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VIA CERTIFIED MAIL

August 4, 2008
PKWD-08-046

Eric Schlorff
Water Quality Program
Department of Ecology
PO Box 47775
Olympia, WA 98504-7775

Dear Mr. Schlorff:

Subject: **PACKWOOD LAKE HYDROELECTRIC PROJECT
FERC DOCKET NO. P-2244
SECTION 401, FEDERAL CLEAN WATER ACT
STATE WATER QUALITY CERTIFICATION**

Energy Northwest, as Licensee, hereby requests the Washington Department of Ecology (Ecology) to issue a Water Quality Certification pursuant to Section 401 of the Clean Water Act, for the relicensing of the Packwood Lake Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 2244. Energy Northwest filed an application to relicense the Project with FERC on February 25, 2008, in accordance with FERC's Integrated Licensing Process regulations (18 CFR §5 and associated sections).

Prior to the formal start of the relicensing process in November 2004, Energy Northwest consulted with Ecology to determine what information would be required to support the issuance of a water quality certification and initiated water quality studies. Modeling of pre-project water quality and flow conditions was also conducted. Specific water quality data are available in the Project Application for New License (Application), and are not described in detail in this letter. The license application was previously provided to Ecology. For ease of processing this application, a copy of the application is being provided in electronic format on CD as an attachment to this letter, together with the water quality study reports also previously filed with Ecology.

Throughout the pre-filing period, Energy Northwest consulted with Ecology, the United States Department of Agriculture (USDA) Forest Service, the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration (NOAA) Fisheries, the Washington Department of Fish and Wildlife (WDFW), and other

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agencies and tribes, regarding the effects of the Project on area resources. Energy Northwest and the stakeholders came to agreement in principle on the Protection, Mitigation and Enhancement Measures (PMEs) that would best address the agencies' resource concerns. These measures are described in detail in the Application. The Project is briefly described, and facts germane to water quality are summarized below.

Project Description

The Packwood Lake Hydroelectric Project is located in Lewis County in southwest Washington State near the unincorporated town of Packwood, about 20 miles south of Mt. Rainier. Packwood Lake is the source of water for the Project. It is located on the west side of the Cascade Mountain Range within the Gifford Pinchot National Forest (see Figure A-1 of the Application). The southern portion of the lake is bordered by the Goat Rocks Wilderness Area. The area's climate is maritime. Average rainfall for Packwood is approximately 57 inches per year, while the national average is 37 inches. Average snowfall for Packwood is 27 inches per year, while the national average is 25 inches. Average high temperature is in July, 79°F; and the average low temperature, 29°F, is in January. Precipitation falls year round, but mainly in the fall, winter and spring. Summer is the driest period.

(<http://climate.fizber.com/Washington-city-packwood-climate.html>).

The normal surface area of Packwood Lake is 452 acres as measured at Elevation 2857 ft mean sea level (MSL). Packwood Lake existed as a natural lake prior to construction of the Project. Water that originates as rainfall and snowmelt in the Goat Rocks Wilderness Area and the Cascade Mountains drains into Packwood Lake via several tributaries. These include Osprey, Trap, Muller, Upper Lake, and Crawford creeks. Lower Lake Creek serves as the outlet of the Lake. It flows in a northwest direction from Packwood Lake about 5.3 miles to a point of confluence with the upper Cowlitz River, at approximately River Mile (RM) 129.2. The Lake Creek drainage is mostly within the Gifford Pinchot National Forest, with the lowest 0.7 miles on private lands. The gradient of lower Lake Creek is relatively high, averaging about 6.3% from the lake to its confluence with the Cowlitz River.

The Project consists of an intake canal, a concrete drop structure (dam) and intake building on Lake Creek, located about 424 feet (ft) downstream from the outlet of Packwood Lake; a 21,691-ft system of concrete pipe and tunnels; a 5,621 ft penstock; a surge tank; a powerhouse with a 26,125 kilowatt (kW) turbine generator; a stilling basin; a 6,690-ft-long tailrace canal with tailrace fish barrier; and a 8,009-ft transmission line. Water discharged from the Project is returned to the Cowlitz River primarily via the tailrace canal at RM 125.2; with a minimum instream flow of 3 cubic feet per second (cfs) to enhance the aquatic habitat, except during the period May 1 to September 15, when the Project is required to release up to a maximum of 5 cfs, in

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order to facilitate a flow of 15 cfs at the gaging station identified as "Lake Creek at Mouth" (USGS Station No. 14226000). Energy Northwest is not currently required to measure instream flows at the confluence, although water release flows to lower Lake Creek are recorded daily at the Project drop structure. When lake level rises above the drop structure crest elevation (El. 2858.5 ft MSL), the flow passes over the drop structure into Lake Creek downstream of the lake.

Power from the Project is delivered over an 8,009-ft-long, 69 kV transmission line to the Packwood substation. General locations and a schematic of Project facilities can be found in the Application (Figures A-2 and A-3).

Water Quality Study Results

Early in the Project's relicensing process, Ecology and the other interested agencies expressed a desire to review the available hydrologic information for Lake Creek. A hydrology report was completed and submitted to Ecology in June 2005. A copy of the report is included in the materials submitted with this request for certification. Additional reports relevant to water quality that were previously submitted are provided again with this request. These include:

1. Water Quality Interim Report: 1st Year Study Results (April 2006)
2. Water Quality Report 2nd Year Study Results (February 2007)
3. Final Water Temperature Report for 2005 (February 2007)
4. Phase 1 Assessment (April 2007)
5. Final Geomorphology and Habitat of the Tailrace Slough Study Report (May 2007)
6. Final Packwood Lake Drawdown Study Report (July 2007)
7. Final Water Quality Temperature Modeling for Lake Creek Report (September 2007)
8. Tailrace Slough Instream Flow Study Report (September 2007)
9. Final Water Quality Modeling for Packwood Lake Report (October 2007)
10. Lake Creek Instream Flow Study Report (October 2007)

The findings of the water quality monitoring and modeling indicated that the Project does not adversely affect water quality parameters other than temperature.

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Proposed Plan for Project Compliance

Energy Northwest filed the attached Tailrace Temperature Monitoring and Enhancement Plan to address the Project's effects on water temperature on June 6, 2008, as required by FERC's Additional Information Request (AIR). As described in the plan, Energy Northwest will undertake measures intended to bring the Project into compliance with the state criteria for temperature within 10 years of issuance of the water quality certification.

During the new license term, Energy Northwest also plans to reroute Snyder Creek to improve fish passage, which is currently impaired by a culvert that does not meet WDFW standards. This project is described in more detail in the Application in Exhibit E, Section E.5.3.1.3.6, Measures to Address Effects on Fish Passage at Snyder Creek Tailrace Crossing. Energy Northwest anticipates that the work to reroute Snyder Creek under the new license will be subject to permit conditions which will require measures to prevent erosion or discharge of any sediment or materials into any streams. Thus, no foreseeable cumulative effects on erosion at the Project are anticipated.

There will be no sanitary or industrial discharge to the Cowlitz River from the project, and no other impacts to the water quality are anticipated. A Spill Prevention, Control, and Countermeasure (SPCC) Plan has been developed and will be reviewed on a five-year basis or more often, as required by FERC. Conformance with the plan will prevent release of any toxic materials into the environment. The details are included in the Application in Exhibit E, Section 5.2, Water Resources and a copy of the SPCC Plan is found in Appendix A. No cumulative effects on water quality due to the Project are reasonably foreseeable.

If you require any further information to support the issuance of the water quality certification for the Project relicensing, please contact me at (509) 377-8581.

Respectfully,



Dan Ross
Packwood Project Manager

cc: J. Blum, EES Consulting
K. Bose, FERC Secretary
C. Leigh, WDFW
Water Quality and Aquatics Committee (via email letter and application only)

Department of Ecology

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Enclosures:

The following is a list of the materials in this request submission:

Hard Copy

1. Letter request for water quality certification
2. Water Quality Certification Application Form

CD-ROM

3. Packwood Lake Hydroelectric Project Application for New License (February 2008)
4. Summary of Packwood Lake Hydroelectric Project Hydrology (June 2005)
5. Water Quality Interim Report: 1st Year Study Results (April 2006)
6. Water Quality Report 2nd Year Study Results (February 2007)
7. Final Water Temperature Report for 2005 (February 2007)
8. Phase I Environmental Site Assessment (April 2007)
9. Final Geomorphology and Habitat of the Tailrace Slough Study Report (May 2007)
10. Final Packwood Lake Drawdown Study (July 2007)
11. Final Water Quality Temperature Modeling for Lake Creek (September 2007)
12. Final Tailrace Slough Instream Flow Study Report (September 2007)
13. Final Water Quality Modeling for Packwood Lake (October 2007)
14. Final Lake Creek Instream Flow Study Report (October 2007)
15. Tailrace Temperature Monitoring and Enhancement Plan (June 2008)