
STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS
FROM: BRITTANY MEHLHAFF, AMANDA REISS, AND JENNIE FUERST
RE: EL25-005 - In the Matter of the Filing by NorthWestern Corporation dba NorthWestern Energy for Approval of Tariff Revisions to Its Small Qualifying Facility Rider (Rates 73 and 74)
DATE: March 20, 2025

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

BACKGROUND

On February 26, 2025, the South Dakota Public Utilities Commission (Commission) received a filing from NorthWestern Corporation dba NorthWestern Energy (NorthWestern or Company) for approval of tariff revisions regarding small qualifying facility rider rates.

The Commission officially noticed NorthWestern's filing on February 27, 2025, and set an intervention deadline of March 14, 2025. No petitions to intervene or comments were filed.

On March 17, 2025, NorthWestern responded to Staff's data requests. These responses were filed in the docket and are referenced throughout this memo.

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, capacity, or both from QFs at rates which are just and reasonable, non-discriminatory, in the public interest, and reflect the incremental cost 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 NorthWestern's tariff. Pursuant to 18 CFR 292.302, at least every two years, each electric utility must

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.

provide to its State regulatory authority data from which avoided costs may be derived. The Commission affirmed this requirement for NorthWestern in an Order Approving Tariff Sheets in Docket F-3365³.

NorthWestern proposes to update its tariff Rate No. 73 and Rate No. 74. This filing updates the avoided cost energy and capacity payments based on current data. NorthWestern does not propose any change to the monthly customer charge. Such proposed revisions will affect seventeen customers currently receiving generation payments for their small qualifying facilities (SQFs) per the Time of Delivery Energy Service Rate No. 74 and one customer on the Occasional Delivery Energy Service Rate No. 73. The Company’s calculation of the avoided costs underlying the proposed payments is discussed more thoroughly below.

ENERGY PAYMENTS

NorthWestern calculates the energy payments for purchases from qualifying facilities based on the projected avoided energy costs of the next 1 MW that would be purchased by NorthWestern. The update reflects NorthWestern’s projected 2025-2026 avoided cost of fuel and purchased power. The main driver of higher avoided costs in 2025 compared to the Company’s last QF filing is a result of higher power price forecasts that represent the SPP North Hub.⁴ NorthWestern provided that the 2024 Integrated Resource Plan⁵ (IRP) shows an average on-peak power price for 2025-2026 is \$46.26 compared to the average on-peak power price in the 2022 IRP for the same time period of \$37.36.

The energy payments resulting from the Company’s analysis are an increase compared to current payments, as shown in the table below:

Rate Schedule	Current Energy Payment	Proposed Energy Payment
Occasional Delivery (Rate 73)	\$0.02449 per kWh	\$0.02547 per kWh
Time of Delivery (Rate 74)		
On-Peak	\$0.02973 per kWh	\$0.03241 per kWh
Off-Peak	\$0.01770 per kWh	\$0.01948 per kWh

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.

⁴ NorthWestern Response to Staff Data Request 1-2.

⁵ <https://www.northwesternenergy.com/docs/default-source/default-document-library/about-us/regulatory/south-dakota-irp-2024--12-03-24.pdf>

CAPACITY PAYMENTS

Both Rate 73 and Rate 74 provide SQFs a capacity payment, subject to certain requirements as further discussed below. The payment is differentiated between wind and solar QFs. The table below provides a comparison of the current and proposed capacity payments:

Rate 73 and Rate 74	Current Capacity Payment	Proposed Capacity Payment
Wind	\$0.81 per kW	\$2.79 per kW
Solar	\$1.61 per kW	\$4.29 per kW

NorthWestern based the capacity payments off the cost of a 55 MW simple cycle frame combustion turbine. As shown on Exhibit C, the cost is \$165.59/kW-year or \$13.80/kW-month. NorthWestern stated in response to Staff Data Request 1-4, the 55 MW simple cycle frame combustion turbine was chosen as the avoided capacity resource because this resource struck a balance between a low-cost capacity resource and a reasonably sized resource given the needed capacity in the near term.

NorthWestern applies a different capacity accreditation percentage to wind vs. solar, since the SPP market assigns different economic value to wind and solar resources based on their operating characteristics with respect to the peak load.⁶ According to the 2024 SPP ELCC⁷ Wind Solar and ESR⁸ Study Report⁹, ELCC is defined as the amount of incremental load a resource can reliably serve, while also considering probabilistic parameters of unserved load.¹⁰ The study results indicate the summer ELCC value of wind resources is 15.4% and the winter ELCC value of wind resources is 25.1%, which agrees with the summer and winter wind accreditation percentages found on the Company's Exhibit C. The summer solar accreditation value (62.2%) used by NorthWestern in its capacity price calculation is also in line with the 2024 SPP ELCC Wind Solar and ESR Study Report. In response to Staff Data Request 1-3, NorthWestern explained that the 0% winter solar accreditation is consistent with the assumptions made in the 2024 IRP. In the 2024 IRP, NorthWestern used a study to calculate a more representative ELCC value for solar at the latitude of NorthWestern's service territory, resulting in a 0.0% winter accreditation for solar.

The annual accreditation percentage is calculated by taking a weighted average of the summer and winter accreditation percentages (4 winter months multiplied by the winter accreditation plus 4 summer

⁶ Filing Letter.

⁷ Effective Load Carrying Capability

⁸ Energy Storage Resource

⁹ <https://www.spp.org/documents/72346/2024%20spp%20elcc%20wind%20solar%20&%20esr%20report.pdf>

¹⁰ 2024 SPP ELCC Wind Solar and ESR Study Report, Executive Summary (pdf pg. 6)

months multiplied by the summer accreditation, all divided by 8 total capacity months)¹¹, resulting in an annual wind accreditation of 20.3% and an annual solar accreditation of 31.1%. When 20.3% is multiplied by the monthly cost of the simple cycle frame combustion turbine, it results in a wind avoided capacity cost of \$2.79. Similarly, when 31.1% is multiplied by the monthly cost of the simply cycle frame combustion turbine, it results in a solar avoided capacity cost of \$4.29.

Staff supports consistency between IRP planning and avoided cost filings. Therefore, Staff believes the Company's proposed capacity payments in this docket are reasonable.

Staff also notes that per the tariff requirements, in order to qualify for capacity payments, the small qualifying facility must be able to deliver power at a minimum on-peak capacity factor of 65% in the months of June – September and must be able to deliver during the Company's summer peak. Capacity payments are only made in the months of June – September. NorthWestern confirmed that currently there are no SQF customers who qualify for capacity payments.

RECOMMENDATION

Staff recommends the Commission approve the tariff revisions as filed, with an effective date of April 1, 2025.

¹¹ NorthWestern Response to Staff DR 1-3.