

TO: COMMISSIONERS AND ADVISORS
FROM: LORENA REICHERT AND AMANDA REISS
SUBJECT: STAFF RECOMMENDATION FOR DOCKET EL17-046
DATE: DECEMBER 15, 2017

STAFF MEMORANDUM

1.0 OVERVIEW

On October 19, 2017, Montana-Dakota Utilities Co. (MDU or Company) filed with the Commission a request for approval of tariff revisions to its Occasional Power Purchase Non-Time Differentiated Rate 95 and Power Purchase Time Differentiated Rate 96.

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 MDU's tariff as Rates 95 and 96, and were first approved in Docket F-3365³. These tariffs are reviewed annually and revised when necessary.

This filing updates the energy and capacity payments as well as metering charges based on current data, each of which are more thoroughly explained below.

2.0 PROPOSED CHANGES

2.1. Proposed Energy Payments

MDU calculates the energy payments for purchases from qualifying facilities using the production costing model PLEXOS for Power Systems (PLEXOS). PLEXOS is a production

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

cost software model which provides an economic dispatch simulation of MDU’s generation fleet versus its load serving obligations. PLEXOS calculates an hourly marginal cost to serve MDU’s customer load based upon the last generation resource dispatched or the Midcontinent Independent System Operators, Inc. (MISO) energy market price⁴. The proposed payments in this filing are based on the test year of calendar year 2018. MDU stated the proposed energy payments reflect a decrease in the energy payment per kWh attributable to a decrease in the forecasted MISO market prices and natural gas prices.

The Rate 95 energy payment is based on the average marginal cost for the test year. Rate 96 energy payments are separated into on-peak and off-peak based on the Company’s defined on and off-peak periods defined in the tariff. The On-Peak Period is defined as between 12:00 p.m. and 8:00 p.m. Monday through Friday in the months of June through September. The Off-Peak Period is defined as all other hours. The On-Peak and Off-Peak payments are also based on the averages for the test year.

The current and proposed energy payments (¢/kWh) are:

Rate Schedule	Current	Proposed
Rate 95	2.581¢	2.489¢
Rate 96 on-peak	2.605¢	2.724¢
Rate 96 off-peak	2.580¢	2.475¢

2.2 Proposed Capacity Payments

The proposed Rate 96 capacity payment reflects the levelized cost of an installed peaking combustion turbine. The company is anticipating a capacity surplus until 2024. Therefore, the capacity payment rate has been set to zero for years 2018 through 2023, lowering the levelized fixed charge calculation.⁵

The capacity payments for Rate 96 is made during the months of June through September, based upon the amount of qualifying capacity assigned to an eligible resource under BPM-011-Resource Adequacy of the MISO Tariff.

The current and proposed capacity payments (\$/kW) are:

Rate Schedule	Current	Proposed
Rate 96	\$7.189	\$3.459

⁴ For additional information regarding the PLEXOS model and the calculation of the energy payments, refer to MDU’s responses to Staff’s data requests 1-1 and 1-3.

⁵ See MDU response to Staff data request 1-4.

3.0 STAFF RECOMMENDATION

Staff recommends the Commission approve the tariff revisions as filed on October 19, 2017, with an effective date of January 1, 2017.