
STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS
FROM: BRITTANY MEHLHAFF AND AMANDA REISS
RE: Docket EL16-023 - In the Matter of the Filing by MidAmerican Energy Company for Approval of Tariff Revisions to its Rates for Cogeneration and Small Power Production Facilities
DATE: July 27, 2016

Commission Staff (Staff) submits this Memorandum regarding its recommendations for the above captioned matter.

BACKGROUND

On July 1, 2016, MidAmerican Energy Company (MidAmerican or Company) filed with the Commission a request for approval of tariff revisions to update its Rate QF – Cogeneration and Small Power Production Facilities tariff (Rate QF).

Under Section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), electric utilities are required to purchase energy offered by Qualifying Facilities (QFs), which are cogeneration facilities¹ and small power production facilities². Utilities are required to purchase energy and capacity from QFs at rates which reflect the incremental costs of energy, capacity, or both, that the utility would have incurred to generate or purchase the energy if it was not supplied by the QF. These incremental costs are termed the utility's avoided costs.

Federal Energy Regulatory Commission (FERC) regulations required states to establish standardized rates for QFs with an installed capacity of 100 kW or less. These standardized rates are included in MidAmerican's tariff as Rate QF.

Pursuant to 18 CFR 292.302, at least every two years, each electric utility must provide to its State regulatory authority data from which avoided costs may be derived. The Commission affirmed this requirement for MidAmerican in an Order Approving Tariff Sheets in Docket F-3365³. Since 2010, MidAmerican has updated its Rate QF credits each year.

This filing updates the energy and capacity credits based on current data used to determine the avoided energy costs and avoided capacity costs, each of which are more thoroughly explained below.

¹ Cogeneration facilities are generating units that produce electricity and steam simultaneously.

² Small power production facilities have a maximum size of 80 MW and have a primary energy source (75 percent or more) of biomass, waste, renewable resources, geothermal resources, or any combination thereof.

³ In the Matter of the Investigation of the Implementation of Certain Requirements of Title II of the Public Utilities Regulatory Policy Act of 1978 Regarding Cogeneration and Small Power Production

AVOIDED ENERGY COSTS

MidAmerican calculates avoided energy costs for purchases from qualifying facilities using MidAmerican's generating costs dispatched against a market price simulating the Midcontinent Independent System Operator, Inc. (MISO) market, using a production costing model, PROMOD IV.

The Company has used this market dispatch methodology in prior avoided cost rate filings but noted one change this year. In MidAmerican's previous filings, the data used in the market dispatch methodology was based on allocating all generation costs to MidAmerican's entire service territory. In 2016, the Illinois jurisdiction began procuring an incremental portion of its energy production from the Illinois Power Agency and excludes for ratemaking purposes the production and costs of all MidAmerican wind resources, Walter Scott Energy Center Unit 4, and the Greater Des Moines Energy Center. These costs are allocated to Iowa customers instead. Therefore, the new avoided energy costs include production costs to serve the Iowa and South Dakota retail load based on the Iowa and South Dakota jurisdictional allocated production costs and exclude the costs for procuring energy from the Illinois Power Agency.

The current energy credits which were effective September 15, 2015 are:

	Summer	Winter
On Peak	\$0.0318 per kWh	\$0.0239 per kWh
Off Peak	\$0.0210 per kWh	\$0.0192 per kWh

MidAmerican's proposed energy credits as a result of this market dispatch methodology are:

	Summer	Winter
On Peak	\$0.0237 per kWh	\$0.0161 per kWh
Off Peak	\$0.0174 per kWh	\$0.0116 per kWh

In response to Staff's data request⁴, MidAmerican identified three primary factors contributing to the decrease in energy credits:

- 1) The current energy credit approved in 2015 included an assumption of \$3.40 per MWh proxy for potential market price impact value associated with additional emissions-free generation. Due to recent court action involving the Clean Power Plan and uncertainty surrounding potential carbon legislation, MidAmerican has delayed this assumption for planning purposes.
- 2) The switch from a total system view to a jurisdiction specific view discussed above allocates zero energy cost wind resources to Iowa and South Dakota and none of these resources to Illinois.
- 3) A decrease in the total retail energy requirement from the project included in the current energy credits due to lower demographic and economic indicators for retail energy needs.

⁴ See MidAmerican's Response to Staff's Data Request 1-1

AVOIDED CAPACITY COSTS

When reviewing its capacity needs, the Company uses the economic carrying charges on a new combustion turbine to calculate its long-term avoidable capacity cost. The determination by MISO in its annual calculation of the Cost of New Entry (CONE) filed with FERC is the basis for the long-term avoided cost calculation. Near-term capacity prices are based on opportunity pricing from the MISO capacity auction. Last year, the near-term opportunity cost pricing used MISO's Initial Reference Level as determined by the Independent Market Monitor. As a result of a FERC order on December 31, 2015, MISO revised its tariff to no longer utilize PJM auction prices as the key component to MISO's determination of the Initial Reference Level, setting its Initial Reference Level to \$0/MW-day. Market monitoring provisions set the conduct thresholds at 10% of the CONE, or \$25.52-MW-day, or \$9.31/kW-year. Rather than use the price of \$9.31/kW-year, MidAmerican based the near-term capacity price on the MISO capacity auction which cleared at \$72/MW-day for Zone 3, or \$26.28/kW-year, adjusted by 2.25% escalation.

The current capacity charge, effective September 15, 2015, is \$86.08/kW/Year, or \$21.52/kW⁵. MidAmerican's proposed capacity charge is \$26.87/kW/Year, or \$6.72/kW. The capacity credit is the lesser amount as determined by either Method 1 or Method 2:

Method 1 (Optional Time-of-Day):

$$A = \frac{B}{C} \times D \text{ where:}$$

A is the capacity credit.

B is the kWh delivered during the applicable summer on-peak period.

C is the number of hours in the applicable summer on-peak period.

D is the capacity charge in \$/KW.

Method 2 (Standard):

$$A = \frac{B}{C} \times D \text{ where:}$$

A is the capacity credit.

B is the kWh delivered during the applicable summer month.

C is the number of hours in the applicable summer month.

D is the capacity charge in \$/KW.

RECOMMENDATION

MidAmerican satisfactorily responded to all of Staff's data requests and these responses are attached to this memo. Staff recommends the Commission approve the tariff revisions with an effective date of August 15, 2016.

⁵ The capacity credit is applicable only for generation capacity received during the four summer months, June through September.