

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSIONC.3.11.T (R)
C.3.11.T (P)
Letterbook
eFile (Licensing)

PKWD-19-028

Energy Northwest

Project No. 2244-035

ORDER MODIFYING AND APPROVING TAILRACE WATER TEMPERATURE
MONITORING AND ENHANCEMENT PLAN PURSUANT TO ARTICLE 401

(Issued February 28, 2019)

1. On January 9, 2019, Energy Northwest, licensee for the Packwood Lake Hydroelectric Project No. 2244, filed a Tailrace Water Temperature Monitoring and Enhancement Plan (Temperature Plan), pursuant to Article 401 of the project license.¹ The project is located on Lake Creek in Lewis County and occupies federal land within the Gifford Pinchot National Forest and Goat Rocks Wilderness, administered by the U.S. Department of Agriculture, Forest Service (Forest Service).

License Requirements and Background

2. Article 401 of the license requires, in part, that the licensee file plans required by the Washington Department of Ecology's (Washington DOE) water quality certification (WQC) under section 401 of the Clean Water Act (attached to the license as Appendix A), and the National Marine Fisheries Service's (NMFS) biological opinion's reasonable and prudent measures (RPM) (attached to the license as Appendix D) for Federal Energy Regulatory Commission (Commission) approval. The Temperature Plan is required by WQC condition 4.5 and RPM 8. The licensee must include documentation that it developed the plan in consultation with the above-listed agencies and provide copies of any comments received, as well as its response to each comment.

3. Prior to the operation and construction of the project, water entered the Cowlitz River via Lake Creek; now, water enters the Cowlitz River through the project tailrace. The licensee used a model in order to establish the temperature criteria to be applied to the tailrace discharge, and determined that in order to comply with water quality standards, the maximum allowable temperature for water delivered by the project to the Cowlitz River via the tailrace is 19.39°C. Based on field collected data, that maximum allowable temperature is likely to be exceeded in mid-to-late August. The licensee

¹ Order Issuing New License (165 FERC ¶ 62,031) issued October 11, 2018.

proposed measures to address project effects on environmental resources in the tailrace vicinity in its initial Temperature Plan, developed in consultation with the resource agencies during the relicensing process and filed with the Commission on June 6, 2008. The Temperature Plan filed on January 9, 2019, updates that June 6, 2008 filing to reflect new implementation dates and project upgrades which have occurred since then.

Licensee's Plan

4. To address project effects on environmental resources in the tailrace vicinity, the licensee proposes to: (1) modify the timing of the annual project maintenance outage; (2) eliminate the lake drawdown that occurs prior to the annual outage; and (3) conduct a fish rescue effort in the tailrace slough² below the tailrace, if the project flows are the primary source of water for the tailrace slough. The purpose of the Temperature Plan is to monitor water temperature at specific sites in the project area to determine the effects of the tailrace water on Cowlitz River water temperature, in order to document compliance with the water quality standards and the effectiveness of the schedule change to the annual shutdown.

5. The licensee has proposed to modify the annual shutdown schedule, so that instead of shutting down for most or all of October, the shutdown would occur between August 15 and September 15. This is expected to have a beneficial effect on water temperature in the Cowlitz River at the confluence with the project tailrace since no water would be discharged through the powerhouse during the hottest period of the year. The license anticipates that the change would reduce the temperature impacts of the project on the tailrace during the warmest time of the year, and may also provide benefits to listed Chinook salmon in the tailrace slough.

6. The licensee would conduct monitoring annually between June 25 and October 5 for the first ten years of the project license, or until modified by Washington DOE. The licensee would collect continuous temperature data at 15-minute intervals at seven sites in four locations (the tailrace, Lake Creek, Packwood Lake, and Cowlitz River), and would download and inspect the monitoring equipment monthly. The collected data would be used to determine the 7 day average of maximum daily temperatures (7-DAD Max) and develop a comparative analysis to the applicable water temperature standards, as well as document water temperatures in the tailrace and differences in the mainstem Cowlitz River up and downstream of the confluence with the tailrace. The licensee states that it would use best management practices in conducting temperature monitoring. If monitor shows that shifting the annual outage to August 15 does not bring the project

² The tailrace slough is a side channel of the Cowlitz River into which the project tailrace channel discharges flow.

fully into compliance with the temperature criteria, the licensee would consult with Washington DOE to consider reasonable and feasible alternatives to achieve compliance.

7. The licensee stated it would prepare an annual report for submission to the Resource Agencies Committee (RAC).³ Following a 45-day review and comment period, the license would file the report with the Commission.

Agency Consultation

8. The licensee developed the initial plan in consultation with the Forest Service, U.S. Geological Survey, National Park Service, U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Army Corps of Engineers, Washington Department of Ecology, Washington Department of Fish and Wildlife, Cowlitz Tribe, and Confederated Tribes and Bands of the Yakama Nation (collectively, the consulting parties), and provided its updated plan to the consulting parties for review on January 2, 2019. The updates are minor in nature and incorporated text from the new license and updated the proposed schedules, which did not fundamentally change the plan. No parties provided comments.⁴

Discussion and Conclusion

9. The licensee's Temperature Plan would allow the licensee to evaluate the effectiveness of the annual outage schedule change on water temperatures and monitor water temperature at specific sites in the project area to determine the effects of the tailrace water on Cowlitz River water temperature, and document compliance with the water quality standards. The licensee prepared its Temperature Plan in consultation with the RAC and updated the plan to reflect schedule and changes that have occurred since relicensing occurred. The licensee did not establish a date to file annual reports with the Commission, therefore the plan is modified to include an annual filing deadline of June 1. The Temperature Plan meets the requirements of Article 401, and with this modification, should be approved.

³ The RAC includes, but is not limited to, representatives from Washington Department of Ecology, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Marine Fisheries Service, the licensee, and consulting biologists.

⁴ Personal communication between Commission staff and the licensee's consultant, February 26, 2019.

The Director orders:

(A) Energy Northwest's Tailrace Water Temperature Monitoring and Enhancement Plan, filed January 9, 2019, pursuant to Article 401 of the license for the Packwood Lake Hydroelectric Project No. 2244, as modified in ordering paragraph (B), is approved.

(B) The licensee shall file annual reports with the Commission summarizing activities implemented under the Tailrace Water Temperature Monitoring and Enhancement Plan, by June 1 of the year following studies. The licensee shall allow the Resource Agencies Committee (RAC) 30 days to review the report and make comments or recommendations. The licensee shall file the annual report with the Commission, including any comments or recommendations received from the agencies, and the licensee's response. If the licensee does not adopt a recommendation from the RAC, the report shall include the licensee's reasons based on project-specific information. The Commission reserves the right to modify the plan or project operations and facilities based on the results of the reports to ensure compliance with license.

(C) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2018). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

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