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
<b>Responses Due:</b>	May 15, 2025

## Small Modular Nuclear Reactor Generation

1-10. Refer to NorthWestern's 2024 IRP, Figure 26. Explain why the Nuclear overnight capital cost curve declines dramatically over time.

## **NWE Response:**

As described in NorthWestern's 2024 SD IRP on page 45, *"The cost for small modular reactors was derived from the Idaho National Laboratory's Gateway for Accelerated Innovation in Nuclear (GAIN) report, 'Meta-Analysis of Advanced Nuclear Reactor Cost Estimation.'<sup>38</sup> " Footnote 38 refers to the GAIN report found at the link below. The capital cost and the "learning rate," or the change in capital cost, was informed by Table A-1 on page vi of the GAIN report. While inflation was included in the capital cost estimates at 2.5%, the steep decline in capital costs is due to the 9.5% learning rate.* 

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