

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426
July 24, 2014

OFFICE OF ENERGY PROJECTS

Project No. 308-007--Oregon
Wallowa Falls Hydroelectric Project
PacifiCorp Energy

Russ Howison
Relicensing Project Manager
PacifiCorp Energy
825 NE Multnomah, Suite 1500
Portland, OR 97232

Reference: Request for Additional Information

Dear Mr. Howison:

We need additional information to complete our evaluation and conduct our environmental analysis of your proposed project. Schedule A contains a list of the requested items. Under section 5.21 of the Commission's regulations, please file your response to the additional information request within 90 days from the date of this letter. If the required information in Schedule A causes any other part of the application to be inaccurate, please revise that part and refile it by the due date.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <http://www.ferc.gov/docs-filing/efiling.asp>. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426. The first page of any filing should include docket number P-308-007.

If you have any questions concerning this letter, please contact Matt Cutlip at (503) 552-2762, or by e-mail at matt.cutlip@ferc.gov.

Sincerely,

Jennifer Hill, Chief
Northwest Branch
Division of Hydropower Licensing

Enclosure: Schedule A

Mailing List
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ADDITIONAL INFORMATION REQUEST

Winter Channel Ice Formation and Flooding

1. Anecdotal information in the project record indicates that flooding in the East Fork bypassed reach can occur under existing conditions during the December through February period when ice forms in the stream channel. In a letter filed on May 15, 2014, Mr. Ron Woodin, a property owner along the East Fork, provided photographic evidence of flooding on his property that appeared to occur during a period of channel ice formation in December 2013. In a July 15, 2014 telephone conversation with Commission staff,¹ Mr. Woodin provided additional information on the circumstances of the flooding event and confirmed that it occurred on December 11 or 12, 2013.

To conduct our analysis of the potential for downstream flooding in the East Fork bypassed reach under existing and proposed operations, we need additional information on project operation and hydrologic conditions during the December 2013 period of channel ice formation. Therefore, please provide the following additional information for the period of December 1 through December 31, 2013:

- (a) a summary of daily average flows in the bypassed reach as measured at the project's compliance gage downstream of the East Fork Dam;
- (b) a summary of the daily average powerhouse discharge during this period; and
- (c) if available, any additional water temperature or stream flow data (e.g., daily averages by monitoring location) recorded during this period..

Powerhouse Outage Events

2. In your August 8, 2011 Additional Information Request (AIR) response, you provide a description of powerhouse outages that occurred over the current license period up to July 31, 2011. However, there is no information in the project record to describe any events that occurred after July 31, 2011.

To assist in our analysis of project effects on ice formation, downstream flooding, and aquatic resources in the project area, please provide a detailed description of any powerhouse outage events that occurred from August 1, 2011 to present, including a description of the cause, date, and duration of each of the events, as well as an explanation of whether the penstock headgate was opened or closed during each of the events.

¹ See telephone conversation memo filed on July 16, 2014.

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Bypassed Reach Flow Modeling

3. To analyze the effect of increasing stream flows in the bypassed reach on downstream flooding, we need to develop a steady flow hydraulic model for the East Fork bypassed reach. To assist in model development, please provide the cross section survey data collected for the PHABSIM model from your IFIM study in tabular format (e.g., Excel) and, if available, georeferenced electronic format (e.g., AutoCAD drawing file, ArcGIS shapefile) along with a file detailing the data's geographic projection and vertical datum. Please ensure the top of bank station points for each cross section are labeled.

In addition, please provide design information including survey data or as-built plans for all existing in-stream structures (e.g., bridges, culverts, the abandoned USGS gauge weir) that could affect stream flow at flood stage. Specifically, you should provide this information for all existing structures along the East Fork bypassed reach from the proposed tailrace pipe outfall location downstream to the West Fork confluence, including the Bailey Road Bridge on the West Fork. The survey data or as-built plans should include the following:

- (a) bridge deck or inline structure width;
- (b) bridge high and low chord elevations and stationing across the stream channel and overbanks on both the upstream and downstream sides;
- (c) bridge or inline structure upstream and downstream embankment side slopes;
- (d) bridge pier widths and stationing;
- (e) bridge abutment slopes;
- (f) culvert type, material, and configuration, or the appropriate Federal Highway Administration nomograph chart and scale numbers;²
- (g) culvert length;
- (h) upstream and downstream culvert invert elevations and centerline stationing;
- (i) inline structure gate type (e.g., sluice, rotary), height, width, invert elevation, and centerline stationing;
- (j) points of intersection of the abutments with the ground;
- (k) points of intersection of the embankments with the ground;
- (l) stream channel geometry; and
- (m) any other ground point geometry integral to the modeling of the structure.

Please also provide photographs of all existing in-stream structures showing: the upstream structure face, the downstream structure face, views from the structure facing

² Federal Highway Administration. 1985. Hydraulic Design of Highway Culverts, Hydraulic Design Series No. 5, U.S. Department of Transportation, September 1985, Washington, DC.

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upstream, and views from the structure facing downstream.

Tailrace Alternatives

4. To protect bull trout from the effects of dewatering in the project tailrace channel, you propose to construct a new tailrace pipe to permanently re-route the powerhouse discharge from the existing tailrace channel to a new outfall location in the East Fork bypassed reach. The Wallowa County Board of Commissioners and land owners along the East Fork bypassed reach recently filed letters expressing concerns about the effects of the proposed tailrace pipe re-route and bypassed reach flow increases on flooding of sewer and water infrastructure and personal property. To alleviate the flooding risk in the East Fork, the commenters recommend alternatives that include continuing to discharge powerhouse flows to the West Fork. You considered several of these alternatives during pre-filing stakeholder consultation, but did not analyze their benefits and costs in the license application.

We need to assess all reasonable alternatives to the proposed tailrace re-route as part of our environmental analysis. Therefore, please provide an evaluation of the environmental effects, benefits, and costs of the following alternatives that were discussed with licensing stakeholders during pre-filing consultation: (1) permanently dewatering the existing tailrace channel and constructing a pipe along the existing tailrace channel alignment to continue to convey powerhouse flows to the West Fork; (2) continuing to use the existing tailrace channel to convey powerhouse flows to the West Fork, but constructing a permanent fish passage barrier at the existing tailrace channel confluence with the West Fork to prevent fish from migrating into the tailrace channel; and (3) permanently dewatering the existing tailrace channel and constructing a pipe along a different alignment that discharges to a more-stable channel location upstream of the current discharge location on the West Fork.

Additionally, please include an analysis of the environmental effects, benefits, and costs of the following additional alternatives: (1) seasonal shutdown of the proposed tailrace pipe with a discharge of powerhouse flows to the existing tailrace channel during winter periods of channel ice formation in the bypassed reach, and (2) permanently dewatering the existing tailrace channel and constructing a pipe to convey powerhouse flows that extends farther downstream of the existing tailrace channel alignment/discharge point to an area of the West Fork with a more-stable channel that wouldn't be as susceptible to channel migration.

Aesthetic Resources

5. In your June 25, 2014 AIR response filing, you state that you are currently reviewing the applicability of Oregon state noise standards to the project. You indicate that, if the standards apply to the project, you would hire an acoustical engineer to

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evaluate powerhouse noise in relation to the standards. You further indicate that installing berms or a cover over the concrete tailrace flume may help to further reduce noise but such measures have not been evaluated and may be too expensive. Please provide the results of your review of the state's noise standards and your evaluation of the project in relation to those standards along with the estimated cost of possible noise mitigation measures.

Document Content(s)

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