



NWE-THF-4421

Debbie-Anne A. Reese  
Acting Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

May 23, 2024

Re: Thompson Falls Hydroelectric Project, FERC Project No. 1869-066;  
Response to Additional Information Request from D2SI, and Request for Extension of  
Time

Dear Acting Secretary Reese,

On December 29, 2023, NorthWestern Energy (NorthWestern) filed its Final License Application (Application) with the Federal Energy Regulatory Commission (Commission or FERC) to relicense the existing Thompson Falls Hydroelectric Project, FERC Project No. 1869 (Project), located on the Clark Fork River, in Sanders County, Montana<sup>1</sup>. On March 22, 2024, Commission staff from the Division of Dam Safety and Inspections (D2SI), in accordance with section 5.21 of the Commission's regulations,<sup>2</sup> requested NorthWestern to file additional information to assist in the evaluation of NorthWestern's relicensing proposal<sup>3</sup>.

With this letter, NorthWestern is responding to Additional Information Request (AIR) #1. AIR #1 is repeated in part as follows:

1. *Regarding your proposal to utilize the top 2.5 feet of reservoir storage rather than continuing to be able to utilize the top 4 feet as is currently authorized, staff will need to understand if this proposed change would affect the routing of the Inflow Design Flood (IDF) and the resulting maximum water levels. Therefore, please review the current IDF study and determine if your proposed higher reservoir level would impact the IDF maximum water surface elevation.*

NorthWestern has reviewed the accepted Thompson Falls Project Probable Maximum Precipitation (PMP), Probable Maximum Flood (PMF) routing, and Inflow Design Flood (IDF) documentation and determined that the change in available reservoir storage does not affect the routing of the IDF. The Thompson Falls PMF event is assumed to correspond to a 72-hour

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<sup>1</sup> Final License Application, Project No. 1869-066, Accession No. [20231229-5139](#) (filed Dec. 29, 2023).

<sup>2</sup> 18 C.F.R. § 5.21.

<sup>3</sup> Request of Additional Information, Project No. 1869-066, Accession No. 20240322-3057 (issued Mar. 22, 2024). Under separate cover, NorthWestern is seeking an extension of time to respond to D2SI's March 22 AIR.

general storm PMP of 10.8 inches occurring in June with a significant snowpack remaining throughout the 21,833 square mile drainage basin. Due to the long travel times associated with the basin and the long duration PMF event, the Thompson Falls reservoir was assumed to be full at the beginning of the PMF event routing. Similarly all evaluations of dam breach analysis of the Dry Channel Dam for the IDF evaluations, assumed full reservoir and maximum flows through the dams with all flashboards removed and gates fully open, due to the magnitude of the PMF flow.

Because all modeled flows used in original development of the Thompson Falls IDF event routing and associated dam breach analysis, conservatively excluded the additional storage, additional evaluation of the IDF routing is not warranted. It is further noted that the minimal storage available (approximately 3,500 acre-ft) in the top 2.5 feet of the reservoir is insignificant for major flood routing of long duration flows reaching over 300,000 cfs (at 300,000 cfs the storage volume would be filled in less than 10 minutes).

NorthWestern is requesting an extension of time to file the response to the AIR #2. The AIR #2 requested information that will require new and additional information be developed. Specifically, AIR #2 requested a separate engineering analysis and summary report that included an analysis of historical storms/floods that have occurred at the project, a flood frequency analysis of flows at the project, and a comparison of how potential flood impacts in areas upstream and downstream of the project, among other items. These are significant evaluations which will require additional time to complete. We are requesting an extension until November 19, 2024 to submit the response to AIR #2.

NorthWestern appreciates Commission staff's consideration of this request for extension of time, and for the opportunity to provide additional information on its relicensing proposal. Should you have any questions or require further information, please contact me at 406-444-8115, or by email at [Andrew.Welch@NorthWestern.com](mailto:Andrew.Welch@NorthWestern.com).

Sincerely,



**Andy Welch**

*Manager, Hydropower License Compliance*

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