

Docket Number: EL25-013
Subject Matter: First Data Request
Request to: NorthWestern Energy Public Service Corporation dba NorthWestern Energy (NorthWestern or Company)
Request from: South Dakota Public Utilities Commission Staff
Date of Request: May 1, 2025
Responses Due: May 15, 2025

Small Modular Nuclear Reactor Generation

- 1-9. Refer to NorthWestern's 2024 IRP. Section 7.3.1 states that the capacity expansion modeling "[d]oes not allow new fossil fuel resource additions after 2035, which is consistent with NorthWestern's NetZero by 2050 goals." Section 8.1.1 states: "A 150-MW CCCT unit is added at the end of 2035 as this is the last year in which NorthWestern can build a carbon-emitting resource to adhere to the Net Zero Goal. Even though this resource is added in 2035, the capacity is not needed until the early 2040s when Neal and coyote reach their planned retirement dates. Finally, an 80-MW SMR is added in 2042 to lower the overall portfolio cost, not specifically for capacity." Did NorthWestern evaluate any scenarios that allowed fossil fuel resource additions after 2035? If so, provide the modeling results.

NWE Response:

Yes. See the workpaper Confidential DR1-9 Resource Support. On tab "Resource Selection", the chart in rows 1 – 23 shows a simulation in which NorthWestern allows carbon emitting resources to be selected after 2035 under the book life assumptions. This workbook contains PowerSIMM's Automatic Resource Selection (ARS) result.