

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 637-107 – Washington
Lake Chelan Hydroelectric Project
PUD No. 1 of Chelan County

March 29, 2017

Mr. Jeff Osborn, Compliance Program Manager
Public Utility District No. 1 of Chelan County
P.O. Box 1231
Wenatchee, WA 98807-1231

Subject: December 5, 2016, minimum flow deviation – Article 405

Dear Mr. Osborn:

This letter is in reference to your February 8, 2017 filing with the Federal Energy Regulatory Commission (Commission), notifying us of a deviation from the minimum flow requirement that occurred on December 5, 2016 at the Lake Chelan Hydroelectric Project, FERC No. 637. You submitted your deviation report pursuant to ordering paragraph (D) of the Commission's Order Modifying and Approving Operation's Compliance and Monitoring Plan, Article 405.¹ As discussed in more detail below, this deviation will not be considered a violation of Article 405 of your project license.²

License Requirement

Article 405 requires you to implement the instream flows, ramping rates, and tailrace flows as set forth in Article 7 of the Lake Chelan Settlement Agreement and Chapter 7 of the Comprehensive Plan attached to the Settlement Agreement.³ The

¹ 121 FERC ¶ 62, 152, issued November 30, 2007.

² Order on Offer of Settlement and Issuing New License (117 FERC ¶ 62,129), issued November 6, 2006.

³ Order on Offer of Settlement and Issuing New License (117 FERC ¶ 62,129), issued November 6, 2006.

Comprehensive Plan provides flow releases in Table 7-3, based on the river reach and the water year type. A minimum flow of 80 cubic feet per second (cfs) was required when the reported deviation occurred.

Ordering paragraph (D) of the Commission's November 30, 2007, Order Modifying and Approving Operation's Compliance and Monitoring Plan, Article 405, requires:

“The licensee shall file a report with the Commission within 30 days of any deviation from minimum flow requirements, lake levels or ramping rates. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report shall also include: 1) operational data necessary to determine compliance with the respective license requirements regarding minimum flows, lake levels, and ramping rates, as appropriate; 2) a description of any corrective measures implemented at the time of occurrence and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the resource agencies and others regarding the incident. Based on the report and the Commission's evaluation of the incident, the Commission reserves the right to require modifications to project facilities and operations to ensure future compliance.”

December 5, 2016, Minimum Flow Deviation

You report that at 1355 hours on December 5, 2016, your minimum flow dropped below the 80 cfs requirement until 1600 hours, except for the readings at 1505, 1510, and 1515 hours. Flow readings ranged from 76.39 to 78.58 cfs during the approximate 2 hour deviation period. You report that the gate of the low level outlet; the method by which you release the minimum flow, had stuck due to water pressure on the upstream side of the gate. You investigated the incident and determined that the linkage in the gate control stem had excess room to move and combined with the water pressure, likely caused the gate to stick and not open to the extent to which it was set to release the 80 cfs. You also report that the operations staff did not report the deviation to your compliance staff until January 16, 2017, whereby it was then reported to the Commission on February 8, 2017.

You report that the short duration and minor extent of the deviation was not likely to cause any ecological damage, in particular to fish, given the combination of the extent of the deviation and the colder water temperature. You report that the monitoring gage recorded a one inch drop in water surface elevation in the river at the lowest point during the deviation. You surmise that such a minor reduction in water surface elevation in the river would not affect Chinook eggs and alevins incubating in the river redds that were constructed during the fall spawning run. You report that you submitted your report to

the Chelan River Fishery Forum for comment, but none have been received.

Your staff has investigated the minimum flow incident and the reason for delayed communication and you report that you have implemented the following corrective actions: 1) perform gate linkage improvements to eliminate play in the linkage; 2) developed clear protocols for automatic deviation alerts for operations staff; and 3) advise your operations staff the importance of reporting deviations to your compliance staff to meet deviation reporting requirements with the Commission.

Discussion and Conclusions

In our review of the available information regarding this deviation, we have determined that the initiating circumstance of a malfunction of the gate linkage led to the inaccuracy of the minimum flow release through the low level outlet. Your operators identified that the incorrect minimum flow was being released and made the necessary adjustments to correct the issue. Fortunately, the duration and extent of the deviation were relatively short, since ESA listed salmonids inhabit the river reach that was affected by this deviation. In this case, you were able to conduct a desk top assessment of the deviation and determine that any impact to fisheries resources was unlikely, based on the duration of the event, and the flow and water level changes that occurred. However, of more concern was the delay in reporting this deviation from your operations staff to your compliance staff, and then to the Commission, a full two months after the event had occurred. Had the deviation been more severe, your compliance staff would not have had an opportunity to assess any effects on fisheries resources resulting from the reduction in minimum flow. Your corrective actions describe that you have implemented better communication protocols between you operations staff and compliance staff. That communication needs to be immediate, since deviations in minimum flow could potentially effect ESA protected fish species.

While we will not consider this deviation a violation of your project license, it may be taken into consideration in our evaluation of future similar deviations, should they occur, to determine appropriate Commission action.

Thank you for your cooperation and report. If you have any questions concerning this letter, please contact Robert Ballantine at (202) 502- 6289.

Sincerely,

Thomas J. LoVullo
Chief, Aquatic Resources Branch
Division of Hydropower Administration
and Compliance