Docket Number: **EL25-005**
Subject Matter: **First Data Request**
Request to: **NorthWestern Energy (NorthWestern or Company)**
Request from: **South Dakota Public Utilities Commission Staff**
Date of Request: **March 4, 2025**
Responses Due: **March 18, 2025**

1-1. Refer to Exhibit B. Provide the inputs and assumptions used to determine the avoided energy costs.

Response:
The resource portfolio used in the avoided cost calculations include resources described in Table 5 (page 20) of NorthWestern's 2024 SD IRP (IRP). The commodity costs, including power, natural gas, and coal, are described in Section 7.7 (page 48) of the IRP.

1-2. Identify and explain the main drivers causing the increase in the avoided energy costs.

Response:
The main drive of higher avoided costs in 2025 as compared to 2022 is a result of higher power price forecasts that represent the SPP North Hub. For example, the power price forward used in the 2024 IRP shows that the average on-peak power price from 2025 through 2026 is $46.26. The power price forward used in the 2022 IRP shows that the average on-peak power price for the same period is $37.36.

1-3. Provide source documentation for the SPP summer, winter, and annual accreditation for wind and solar used in the computation of the avoided capacity costs.

Response:
The 2024 SPP accreditation reference can be found at https://www.spp.org/documents/72346/2024%20spp%20elcc%20wind%20solar%20&%20esr%20report.pdf. Note that the 2024 version of SPP's resource accreditation was not available until after the IRP modeling. The summer and winter seasonal wind accreditation is referenced on page 6. The summer solar accreditation is referenced on page 9. NorthWestern used a winter solar accreditation of 0%, which is consistent with the assumptions made in the IRP. The supporting documentation for the 0% winter solar accreditation in the IRP is based on a National Renewable Energy Laboratory (NREL) System Advisor Model (SAM) study, which is described on page 44 – 45 and 47-48 of the IRP. NorthWestern used the NREL SAM study to calculate a more representative winter ELCC value for solar at the latitude of NorthWestern's service territory, which is located at the north end of SPP's footprint. The annual accreditation for both wind and solar resources is calculated as the weighted average of 4 winter months multiplied by the winter accreditation plus 4 summer months multiplied by the summer accreditation, all divided by 8 total capacity months. The summer and winter months are defined in the SPP Tariff, Attachment AA, Section 2.

1-4. Explain why the 55 MW simple cycle frame combustion turbine was chosen as the basis for the capacity rate.

Response:
The overnight costs of all resources considered are shown in Table 11 of the IRP (page 46). The least-cost resource in Table 11 is the 265 MW combined cycle combustion turbine. However, 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.

1-5. How many SQF customers on rates 73 and 74 are wind and how many are solar?

Response:
All the customers on rates 73 and 74 are solar customers.

1-6. Provide the letter regarding notification of the proposed tariff changes that was mailed to each affected customer.

Response:
See the attached pdf file “1-6 Customer Letter”.