

Questions for Discussion with ETAC at September 14, 2017 meeting regarding Net Metering Study

On August 9, 2017, the Montana Public Service Commission (“Commission”) issued a Notice of Commission Action (“Notice”) setting the minimum information NorthWestern Energy (“NorthWestern”) must include in the Net Energy Metering (“NEM”) Study required by House Bill 219 (“HB 219”). Pursuant to HB 219, NorthWestern must conduct a NEM Study regarding the costs and benefits associated with customer-generators and file that study with the Commission no later than April 1, 2018. NorthWestern may hire a consultant to assist it in conducting the study, and the Commission is authorized to set the minimum information that NorthWestern must include in the study.

NorthWestern issued its Request for Proposals seeking a consultant, which is attached, on August 16, 2017. NorthWestern intends to hire its consultant by early October 2017. As part of the minimum information requirements, the Commission required NorthWestern to consult with the Electric Technical Advisory Committee (“ETAC”) regarding the following matters related to the NEM Study: adoption rate of solar, locational attributes of solar customer-generators, avoided capacity costs, avoided transmission and distribution capacity costs, avoided environmental compliance costs, non-energy benefits, and reduced revenue. NorthWestern intends to discuss these matters and the following questions related to each matter with ETAC at the September 14, 2017 meeting. When considering each of the questions below, it will be helpful to NorthWestern if ETAC members are prepared to support their observations, opinions, and advice with sufficient reasoning, and other documentary support, if appropriate, to allow NorthWestern to fully understand the basis for them. Also, as noted below, NorthWestern will schedule follow-up discussions with ETAC as necessary.

1. ADOPTION RATE OF SOLAR

The Commission has applied to the National Renewable Energy Laboratory (“NREL”) seeking NREL’s assistance with modeling this issue. If NREL accepts the Commission’s application and models this issue for NorthWestern’s Montana service territory, the Commission will provide NorthWestern with the results, which results NorthWestern will then provide to its consultant performing the NEM Study. Notwithstanding that fact, the Notice requires NorthWestern to consult with ETAC regarding “a range of plausible adoption rates.” At the September 14, 2017 meeting, the question presented for discussion on this issue is:

- What is the ETAC’s opinion of a plausible range of adoption rates for installation of solar net metering facilities by customers in NorthWestern’s Montana service territory?

If NREL accepts the Commission’s application to perform modeling on this issue, once that modeling is complete, NorthWestern will inform ETAC of the results.

2. LOCATIONAL ATTRIBUTES

Currently, NorthWestern has limited information from its distribution system related to distributed energy resource hosting capabilities. NorthWestern currently only has the location and size of its net-metering customers. At the September 14, 2017 meeting, the question presented for discussion on this issue is:

- Given NorthWestern’s current information, what does ETAC believe as a reasonable approach for assessing locational attributes of solar customer-generators?

3. AVOIDED CAPACITY COSTS

Related to this category, the Commission has directed NorthWestern to conduct an Effective Load Carrying Capability (“ELCC”) analysis as part of its assessments of these costs. Alternatively, NorthWestern can perform a similar assessment of the capacity contribution of

solar customer-generators. Whether NorthWestern performs an ELCC or similar assessment, NorthWestern lacks data on the actual generation of solar generators owned by its customers. At the September 14, 2017 meeting, the questions presented for discussion on this issue are:

- If NorthWestern is able to perform an ELCC analysis, does ETAC believe that using NREL's System Advisory Model to derive the necessary data inputs for an ELCC is reasonable?
- If not, what other data and/or information does ETAC suggest NorthWestern should use to address this matter?
- If NorthWestern is unable to perform an ELCC and in light of the data limitations, what other analysis does ETAC consider to be "a similar assessment" to an ELCC analysis?

If necessary, an additional meeting will be set up with ETAC to discuss data needs and other related matters associated with this category.

4. AVOIDED TRANSMISSION AND DISTRIBUTION CAPACITY COSTS

The Commission directed NorthWestern's NEM Study to evaluate the cost of deferred or displaced transmission and distribution resources. Since NorthWestern currently does not have detailed marginal cost information related to these costs, NorthWestern must use the regression method developed by the National Economic Research Associates ("NERA"). NERA's regression method uses historical data on transmission and peak transmission system load reported by the utility in its FERC Form 1, and if available, a five-year forecast of future expenditures and load growth. Since the Commission has determined the methodology NorthWestern must use and that methodology controls the data needs, at the September 14, 2017 meeting, the question presented for discussion on this issue is:

- Are there any other matters related to NERA's regression method that warrant discussion?

5. AVOIDED ENVIRONMENTAL COMPLIANCE COSTS

The Commission directed NorthWestern to evaluate two scenarios in the NEM Study – one that includes potential carbon dioxide regulations and one that does not. At the September 14, 2017 meeting, the question presented for discussion on this issue is:

- How does ETAC recommend that NorthWestern and its consultant incorporate carbon dioxide regulations into the NEM Study?

6. NON-ENERGY BENEFITS

This NEM Study must consider whether there are any benefits associated with net metering that are not related to energy delivery, including matters such as increased customer satisfaction and fewer service complaints. At the September 14, 2017 meeting, the question presented for discussion on this issue is:

- Are there other matters/topics/areas of non-energy benefits that ETAC believes are reasonable matters/topics/areas for the consultant to review when conducting the NEM Study?

7. REDUCED REVENUE

This cost category must review lost utility revenues associated with reduced sales due to net metering and serves as a proxy for ongoing costs associated with distribution, transmission and supply services not otherwise accounted for in other categories. At the September 14, 2017 meeting, the questions presented for discussion on this issue are:

- Related to retail transmission and distribution rates, what are plausible assumptions for the annual rate of change in such rates?
- Related to the production rate, what are plausible assumptions for the annual rate of change in this rate?