

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426
February 26, 2024

OFFICE OF ENERGY PROJECTS

Project No. 1869-066 – Montana
Thompson Falls Hydroelectric Project
NorthWestern Energy

VIA Electronic Mail

Andy Welch
Manager, Hydrolicensing Compliance
NorthWestern Energy
andrew.welch@northwestern.com

Subject: Request for Additional Information

Dear Mr. Welch:

After reviewing your license application filed on December 29, 2023, we have determined that additional information is needed to evaluate your relicensing proposal. Schedule A contains a list of the requested items. Under section 5.21 of the Commission's regulations, please file the information requested in Schedule A within 90 days from the date of this letter.

If the required information causes any other part of the application to be inaccurate, please revise that part and refile it by the due date. Also, please be aware that further requests for additional information may be sent to you at any time before final action on your application.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <https://ferconline.ferc.gov/FERCOOnline.aspx>. For assistance, please contact FERC Online Support at FERCOOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY). In lieu of electronic filing, you may submit a paper copy. Submissions sent via the U.S. Postal Service must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, D.C. 20426. Submissions sent via any other carrier must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The first page of any filing should include docket number P-1869-066.

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If you have any questions, please contact Michael Tust at (202) 502-6522, or via email at michael.tust@ferc.gov.

Sincerely,

David Turner, Chief
Northwest Branch
Division of Hydropower Licensing

Enclosure: Schedule A – Additional Information

cc: VIA FERC Service

John Tabaracci
Senior Corporate Counsel
NorthWestern Energy
208 N. Montana Avenue, Suite 200
Helena, Montana 59601

ADDITIONAL INFORMATION

Exhibit A

1. Exhibit A does not describe the recreation facilities you propose to maintain or the access roads you propose to include within your proposed project boundary. These facilities are described in Exhibit E but should also be described in Exhibit A. Therefore, please revise Exhibit A to include descriptions of these proposed facilities.

Exhibit E

Pacific Northwest Electric Power Planning and Conservation Act

2. While section 1.3.7 of Exhibit E states that the project is not located within a protected area, we nevertheless need to understand how the project would or would not be consistent with Appendix B of the Northwest Power Planning Council's (Council) Program as required by the Pacific Northwest Electric Power Planning and Conservation Act. The license application does not include any evidence that you consulted with the Council and the Council does not appear on the distribution list for either the draft license application or the final license application. Therefore, please provide a copy of your license application to the Council and allow them 30 days to respond to your request for comments. Please provide evidence of this consultation along with an updated description of how the proposed project would or would not be consistent with the Columbia River Basin Fish and Wildlife Program based on any feedback received from the Council.

Geology and Soils

3. Section 2.2.4 and 5.4.2 of Exhibit E states that you propose to develop a "drawdown management plan" within two years of license issuance which is characterized as a geology and soils measure. Staff assume the plan would include measures intended to reduce erosion and shoreline slumping caused by deep drawdowns that are periodically needed for maintenance or repairs at the project. However, you do not elaborate on what types of measures you are considering. Table 4-3 of Exhibit D, *Estimated costs for proposed PM&E environmental measures*, identifies a \$12,000 capital cost for developing the plan and \$1,600 in annual costs for implementing the plan. Please describe the types of measures you are considering that would make up the basis for the \$1,600 annual cost. We understand it may be your preference to finalize these types of plans post-licensing; however, we cannot evaluate the adequacy of your proposed measure at minimizing effects on aquatic and soil resources at the project, the relationship of the measure to project effects, or the estimated cost of

implementing the plan without knowing what measures would likely be included in the plan.

Aquatic Resources

4. Section 2.1.1.1 of Exhibit E, *Project Upstream Fish Passage Facility*, states “the sampling/pool crowder (also referred to as the work station) has 3 cubic feet per second (cfs) flowing and the ladder has 6 cfs flowing pool-to-pool. Attractant flows include options of 20 cfs from the high velocity jet (HVJ) and maximum of 54 cfs from the auxiliary water system. Thus, the passage facility may utilize between 9 and 83 cfs. In addition to these operating and attractant flows at the ladder, part of one Main Channel Dam spill panels near the upstream fish passage facility may be opened to provide an additional fish attractant flow of approximately 100 to 125 cfs.” We will need to understand how NorthWestern Energy has been operating these various attraction flow sources under existing conditions and how you intend to operate them under your proposal. For instance, do you typically provide attraction flows of 20 cfs via the high velocity jet and 54 cfs through the auxiliary system at all times as flows allow while operating the fish passage facility or do you adjust attraction flow via each of these sources based on the season or based on river flow conditions? What conditions trigger opening the spill panel nearest the fish passage facility to provide additional attraction flows? Please describe how all these attraction flow mechanisms are utilized throughout the year both under current conditions and under your proposed operation.

5. Sections 2.2.4 and 7.2.2 of Exhibit E states that you propose to develop a “Fisheries and Aquatic Resources PM&E Plan” plan for improving upstream fish passage for native fish. You state that the plan would include the following measures, at a minimum: (1) during the first five years of implementation, deploy up to 8 submersible PIT antenna below the Main Channel Dam to evaluate the finer scale fish movements in the near field of the fish passage facility; (2) prepare a summary report discussing the results of the 5-year study period; (3) develop an “upstream passage improvement plan” during the next 5-year period based on the study results that includes evaluations to improve capture efficiencies of the upstream fish passage facility, any proposed operational changes, and a plan and schedule to complete any facility modifications that are determined necessary to improve upstream passage efficiency; and (4) improvements to downstream fish passage of bull trout at the project. Table 4-3 of Exhibit D, *Estimated costs for proposed PM&E environmental measures*, identifies a \$200,000 annual cost for implementing this plan. However, because this plan has not yet been developed, there should be a capital cost associated with developing the plan and an annual cost for implementing measures contained in the plan. Please provide an estimated capital cost for developing the plan. Additionally, for the \$200,000 annual cost, please include an itemized breakdown of costs for each of the associated measures such as a cost for deploying the PIT antenna

array and monitoring fish movements for the first five years and a cost for developing an upstream passage improvement plan based on the study results. Please revise Table 4-3 in Exhibit D to include these costs.

Additionally, your measure for making “improvements to downstream fish passage of bull trout at the project” is too vague for staff to evaluate. Please include a list of conceptual measures you are considering for improving downstream fish passage for bull trout along with their associated costs in your response.

6. Sections 2.2.4 and 7.2.2 of Exhibit E states that you propose to develop “an engineered solution to provide adequate flow to the upstream fish passage facility at all water surface elevations down to 2.5 feet below full pool. This work will be completed prior to NorthWestern’s implementation of flexible generation between 2.0-2.5 feet below full pool during periods when the fish passage facility is operating.” This measure is too vague for staff to evaluate. Please identify what conceptual “engineering solution” options are being considered for maintaining adequate flow to the upstream fish passage facility under your proposed operation as well as their associated costs.
7. Sections 2.2.4.2 and 6.8.2 of Exhibit E state that you propose within 1 year of license issuance to consult with Montana Department of Environmental Quality (Montana DEQ) and update the 2010 Total Dissolved Gas (TDG) Control Plan submitted with the license application to “incorporate data that have been collected during the recently completed relicensing studies.” You state that the plan would include at a minimum: (1) a requirement to monitor TDG at the project for three consecutive years to validate the updated TDG Control Plan and (2) a monitoring and reporting schedule in years where the most probable (50 percent) April 1 Natural Resources Conservation Service runoff forecast for the U.S. Geological Survey Clark Fork River near Plains stream gage no. 12389000) is at or above 125 percent. Earlier in section 2.1.3.3 of Exhibit E, you state that “the typical spillway opening sequence may be modified to optimize the use of the radial gates and minimize TDG as defined in the TDG Control plan.” Again, we understand it may be your preference to finalize this plan post-licensing. However, given that you completed a two-year study evaluating TDG under various sequencing options for operating your radial gates at the Main Channel Dam, you should be able to provide draft proposals for addressing TDG based on the results of your prefilings study now. Therefore, please develop your proposed procedures for addressing TDG based on the results of your prefilings TDG study (including any revised sequencing procedures for operating your radial gates on the Main Channel Dam) and provide these proposals to the Montana DEQ for review and comment before filing them with the Commission. Please allow Montana DEQ 30 days to review your draft procedures. Your response should include documentation of the consultation, any recommendations and comments provided by

the Montana DEQ on your proposal, and any recommendations you have considered but rejected and the basis for such rejection.

Recreation Resources

8. Your proposed Recreation Management Plan in Appendix D of Exhibit E outlines various measures, including (1) maintenance and operation of additional and expanded recreation facilities and (2) a recreation report that will be filed every 12 years that includes visitor monitoring, visitor surveys, and condition assessments. In table 4-3 in Exhibit D, you provide a \$200,000 capital cost for the Recreation Management Plan and an annual implementation cost of \$189,000. Please explain what the \$200,000 capital cost entails. Please also explain what measures are reflected in your \$189,000 annual costs for implementing the plan.

Cultural Resources

9. Section 12.4.2 of Exhibit E states that a “new” Area of Potential Effect (APE) is proposed based on your project boundary modifications. Your responses to comments in Table 19-2 in Exhibit E states that the Montana State Historic Preservation Officer (Montana SHPO) concurred with the “new” APE on December 20, 2023.¹ In section 2.4 of the revised Historic Properties Management Plan (HPMP), which was filed as privileged as Appendix F of Exhibit E, you define the APE as “lands within the project boundary as proposed in the relicensing application” which would be 1,536 acres. However, the cultural resources inventory study report filed with the license application indicates the APE as 946.7 acres (see section 2.1 on page 2-1 of the cultural resources inventory study report). Please explain this discrepancy and confirm if there are any areas of the new APE that were not surveyed as part of the cultural resources inventory.
10. Section 19.7.3 of Exhibit E states that the Montana SHPO provided comments on the revised draft HPMP on November 3, 2023, and that the SHPO concurred with the APE on December 20, 2023; however, it is unclear if the Montana SHPO has also concurred with the National Register eligibility determinations for the previously identified cultural properties listed in table 12-2 of Exhibit E, *Previously recorded cultural properties*.² To fulfill the requirements of section 106, please seek Montana

¹ A copy of the SHPO’s December 20, 2023 concurrence response was provided in Appendix D of the HPMP.

² The passage of time, changing perceptions of significance, or incomplete prior evaluations may require properties previously determined eligible or ineligible to be re-evaluated.

SHPO concurrence on your eligibility determinations and file evidence of that consultation with the Commission.

11. Section 12.4.2 of Exhibit E states that fluctuating the reservoir and modifying the project boundary will have no effect on cultural resources. However, the analysis makes no mention of the potential effects of proposed environmental enhancement measures or continued operation and maintenance activities on the identified eligible or undetermined/unevaluated cultural resources listed in table 12-2 of Exhibit E.³ What effects would project operation and maintenance have on the undetermined/unevaluated sites?
12. Section 12.4.2.1 of Exhibit E states that precontact and/or historic archaeological properties could be affected by fisheries and recreation environmental measures implemented outside of the APE. You do not describe these potential effects, nor do you specify which cultural resources may be affected. Please provide this information.
13. The Thompson Falls Hydroelectric Dam Historic District, which is described in your HPMP and cultural resources inventory study report, is eligible and listed with the National Register of Historic Places. It encompasses 21 resources, including two dams, a forebay and intake structure, two powerhouses, three bridges, two dwellings and a garage, several smaller auxiliary structures, and a powerhouse ruin. You state in table 3-2 of the cultural resources inventory study report that the “majority of the district’s boundary and most of its contributing elements are within the APE”; however, table 2-1 of the HPMP says that the district is “entirely within the APE.” Please provide a map of the district boundary that identifies all sites/elements of the district, and overlay it with the APE boundary, so that staff can identify which parts of the district boundary and which of its elements fall within the APE.

Exhibit G

14. In staff’s comments on the draft license application, we reminded you that your Exhibit G needs to conform to section 4.41(h) of the Commission’s regulations which requires that the Exhibit G include: (1) project boundary data in a geo-referenced electronic format (i.e., ArcView shapefile or similar format), (2) electronic boundary data that is positionally accurate to ± 40 feet, and (3) a text file describing the map projection used for the Exhibit G data. We asked that you include this information with your final license application. In table 19-2 in Exhibit E containing your response to comments on the draft application, you state that “the electronic project

³ Contributing elements/sites of the Thompson Falls Dam Historic District (24SA0165) should be individually assessed.

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Appendix B

boundary files are being submitted with this filing.” However, the shapefiles do not appear in any of your final license application exhibits or any subsequent filing. Please file the project boundary shapefiles in the above format.