, 2016.[2] At the prehearing conference, ALJ Cummins granted petitions to intervene filed by Cadillac Renewable Energy, LLC; the City of Ann Arbor (Ann Arbor); Landfill Energy Systems (LES); Environmental Law & Policy Center, Ecology Center, Solar Energy Industries Association, and Vote Solar (collectively, ELPC); and Great Lakes Renewable Energy Association (GLREA). The Staff also participated in the proceedings.

An evidentiary hearing was conducted on January 12, 2017. The parties filed briefs and reply briefs, and on March 31, 2017, the ALJ issued his Proposal for Decision (PFD). On April 21, 2017, DTE Electric, LES, Ann Arbor, GLREA, and ELPC filed exceptions to the PFD. On May 5, 2017, DTE Electric, Ann Arbor, GLREA, and ELPC filed replies to exceptions. The record in this proceeding consists of 363 pages of transcript and 47 exhibits that were admitted into evidence.

Background

On March 17, 1981, the Commission issued an order in Case No. U-6798, to implement the provisions of Section 210 of PURPA (16 USC 824a–3), which requires, among other things, that the Commission establish the avoided cost amounts that an electric utility is obligated to pay to certain Qualifying Facilities (QFs). As defined in PURPA, a QF is a small power production facility or cogeneration facility that has a right to be served by, and sell to, its host electric utility at the utility's avoided cost. Cogeneration QFs produce electric energy and steam or other forms

[2] On December 19, 2016, this case was reassigned to Administrative Law Judge Martin D. Snider (ALJ).

of energy, which are used for industrial, commercial, or cooling purposes. There is no maximum size limitation for PURPA qualification for cogeneration facilities. Small power production facilities are defined as facilities that use biomass, waste, or renewable resources, including wind, solar, and water, to produce electric power, and which, together with other facilities at the same site, have a generating capacity equal to or less than 80 megawatts (MW).[3] *See*, 18 CFR 292.101.

PURPA requires electric utilities to purchase the energy offered by QFs at rates that are "just and reasonable to the electric consumer of the electric utility and in the public interest" and that do not "discriminate against qualifying cogeneration and small power production facilities." 18 CFR 292.304(a)(1)-(2). However, electric utilities are not required "to pay more than the avoided costs for purchases." "Avoided costs" are defined as "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." 18 CFR 292.101(b)(6).

In its evaluation of avoided costs, the Commission is required, to the extent it can, to consider the following criteria, set forth in 18 CFR 292.304(e):

> (1) Data regarding the utility's cost structure and plans to add capacity;
> (2) The availability of capacity or energy from a qualifying facility during daily and seasonal peak periods, including:
> (i) The ability of the utility to dispatch the qualifying facility;
> (ii) The reliability of the QF;
> (iii) Contract terms;
> (iv) The extent to which scheduled outages of the qualifying facility can be coordinated with scheduled outages of the utility's facilities;

[3] Pursuant to the 2005 Energy Policy Act amendments to PURPA, and Federal Energy Regulatory Commission (FERC) Order 688, QFs larger than 20 MW are presumed to have non-discriminatory access to regional markets. Thus, a host utility may apply to the FERC to terminate its obligation to purchase from QFs with net capacity in excess of 20 MW. DTE Electric is excused from the mandatory purchase obligation from these larger QFs. *See,* FERC Docket Nos. QM10-2-20-000, QM10-2-001, and QM10-2-002, issued October 26, 2009.

(v) The usefulness of energy and capacity supplied from a qualifying facility during system emergencies;
(vi) The individual and aggregate value of energy and capacity from QFs on the electric utility's system;
(vii) The smaller capacity increments and the shorter lead times available with additions of capacity from QFs.
(3) The relationship of the availability of energy or capacity from the QF to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use.
(4) The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.

Finally, FERC regulations require the establishment of Standard Offer rates for utility purchases from QFs with a design capacity of 100 kilowatts (kW) or less. The 100 kW size limit is a floor for Standard Offers, and uniform contracts and rates for QFs larger than 100 kW may be established.

By 1993, the Commission had issued over 20 orders approving PURPA contracts, with avoided costs calculated on the basis of a proxy coal-fired generating unit. In 2016, the Commission noted that it had been over two decades since avoided cost rates were developed and that, in light of the significant changes in the energy landscape and the imminent expiration of many of the original PURPA contracts, it was an opportune time to undertake a comprehensive reexamination of PURPA, with a focus on identifying appropriate, updated methods for establishing avoided costs.

Discussion

The ALJ provided a detailed review of the record and positions of the parties that will not be repeated here. *See*, PFD, pp. 18-81. The ALJ addressed avoided cost calculations for both capacity and energy along with the planning horizon for determining capacity needs; biennial

reviews of avoided costs; and Standard Offer tariff language, including contract length, rates, and design capacity. These issues are addressed *ad seriatim.*

1. Planning Horizon and Avoided Capacity and Energy Costs

While noting that it has no PURPA contracts expiring before 2023 (and only four that expire before 2030) DTE Electric summed up its view of the changes to the energy landscape since the Commission first addressed PURPA:

> PURPA continues to only require electric utilities to purchase electricity from QFs at the electric utility's "incremental cost of alternative energy" (i.e., its "avoided costs"), Michigan law now requires retail electric rates to be established by the Commission at the cost of service and without subsidies, there are now alternative electric suppliers (AES) capable of purchasing wholesale electricity from QFs for resale to retail electric consumers in Michigan and AESs must also have QF purchase obligations, there is now a MISO wholesale market for electricity that did not exist in the past, and Michigan law now prescribes a detailed process for evaluating new generation development in Michigan.
>
> This environment provides QFs vastly more options than in the past while simultaneously diminishing the relative certainty and flexibility in which electric utilities have operated in the past.

DTE Electric's initial brief, pp. 11-12 (footnotes omitted).

DTE Electric proposed using a natural gas combined cycle (NGCC) plant, with a 30-year life, as the basis for calculating avoided capacity and energy costs. According to DTE Electric, if the company were to build a plant to satisfy capacity requirements, an NGCC is the first unit the company would select. DTE Electric further recommended that capacity and energy purchases be adjusted to reflect the different performance characteristics of the specific type of QF compared to the NGCC proxy unit. DTE Electric added that, if the company does not require capacity to serve its customers in the next five years, it should only be required to pay the avoided cost of energy at the wholesale price, or locational marginal price (LMP) in the Midcontinent Independent System Operator, Inc.'s (MISO) wholesale market. DTE Electric argued that its approach results in

avoided cost rates that are just and reasonable to customers and that meet the requirements of PURPA.

The Staff proposed a hybrid proxy plant approach for determining DTE Electric's avoided costs if any capacity is required during a 10-year planning horizon. The Staff's method combines a natural gas combustion turbine (NGCT) proxy unit for capacity, and it allows a QF to choose among three options for the energy component. If DTE Electric's forecast shows that no capacity is needed during the entire 10-year planning period, the Staff recommended that the company submit a filing so indicating, and the Standard Offer capacity rate for new QFs would then be adjusted to the MISO planning reserve auction (PRA) price. Nevertheless, for existing QFs with contracts that expire, the Staff advised that these facilities should have their contracts renewed at the full standard rate, whether or not the company forecasts a need for capacity. The Staff posited that because the capacity supplied by existing QFs is already taken into account in the company's planning, it was appropriate to continue the contracts at the full avoided cost rate. The Staff recommended that if any capacity shortfall is projected over the 10-year planning horizon, QFs should be compensated for both capacity and energy.

The Staff contended that the use of an NGCT unit as a proxy for the cost of capacity was appropriate because this type of unit could be built quickly, at a relatively low cost, and an NGCT can be cycled on and off as needed. The Staff's proposal also recognizes effective load carrying capability (ELCC) on-peak for intermittent resources. Specifically, the Staff's method considers daily and seasonal peak periods using MISO's ELCC to determine the amount of capacity credit provided by wind and solar QFs.

For energy, the Staff proposed that a QF select one of three options: (1) LMP at the time of delivery; (2) the utility's LMP forecast over the contract period; or (3) payment based on the

forecasted variable cost of an NGCC unit as determined by the model used to calculate transfer prices pursuant to Act 295 for the period of the contract. The Staff noted that to obtain lower-cost energy, a utility would be more likely to build an NGCC than an NGCT; thus, the use of an NGCC unit as a proxy for avoided energy cost was appropriate. In addition:

> Staff suggests that energy payments to the QF include a fixed investment cost attributable to energy [ICE] in addition to the LMP, LMP forecast or the NGCC operating cost forecast. The rationale is that in order to realize a cheaper energy price on the market, additional capital costs to build an NGCC are incurred over and above the cost to build a CT as a CT would generally be built to provide cheap capacity while an NGCC would be built to provide cheap energy.

2 Tr 106.

In its reply brief, the Staff maintained that its hybrid proxy method was the most appropriate way to establish avoided cost, but nevertheless raised concerns about whether the inputs to the model were appropriate:

> While the same NGCC transfer price model was used for this case to calculate Staff's avoided energy cost option as the one used to develop the transfer price schedules, several of the inputs were modified in this case to more closely reflect DTE's filed inputs. The modified inputs are: plant size, plant capacity factor, heat rate, fixed charge rate, and fixed operations and maintenance (O&M) cost. Each modification Staff made to the transfer price model inputs used in this case, unfortunately, contributed to an unexpectedly lower avoided energy cost than is found on recent transfer price schedules. If Staff used the same inputs it used for recent transfer price schedules, the resulting avoided energy cost would be similar to the energy price used in recent transfer price schedules. Thus, while Staff still supports the model it chose, it recommends that the Commission look closely at the inputs.

Staff's reply brief, p. 6.

ELPC agreed that the Staff's hybrid proxy method was the most reasonable starting point for calculating avoided costs, noting that "an NGCT is the best measure of the incremental cost DTE actually avoids by entering long-term QF contracts." ELPC's initial brief, p. 7. In addition, ELPC agreed with the Staff's recommendation to use ELCC for both the QF and the proxy plant,

explaining that ELCC "recognizes the historical availability and output of intermittent generation types during on-peak periods, and therefore accounts for the avoided costs associated with intermittent resources." *Id.*

ELPC urged the Commission to reject DTE Electric's proposed five-year planning period for determining whether capacity is needed on grounds that short-term planning discriminates against QFs by using a significantly shorter horizon than is used by the company. ELPC further pointed out that when a utility builds capacity it tends to be added in relatively large amounts, resulting in excess capacity for several years. According to ELPC, "The perverse result . . . is that QFs will perpetually be caught in a cycle of low capacity values due to the nature of large-scale utility capacity acquisitions even though customers would save money if the utility procured capacity through smaller, incremental QF purchases." ELPC's initial brief, p. 9, citing 2 Tr 204.

ELPC also supported the Staff's recommended approach for calculating avoided energy costs, observing that using an NGCC unit as a proxy for energy appropriately reflects what DTE Electric would pay under a long-term power purchase agreement (PPA). ELPC added one caveat to its support for the Staff's avoided cost method: namely, that the Commission should set avoided cost at no less than DTE Electric's cost to meet any applicable integrated resource plan (IRP), customer demand, or renewable portfolio requirements. ELPC pointed to increased renewables requirements under 2016 PA 342 (Act 342), recommending that when a QF is providing capacity and energy to satisfy a mandate, like Act 342, the avoided cost rate should be the greater of the Staff's hybrid proxy plant approach or the company's cost to build the same generation. ELPC also recommended that additional avoided costs for reduced line-losses, emissions reductions, and the hedging value associated with QF power be incorporated into the calculation.

GLREA argued that avoided costs are best calculated using a comparative IRP approach, which it described as follows:

> The comparative IRP method compares a long-range expansion plan without [small power production and cogeneration facilities] SPPCFs to a long-range expansion plan with SPPCFs. The difference between the two is the avoided cost resulting from the SPPCFs. This method is the most detailed and comprehensive analysis, not relying on the proxy plant or other approximations, but it is also more complicated that the proxy methods. It requires long-term projections of load, fuel costs, resource expansion plans, but these are the same inputs and methods the Company would already use in its own long term planning, so the incremental effort to conduct the comparative IRP analysis should be quite small. Since the SPPCFs are likely to be small, it would make sense to consider a block of SPPCFs rather than individual projects. The costs (payments) would be made on a per unit basis (e.g., X $/KW and Y $/MWH for any SPPCF projects within that block.

2 Tr 115.

Ann Arbor contended that the transfer price schedule, established and updated annually pursuant to Act 295 is the most just, reasonable, and non-discriminatory means to establish avoided costs. Ann Arbor claimed that because the transfer price represents what the utility would pay itself for its own projects, failure to apply transfer price to avoided costs would result in discrimination that favors company-owned projects over projects developed by QFs. Ann Arbor pointed out that DTE Electric supports the transfer price schedule for its own projects (citing Case No. U-18082), but "does not explain why the transfer prices it is proposing in this docket for the Commission's consideration for use with QFs are so much less (around 30% less) than the transfer prices it is simultaneously proposing in U-18082 for its own projects." Ann Arbor's initial brief, p. 47. Ann Arbor further observed that the Staff is also proposing much lower avoided costs in this case than it is in Case No. U-18082.

Ann Arbor suggested that because the purpose of PURPA is to encourage the development of cogeneration and small power production facilities, if the Commission were to implement either DTE Electric's or the Staff's proposals, the resulting avoided cost rates would discourage the

development of QFs, claiming that it is not in the ratepayer's interest to undercompensate QFs. Ann Arbor therefore asserts that the application of ELCC to QF capacity, as DTE Electric proposes, undervalues "the reliability, sustainability, environmental and economic development attributes of these QFs to the State and to local areas in which they operate." Ann Arbor's initial brief, p. 51. Ann Arbor highlights two of the city's dams that provide a number of public benefits including flood control, recreation, and drinking water. Ann Arbor contends that these public benefits should also be considered in the avoided cost calculation.

LES agreed with the Staff that the avoided costs established in this case should not apply to DTE Electric's existing PURPA contracts, noting that this is consistent with federal law.

After reviewing the various proposals and arguments presented by the parties, the ALJ found that there was no dispute that Staff's hybrid proxy plant approach was a reasonable, FERC-approved method to determine avoided cost. The ALJ further observed that the Staff made considerable efforts during the meetings that culminated in the PURPA Report to address DTE Electric's recommendations as well as those of other parties that have intervened in this proceeding. He further found that the Staff, ELPC, and to some degree GLREA agreed that the Staff's method is reasonable, whereas "All parties, save DTE, have submitted extensive evidence that DTE's preferred avoided cost method is unreasonable and arguably not PURPA compliant for a variety of reasons[.]" PFD, p. 93.

With respect to the planning period during which capacity needs are assessed, the ALJ agreed with the Staff, ELPC, and GLREA that the five-year planning horizon proposed by DTE Electric would discriminate against QFs because the company's planning period is at least 10 years for self-build options. The ALJ also adopted the Staff's recommendation to undertake a review of DTE Electric's capacity planning and PURPA avoided costs every two years.

DTE Electric takes exception to the ALJ's recommendations concerning the appropriate method to establish avoided capacity and energy costs. DTE Electric avers that the company's NGCC proxy method is the only one that actually reflects the company's avoided costs and that does not result in subsidized rates for QFs. DTE Electric further argues that the ALJ failed to undertake any reasoned analysis or critique of the company's position.

DTE Electric maintains that it is unreasonable to base avoided capacity cost on an NGCT when the company has sufficient capacity and has no plans to either build or purchase from such a unit in the future. DTE Electric also contests the ALJ's finding that capacity determinations should be made over a 10-year planning period, rather than five years as the company recommended. DTE Electric asserts that it would be unjust and unreasonable to require ratepayers to cover QF capacity costs for years one through five, even if no capacity is required until year nine or 10.

ELPC responds that DTE Electric has undertaken a selective reading of PURPA and the FERC orders and rules implementing that law, ignoring the mandate that, in addition to being just and reasonable to the utility's ratepayers, avoided costs shall not discriminate against QFs in favor of utility self-generation. According to ELPC, "Congress enacted the must-buy provisions of PURPA precisely because DTE's selective reasoning is so predictable; Congress anticipated that utilities would resist purchasing power from QFs." ELPC's replies to exceptions, p. 1. ELPC argues that the Staff's proposal avoids such discrimination, and it therefore urges the Commission to adopt the Staff's hybrid proxy approach to determining avoided energy and capacity costs.

With respect to planning horizon, ELPC replies that the Commission should reject DTE Electric's recommendation to limit capacity payments to LMP if no capacity needs are forecasted in the next five years. ELPC notes that, despite the fact that DTE Electric's forecast shows excess

capacity for the next five years, the company's own planning projects the need for a new 1,100 MW unit in year six. ELPC adds that DTE Electric fails to recognize that the capacity costs that are avoided include the deferral of a new unit, even if there is no immediate need for additional capacity.

Ann Arbor also takes exception to the ALJ's recommendation to adopt the Staff's method for calculating avoided cost, contending that the use of an NGCT unit as a proxy for capacity is inappropriate because it seeks to model the lowest-cost proxy for capacity, contrary to PURPA's intent. Ann Arbor points out that for DTE Electric's renewable energy resources, the proxy unit used for capacity is an NGCC and that DTE Electric also declares that its next unit would be an NGCC. Ann Arbor reiterates that the only reasonable and non-discriminatory approach to establishing avoided costs is through the implementation of transfer prices.

Ann Arbor also raises concerns about the inputs to the Staff's avoided cost model, noting that even the Staff expressed reservations about the assumptions used, noting that the PFD did not address these issues. In addition, Ann Arbor requests clarification that: (1) if DTE Electric requires any capacity during the 10-year planning horizon, the company should pay QFs for capacity; and (2) the Commission rejects DTE Electric's proposal that it not be required to purchase capacity from existing QFs unless these QFs undertake substantial renovations.

DTE Electric replies that the transfer price under Act 295 is not appropriate for use as avoided cost under PURPA because the capacity payments under the transfer price are not discounted to reflect the intermittent capacity for certain QFs. DTE Electric adds that the energy component of the avoided cost should not be based on a single price forecast given the volatile nature of the gas market.

DTE Electric agrees that the Staff's concerns that the inputs to the avoided cost model were not addressed in the PFD. The company reasserts, however, that the only correct method and inputs to develop avoided costs were those supplied by the utility.

LES filed an exception requesting that the Commission clarify that the avoided costs approved in this order in this proceeding applies only to new PPA's, and that existing PURPA contracts will not be altered by the determinations in the final order.

The Commission agrees with the ALJ and finds that the Staff's hybrid proxy plant method is the most appropriate model for calculating avoided costs pursuant to PURPA. As several parties point out, the purpose of PURPA, and the avoided cost calculation, is not to set prices that reflect the lowest-cost incremental capacity and energy, but to provide non-discriminatory treatment to QFs by setting prices that are just and reasonable, in the public interest, and that mirror what the utility would have paid if it purchased or built the resource itself. 18 CFR 292.101(b)(6). As DTE Electric concedes, the energy landscape has changed significantly since the Commission last addressed PURPA avoided costs, and the Commission finds that the Staff's proposed method appropriately addresses those changes.

The company also raises issues concerning the "significantly more challenging business environment" in which it operates, but fails to connect how exactly those challenges are exacerbated by DTE Electric's obligation to purchase QF power, at the company's avoided cost, in a non-discriminatory manner. DTE Electric's exceptions, p. 1. Indeed, the Commission posits that one of the challenges that DTE Electric is also facing (but fails to mention) is the need to increase its renewable generation portfolio from 10% to 15% and to provide additional renewable energy to customers under the voluntary green pricing program mandated under Section 61 of Act 295, MCL 460.1061. The availability of QFs willing and able to provide additional renewable

energy at no more than DTE Electric's avoided cost should make this particular challenge much easier to surmount.

In response to Ann Arbor, as the Commission recently determined in the May 31, 2017 order in Case No. U-18090, PURPA avoided cost is a more detailed inquiry than transfer price, which is primarily used to allocate Act 295 renewable energy costs between power supply and incremental costs of compliance. Accordingly, the Commission agrees with the Staff that in the event that DTE Electric requires additional capacity only, the company would theoretically build an NGCT unit.[4] As the Staff argued, this type of unit could be built quickly, at a relatively low cost, and an NGCT can be cycled on and off when additional capacity is required. On the other hand, if the company requires additional energy, an NGCC would be the most appropriate generating unit due to the low cost of the energy produced.

Further, the Commission agrees with the Staff's and to some extent DTE Electric's recommendation, that it is reasonable to adjust QF capacity in accordance with ELCC to reflect availability during seasonal and daily peak times. The Commission also agrees that the ICE payment added to energy cost is appropriate. As the Staff explained, the ICE adder computes the difference between capital costs of an NGCT and NGCC, and the Commission recognizes that these costs should be included in the avoided cost model.

The Commission also agrees with the ALJ that a 10-year planning horizon is most appropriate for determining capacity requirements, that avoided costs established in this proceeding should only apply to new and renewed contracts, and that existing contracts should not be altered as a result of the determinations in this order.

[4] The Commission rejects Ann Arbor's claim that the use of an NGCT unit as a proxy for capacity violates PURPA. The Commission has consistently found that thus use of LMP or PRA for capacity is not an appropriate avoided cost because these amounts do not truly reflect the costs the company would incur to build or purchase the capacity itself.

The Commission rejects DTE Electric's contention that only if capacity is required in the next five years should the company pay full avoided cost because, as the Staff, GLREA, and ELPC point out, DTE Electric uses a far longer planning horizon in making decisions about whether to purchase or build new conventional generation. In addition, as ELPC argued, there is significant ratepayer value in deferring large, capacity additions through contracting with QFs for incremental capacity. This is a particularly acute concern in the case of DTE Electric, which is in fact planning a significant increase to its capacity portfolio, at a substantial cost to ratepayers, beginning in the next few years.[5] As ELPC stated, "DTE's proposed methodology . . . 'gives no value to capacity until DTE approaches a near-term shortfall, and then returns to giving virtually no value to capacity when DTE addresses that shortfall by acquiring a large resource.' The Commission must not permit discrimination against QFs by basing avoided capacity costs on an artificially short planning period." ELPC's reply brief, p. 4, quoting 2 Tr 204-205.

The Commission also finds that existing QFs with expiring contracts should have their contracts renewed at the full avoided cost rate, whether or not the company forecasts a capacity shortfall over the planning horizon. As the Staff observed, the capacity and energy supplied by these QFs is already taken into account in the company's determinations about future capacity additions.

The Commission concurs with the Staff's recommendation that if no capacity is needed during the entire 10-year planning horizon, then DTE Electric shall make a filing so indicating, and the avoided cost for capacity shall be reset to the MISO PRA.

[5] On June 30, 2017, in Case No. U-18419, DTE Electric filed a notice of intent to file a certificate of necessity (CON) in connection with the addition of a natural gas combined cycle facility to its generation fleet.

The Commission finds that these conclusions best represent the proper approach to determining what DTE Electric would pay if the company builds or purchases the energy and capacity itself. Moreover, the hybrid proxy method proposed by the Staff and adopted here, along with the other determinations in this order, will ensure that QFs are not discriminated against in resource planning and contract arrangements.

While the Commission adopts the hybrid-proxy approach as the appropriate method for arriving at avoided cost, it nevertheless finds that, with respect to calculating final avoided cost amounts for capacity and energy, there is insufficient information in this record about the proper inputs to the models to arrive at an accurate determination. Given the need to set new avoided cost rates that will be in effect for at least two years, it is essential that the Commission have a sufficient record on which to make the determination of avoided cost in compliance with the mandates of PURPA. Not only is the establishment of an accurate avoided cost necessary for existing and new QFs, but also for the Commission's benefit in evaluating PPAs and certificates of need for new generation that the company may present in the future. The Commission finds that the inputs to the NGCT proxy for capacity and the NGCC model for energy were not sufficiently examined in the proceeding. Accordingly, the Commission remands this case for the limited purposes of receiving into evidence the appropriate inputs for capacity, capacity factor, heat rate, projected fuel cost, and capital costs plus the amount of the ICE adder, for the Staff's hybrid proxy model.

To that end, the parties shall file proposed inputs for the NGCT and NGCC models by August 15, 2017. Parties shall file responses by August 31, 2017. A hearing shall be conducted by the ALJ on September 13, 2017, and the ALJ shall set a briefing schedule so that the record and briefs in the reopened case can be submitted to the Commission by October 5, 2017. In their

calculations for the energy portion of the model, the parties shall provide both a levelized energy payment and a schedule of energy payments for the contract lengths discussed *infra*.

2. Standard Offer Tariff

The Standard Offer is a tariffed rate paid to QFs through a standard contract with the utility. PURPA regulations require electric utilities to establish standard rates for purchases from QFs with capacity of 100 kW or less, but the regulations also give state commissions the authority to apply the Standard Offer to larger projects. 18 CFR 292.304(c)(1) and (2). The availability of a standard tariff reduces transaction costs for individual projects, thus reducing barriers to entry, especially for developers of smaller QFs. The disputed issues include the method and inputs to the Standard Offer rate, planning horizon for capacity additions by QFs, design capacity for the Standard Offer, and contract length.

For the Standard Offer, DTE Electric again used the NGCC proxy plant approach for both capacity, and energy, with a continuation of the current design capacity of 100 kW, as required under PURPA, with contract length subject to negotiation. DTE Electric again argued that if there is no need for capacity in the first five years of the planning period, QFs under the Standard Offer would receive capacity payments based on the MISO LMP. DTE Electric did not specify contract lengths or propose amounts for other avoided costs such as line losses, air emissions reductions, or hedging value, contending that these contract terms should be negotiated by the parties.

In addition to recommending the hybrid proxy method for setting avoided capacity and energy rates, the Staff proposed several changes to the company's tariff and submitted its own Standard Offer in Exhibit S-1. As summarized by the ALJ, the Staff recommended:

> Limit the tariff's applicability to the standard offer tariff qualifying facility (QF) size cap; 2 TR 73.

> • Set the standard offer tariff QF size cap (in the range of 1 MW to 5 MW) according to the capacity need of the utility during the succeeding two years and the PURPA 10-year planning horizon; 2 TR 73-76.
> • Set the standard offer term at 5, 10 or 15 years at the QF's option; 2 TR 76-77.
> • Set the standard offer rates based on Staff's avoided cost methodology. 2 TR 77-79.

PFD, p. 31. In addition, the Staff recommended that QFs under the Standard Offer receive credit for line loss savings and that RECs should be transferred to DTE Electric as part of the Standard Offer.

ELPC again agreed with the Staff's method for calculating avoided cost for Standard Offer contracts. ELPC also recommended that the Standard Offer be made available to QFs of up to 20 MW, contending that larger QFs also benefit when transactions costs are reduced through the use of standardized contracts. ELPC recommended that contracts be extended to at least 15 years.

Ann Arbor again disagreed with Consumers' and the Staff's approaches to calculating avoided costs, reiterating that transfer price is the most appropriate method for making these determinations. Ann Arbor agreed with ELPC that contracts be permitted a term of 20 years; however, GLREA argued that contracts of 20 years or longer should be permitted, pointing to MCL 460.6j, which allows for QF contracts of 17.5 years or longer.

The ALJ found that the Staff's recommendations should largely be adopted, except he determined that Standard Offer contracts should extend to 20 years as recommended by Ann Arbor and ELPC. The ALJ found persuasive the claim that longer contracts would benefit both QFs and the company by allowing better access to investment and financing. The ALJ agreed with the Staff that the design capacity for the Standard Offer should be established at 1 MW, with the proviso that this cap should be revisited in the next PURPA review in accordance with the company's capacity forecast over the next two years.

DTE Electric takes exception, arguing that the Staff's recommended 1 MW cap on Standard Offers was presented with no basis except to "encourage" QF development. DTE Electric maintains that the current 100 kW cap not only complies with PURPA, but there has not historically been any opposition or criticism of the 100 kW limit. Thus, DTE Electric urges the Commission to reject the ALJ's recommendation. DTE Electric also repeats its objections to contracts of fixed duration, contending that contract length should be subject to negotiation between the parties, noting that its proposal does not preclude long-term PURPA contracts. DTE Electric posits that the ALJ and the other parties to this proceeding misconstrue the company's position and that "Pre-specifying contract terms, as proposed by Staff and Intervenors and adopted by the PFD, places unnecessary constraints on both the utility and the QF to negotiate agreements that best meet the needs of each party." DTE Electric's exceptions, p. 13.

GLREA takes exception, asserting that the Commission should recognize that contracts in excess of 20 years should be approved, noting that longer contracts are particularly important to ensure financing of biomass facilities. GLREA points to the provision in MCL 460.6j that permits QF contracts to extend for 17.5 years or for the length of the financing period, if longer.

ELPC and GLREA take exception to limiting the design capacity for the Standard Offer to 1 MW. These parties reiterate that the Standard Offer should be made available to QFs up to 20 MW in size because the individual negotiations necessary for non-Standard Offer contracts can be costly in terms of time and expense for both parties. ELPC contends that DTE Electric's presentation demonstrates that the company requires additional capacity over the 10-year planning horizon and that a 20 MW cap can be reexamined in the biennial proceedings. GLREA maintains that there was no evidentiary or policy basis for adopting the low caps recommended by the Staff.

Ann Arbor and ELPC objected to assigning RECs to the company, noting that this issue was addressed by the FERC in *Windham Solar LLC and Allco Finance Ltd*, 156 FERC P 61,042, ¶ 4 (2016) (*Windham Solar*). According to ELPC, in *Windham Solar*, the FERC held that PURPA contracts are compensation for energy and capacity only, and a state commission cannot assign RECs as part of that contract. ELPC further argues that MCL 460.1037 recognizes RECs as distinct from renewable energy and points to the MIRECS tracking system where RECs are registered, sold, and traded.

DTE Electric also takes exception to the ALJ's wording with respect to the assignment of RECs. According to DTE Electric, there is no need to "balance" the interests of the utility and the QF in making this determination, and that RECs should be assigned to the utility as part of the sale of QF energy and capacity.

The Commission generally agrees with the ALJ's reasoning and conclusions and adopts the PFD on most issues concerning the Standard Offer tariff. Specifically, the Commission agrees that the Staff's hybrid proxy plant method for determining avoided cost should also apply to the Standard Offer and that QFs under the Standard Offer should be able to opt for a contract term up to 20 years. The Commission disagrees with GLREA that a 35-year option should be made available under the Standard Offer, noting that contracts that extend beyond 20 years could be negotiated in a non-Standard Offer agreement and would likely only apply in rare circumstances.

However, the Commission disagrees with the ALJ concerning the ownership of RECs generated by a QF pursuant to a PURPA contract. The Commission concurs with ELPC's interpretation of *Windham Solar* concerning the ownership of RECs; thus, the amounts paid for energy and capacity do not include compensation for RECs. Accordingly, even under the

Standard Offer, the QF may sell the RECs to the host utility or otherwise dispose of them at the QF's option.

The Commission rejects DTE Electric's proposal to limit the Standard Offer to the minimum 100 kW required under PURPA, noting that transaction costs can be excessive even for some larger projects, thus leading to a situation where QFs are discriminated against. The Commission believes that given the sheer size of DTE Electric relative to almost any QF, the more contract terms, including capacity price, energy payment options, and contract lengths, are spelled out in the Standard Offer, the less there is to negotiate, an advantage to both parties.

The Commission agrees with the Staff's proposal to reevaluate the Standard Offer design capacity every two years, as informed by the company's upcoming capacity requirements. Nevertheless, because the Commission recently set the Standard Offer limit for Consumers Energy Company at 2 MW, the Commission finds that in the interest of more uniform QF development across the State,[6] the design capacity for the Standard Offer should be set at 2 MW, with that cap to be revisited in DTE Electric's biennial review as recommended by the Staff.

As the Commission discussed above, this case is remanded for the taking of additional evidence on the appropriate inputs to the NGCT and NGCC models for avoided capacity and energy costs. As part of that reopened proceeding, parties may present updated Standard Offer tariffs, which should include forecasted LMP energy rates for five, 10, 15, and 20 years and proxy plant variable rate forecasts for the same incremental periods.

[6] In an order issued on May 31, 2017 in Case No. U-18090, the Commission established a 2 MW alternating current (AC) capacity limit for the Standard Offer for Consumers Energy Company.

3. Other Avoided Costs and Benefits

Other potential avoided costs and benefits associated with QF power include reduced transmission costs and line losses, reduced air emissions and environmental compliance costs, and the hedging value resulting from the use of QFs. DTE Electric proposed that other avoided costs that might be included in the calculation should be subject to negotiation between the parties, noting that line-losses cannot be quantified. ELPC recommended that the Commission establish a process for quantifying other avoided costs including undertaking an updated value-of-solar (VOS) study. Ann Arbor maintains that DTE Electric's Standard Offer does not comply with PURPA because it does not include the factors set forth in 18 CFR 291.304(e). The Staff asserted that avoided costs associated with line losses should be subject to negotiation.

The ALJ agreed with the Staff and that line losses, as well as other avoided costs, should be negotiated by the parties.

ELPC takes exception, pointing out that the ALJ failed to address its proposal to complete a new VOS study before the next biennial review. According to ELPC, PURPA permits regulatory commissions to set technology-specific avoided costs, and a VOS "is a good first step to begin identifying and quantifying these solar-specific avoided costs." ELPC's exceptions, p. 8. GLREA concurs on the need for a VOS study and argues that addressing other avoided costs on a case-by-case basis through negotiations could become unwieldy and burdensome for small QFs. GLREA therefore recommends that the Commission set a standard for line losses, based on the line losses established in DTE Electric's most recent rate case.

The Commission finds that there is insufficient information in this record to quantify other avoided costs and that parties may negotiate these terms. The Commission further directs that interested parties shall include analyses of these costs in the next PURPA review proceeding. The

Commission also finds that ELPC's recommendation that a VOS analysis be undertaken is potentially duplicative, given the directive under the new energy legislation, which requires the Commission to create a distributed generation program and examine costs associated with distributed generation and net metering. MCL 460.1173 and MCL 460.6a(14). Accordingly, the Commission anticipates that VOS issues, as well as other avoided costs associated with distributed generation generally, will be examined as part of these proceedings, which will be completed before the next PURPA review.

4. Other Issues

With respect to stand-by rates and future PURPA reviews, the Staff pointed out that pursuant to Section 6v of Act 341, MCL 460.6v, for each electric utility that serves Michigan customers, the Commission must conduct a proceeding at a minimum of every five years that evaluates: (1) whether the rates paid to QFs are just and reasonable, as well as in the public interest, as defined by PURPA; and (2) whether the amounts charged by the utility, to QFs, for maintenance, backup, interruptible, and supplementary power, and other services are just and reasonable, and non-discriminatory. The Staff maintained that this proceeding should be considered the first five-year review for DTE Electric because it addressed all of the avoided cost issues. The Staff also proposed that avoided costs be reexamined every two years, noting:

> The proposal is consistent with 18 CFR § 292.302(b), which requires the companies to report every 2 years the utility's avoided cost data and capacity planning information for a 10 year period. At the time of the biennial report, the Commission may update the standard offer as necessary, during a contested case proceeding. The contested case proceeding would allow the Commission to update the cap for the utility's standard offer, depending on its capacity need in the succeeding 2 years and over the 10 year planning horizon.

Staff's initial brief, pp. 9-10. ELPC agreed with the Staff that biennial avoided cost reviews were appropriate.

DTE Electric objected to the Staff's proposal to hold a contested proceeding every two years, maintaining that it was sufficient for the company to file updated avoided costs based on the company's capacity needs over the next five years.

With respect to stand-by rates and other matters that are part of the five-year review under Section 6v, the Staff pointed out that these issues are being addressed by the Stand-by Rates Workgroup that was established in the November 19, 2015 order in Case No. U-17735. In addition, the Staff argued that stand-by rates can be addressed in DTE Electric's next rate case.

The ALJ found that the Staff's proposal was reasonable and prudent, and he therefore recommended its adoption.

The Commission agrees that, given the rapid changes to the energy landscape, and pursuant to MCL 460.6v(3), a biennial review of PURPA avoided costs, in a contested case, is appropriate and that for purposes of Section 6v(1) this proceeding should be considered the initial five-year review for DTE Electric. The Commission further observes that by the time of DTE Electric's next biennial review, the CON proceeding in Case No. U-18419 will have been completed, and the Commission may have better information available on which to update the company's avoided costs. The Commission also agrees that the other rate elements of PURPA, namely, maintenance, backup, interruptible, and supplementary power, and other services, are being addressed in other proceedings and need not be addressed here.

Finally, the Commission finds that several issues raised by DTE Electric concerning the must-purchase obligation applied to alternative electric suppliers and the requirement that the Standard Offer be available only to DTE Electric full-service customers are outside the scope of this proceeding and will not be addressed in this order.

THEREFORE, IT IS ORDERED that:

A. On or before August 15, 2017, the parties to this proceeding may file proposed inputs to be used for developing avoided capacity cost using a natural gas combustion turbine unit and avoided energy cost using a natural gas combined cycle unit as proxy plants and a calculation of investment cost attributable to energy. The parties shall at the same time file final, proposed avoided cost calculations and a proposed Standard Offer tariff, which includes all forecasts as described in the order.

B. Parties to this proceeding may file responses to the initial filings by August 31, 2017.

C. A hearing shall be conducted by Administrative Law Judge Martin D. Snider at 10 a.m. on September 13, 2017. At the hearing, the Administrative Law Judge shall set a briefing schedule so that the Commission can begin reading the record by October 5, 2017.

The Commission reserves jurisdiction and may issue further orders as necessary.

MICHIGAN PUBLIC SERVICE COMMISSION

Sally A. Talberg, Chairman

Norman J. Saari, Commissioner

Rachael A. Eubanks, Commissioner

By its action of July 31, 2017.

Kavita Kale, Executive Secretary

P R O O F O F S E R V I C E

STATE OF MICHIGAN)

Case No. U-18091

County of Ingham)

Angela McGuire being duly sworn, deposes and says that on July 31, 2017 A.D. she electronically notified the attached list of this **Commission Order via e-mail transmission**, to the persons as shown on the attached service list (Listserv Distribution List).

_____

Angela McGuire

Subscribed and sworn to before me
This 31st day of July, 2017

_____

Lisa Felice
Notary Public, Eaton County
My Commission Expires April 15, 2020

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