

Docket Number: EL23-002
Subject Matter: First Data Request
Request to: NorthWestern Corporation dba NorthWestern Energy (NorthWestern or Company)
Request from: South Dakota Public Utilities Commission Staff
Date of Request: February 10, 2023
Responses Due: February 17, 2023

- 1-1. Explain the factors that contributed to the early retirement of coal facilities in the most recent Integrated Resource Plan.

NorthWestern has no intentions to retire any of our current coal facilities early. However, we are concerned about a number of factors outside of our control that may force us into early retirement of our coal-based generation facilities. In order to be prepared for this possibility, NorthWestern needs to initiate an investigation into other cost effective generation options that can replace these resources if we are forced to retire them early. NorthWestern is not the majority owner of any of these resources. Factors that may force early retirement, as described in the IRP, include: ownership decisions related to participation and operation by the other owners; federal regulatory actions regarding upgrades to one or more of our coal generators; other federal actions related to electric generation and climate change; or loss of capacity accreditation.

- 1-2. Does the study need to be completed by the end of May 2023 to participate in Department of Energy Loan Programs Office (“LPO”) funding? If so, does the vendor selection and site assessment need to be completed by the end of May 2023?

Participation in the Department of Energy (“DOE”) funding is dependent on the number of projects selected for funding and the amount of funding that is available. NorthWestern’s consultant recommends we file as soon as possible to increase our success in being selected for funding from the LPO. By starting our study process now, we will be able to submit an application to meet the May 2023 deadline for vendor and site assessment selection. If we wait to file later in the year, the more likely it is that all available funds will be allocated to other projects. The DOE LPO application requires applicants to identify the vendor and site location when a project application is submitted. This does not preclude project changes at a later time, but we would be required to provide justification for any changes.

- 1-3. Is nuclear cost-competitive with natural gas without the Department of Energy funding? Explain.

Nuclear may be cost-competitive with natural gas depending on project specifics. NorthWestern’s IRP identified natural gas as being more cost effective, but with the specific locational requirements and fuel support requirements identified, nuclear may offer another cost effective option. Nuclear also provides more certainty for fuel costs that are not directly affected by the real-time market. The availability of additional federal funds may also push nuclear development to be more cost effective. Either way, adding the DOE LPO support will make the nuclear resource more cost effective for NorthWestern customers.

- 1-4. Explain the various technologies that will be part of the study and identify if these technologies have been successful elsewhere.

The study particulars have not been defined yet, but it will take into account any available nuclear technologies that we expect to be available in the 2030 timeframe.

- 1-5. What is the current estimate and timing of study costs for 2024? Does NorthWestern anticipate any study costs beyond 2024? Explain.

NorthWestern anticipates that the 2023 cost estimate should complete the vendor study, most of the siting study, and Part I to the LPO application. We have not completed our estimate for Part II of the LPO application or the 2024 costs for the site development process. These estimates will depend on results from the 2023 study. Part II of the LPO application will require additional work, possibly starting at the end of 2023. Additional costs and timelines will be developed during the first part of the study process.

- 1-6. When does NorthWestern anticipate a need for nuclear generation in Montana? Explain how these study costs/benefits will be shared with Montana.

NorthWestern has not identified a date certain for nuclear in Montana, only the possibility. But to be ready for the possibility, NorthWestern has modeled retirement scenarios that include adding nuclear in 2030 and 2035. The vendor selection analysis currently being contemplated in South Dakota can be repurposed to meet Montana needs. However, the siting studies will need to be redone for Montana based on the need for load service and the characteristics of the possible site locations.

- 1-7. Has NorthWestern identified any potential utility partners to share the costs/benefits of this study and/or the future nuclear generation? Explain.

NorthWestern has been in discussion with possible partners. If a partnership develops, cost sharing of all applicable study costs will be negotiated depending on their level of participation. Based on future participation, the deferred accounting approach would allow all development costs to be allocated to the parties appropriately.