September 5, 2019
PKWD-19-064

Kimberly D. Bose, Secretary
ATTN: OEP/DHAC
Federal Energy Regulatory Commission
Mail Code: DHAC, PJ-12
888 First Street NE
Washington, DC 20426

Subject: PACKWOOD LAKE HYDROELECTRIC PROJECT
FERC DOCKET NO. P-2244
PIPELINE, SURGE TANK AND PENSTOCK MONITORING

Energy Northwest (EN), in accordance with the Order Issuing New Operating License issued by the Federal Energy Regulatory Commission (Commission) October 11, 2018, has consulted with the United States Department of Agriculture – Forest Service (USFS) on the preparation and submittal of a monitoring plan of the pipeline, surge tank and penstock.

EN proposed that it utilize the existing Dam Safety Surveillance and Monitoring Plan (DSSMP) for the Packwood Lake Hydroelectric Project given that it contains all of the required components intended by the USFS Condition in the new Operating License. Subsequent to this proposal and review of the existing plan, the USFS Regional Dam Safety Program Engineer acknowledged that the DSSMP is an adequate plan and meets the intent of the Condition. EN herein files the DSSMP (Plan) Revision 6. The filing of this Plan satisfies the USFS 4(e) Condition No. 15 – Pipeline, Surge Tank and Penstock Monitoring. As proof of this consultation, EN has included a record of consultation with the USFS.

The DSSMP was initially developed by EN at the direction of the FERC Portland Regional Office (FERC-PRO) in 2009. The Plan is based on selected elements taken from the Risk Informed Decision Making (RIDM) process and the traditional inspection checklist utilized by the FERC-PRO staff. The Plan documents the requirements, tasks, methods and reports related to monitoring the waterway system. The Plan details technical descriptions of monitoring methods, data analysis, and techniques necessary for EN to conduct specific monitoring tasks. The Plan provides a mechanism for revising monitoring strategies and methods to reflect improvement in sampling procedures and/or changes in regulations or environmental conditions. The Plan identifies practices for record keeping and reporting. The Plan includes provisions for the routine updating of the monitoring plan. Going forward, EN
will ensure the USFS is offered an opportunity to consult and approve the updates, subsequent to filing the updated DSSMP with the Commission.”

In the event that the FERC-PRO changes the dam hazard classification for the Project in the future, EN will engage in consultation with the USFS, seek approval from the USFS, and file the Plan with the Commission for approval.

EN seeks Commission approval of the aforementioned approach to utilize the Dam Safety Surveillance and Monitoring Plan to satisfy USFS 4(e) Condition No. 15 – Pipeline, Surge Tank and Penstock Monitoring.

If you have any questions or require additional information regarding this Plan, please contact me at 509.378.9755 or kvwilliams@energy-northwest.com.

Respectfully,

Ken Williams
Supervisor, Hydro & Wind Projects

Enclosure: 1) Dam Safety Surveillance and Monitoring Plan, Revision 6
   Controlled Unclassified Information/Critical Energy Infrastructure Information (CUI/CEII)
   2) Condition No. 15 – Pipeline, Surge Tank and Penstock Monitoring, Record of Consultation 081919

Distribution:
   Email: USFS
   Hardcopy: Cowlitz Indian Tribe (3); Yakama Nation (3)
Ruth,

Thank you for the acknowledgement of our DSSMP as “adequate”. In accordance with Condition No. 15 of the License, Energy Northwest (EN) will proceed with filing the DSSMP in the coming weeks, seeking the Commission’s approval.

EN has been in communication with the FERC Portland Regional Office (FERC-PRO) regarding the hazard classification. In response to FERC-PRO’s letter dated 6/22/2019, Energy Northwest replied on 7/10/2019 with a schedule for meeting the requirements outlined in their letter.

Action Plan 1 is to prepare and submit the Emergency Action Plan (EAP) to the FERC-PRO by 9/2/2019. This will be a draft version, whereas EN anticipates further input by FERC-PRO and refinement by EN at which time USFS will be included.

Action Plan 2 is to perform a more detailed, on-the-ground survey, document the results, and submit the report to FERC-PRO by 11/1/2019.

EN will update the DSSMP in accordance with the change in hazard classification. The timing of the update is dependent upon the outcome of FERC-PRO’s review of the EAP and the survey report. EN is targeting December 31, 2019 as the filing date.

EN will provide the USFS the requested documentation associated with the change in hazard classification. Due to the size of the document files and the number of documents, EN will prepare a hard copy package and send it to your office. Going forward, EN will include your office on copy.

Audrey Desserault
Project Specialist
Packwood Lake Hydroelectric Project
509.840.2067 cell
A response letter from FERC dated 6/22/2019, regarding a dam break study, states the dam hazard classification has been changed to “Significant”, and the project falls under Part 12D of CFR 19 [inspection by independent consultant], including an Emergency Action Plan. The letter also had a requirement to provide a plan and schedule for meeting the requirements outlined in the letter.

The Forest Service would like to receive a copy of the documents associated with the change in hazard classification, including the dam hazard assessment report, the draft EAP for Forest Service Comment, and documentation of any modifications or rehabilitation proposals as a result of the change to “significant” hazard potential classification.

I looked into my e-mails and see two in April, one a change to the table of contents and contacts list, and the other Public Safety Instructions. I presume these would be updated based on the change to “significant” hazard potential classification. Please let me know where I may be missing some understanding of the current status. Thank you.

Ruth E Tracy
Gifford Pinchot NF
Soil and Water Program Manager
360-891-5112
rtracy@fs.fed.us

From: Desserault, Audrey J. [mailto:AJDESSERAULT@energy-northwest.com]
Sent: Tuesday, August 13, 2019 3:18 PM
To: Tracy, Ruth -FS <ruth.tracy@usda.gov>
Cc: Desserault, Audrey J. <AJDESSERAULT@energy-northwest.com>
Subject: FW: Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring
Importance: High

Hi, Ruth. Checking in with you on your status of this subject.

Audrey Desserault
Project Specialist
Packwood Lake Hydroelectric Project
509.840.2067 cell

From: Desserault, Audrey J.
Sent: Wednesday, July 17, 2019 7:31 AM
To: Ruth Tracy <Ruth.Tracy@usda.gov>
Cc: Audrey Desserault <ajdesserault@energy-northwest.com>
Subject: FW: Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring
Importance: High

Ruth,

I am checking back with you on this topic. Have you been able to get an acknowledgement or other response on the proposal to utilize the current DSSMP in
lieu of creating a separate plan for the Pipeline, Surge Tank, and Penstock Monitoring Plan (Condition No. 15).

The filing of a Plan is due October 11, 2019. If a Pipeline, Surge Tank, and Penstock Monitoring Plan does indeed need to be developed, I would like to have sufficient time to prepare it, route it, and finalize it.

Looking forward to hearing back from you soon.

Audrey Desserault
Project Specialist
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Ruth,

I have gone back to the License Order to validate what is required. I am taking these current discussions with you as consultation for the development of said Plan.

**Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring**

Within one year of License issuance, the Licensee must, in consultation with and approved by the USDA Forest Service prepare a Pipeline, Surge Tank and Penstock Monitoring Plan and file the plan with the Commission for approval. The goal of the plan is to provide protection to NFS lands from Project waterway system leakage or failure. The plan must:

Document the requirements, tasks, methods and reports related to monitoring the Project waterway system.

Document detailed technical descriptions of monitoring methods and data analysis and techniques necessary for the Licensee to conduct specific monitoring tasks.

Provide a mechanism for revising monitoring strategies and methods to reflect improvement in sampling procedures and/or changes in regulations or environmental conditions.

Identify practices for record keeping and reporting.

Include provisions for the routine updating of the monitoring plan, in consultation with and approved by the USDA Forest Service, and subsequent filing with the Commission.

I propose that the current Dam Safety Surveillance and Monitoring Plan (as
previously approved by the Federal Energy Regulatory Commission Portland Regional Office) be used as the Plan required to satisfy Condition No. 15. In so doing, edits will be made to capture the terms of Condition No. 15. Revision 7 would be filed with the FERC Secretary (by October 11, 2019). See attached table of current status/practice and proposed actions.

Audrey Desserault
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Packwood Lake Hydroelectric Project
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From: Tracy, Ruth -FS <ruth.tracy@usda.gov>
Sent: Monday, April 15, 2019 3:55 PM
To: Desserault, Audrey J. <AJDESSERAULT@energy-northwest.com>
Subject: RE: USFS/EN - Discuss 4(e) Conditions for Packwood Project - Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring

Hi Audrey, I do not know for sure. I can try or if needed probably get additional ‘clearance’ or see if the Regional FERC coordinator has additional clearance.

Ruth E Tracy
Gifford Pinchot NF
Soil and Water Program Manager
360-891-5112
rtracy@fs.fed.us

From: Desserault, Audrey J. [mailto:AJDESSERAULT@energy-northwest.com]
Sent: Monday, April 15, 2019 3:11 PM
To: Tracy, Ruth -FS <ruth.tracy@usda.gov>
Subject: FW: USFS/EN - Discuss 4(e) Conditions for Packwood Project - Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring

Something that has come to mind about the DSSMP. When I file it with FERC, it is labeled as CUI/CEII (controlled unclassified information/critical energy infrastructure information). Are you (USFS) able to retrieve the document from the FERC docket when EN posts a revised DSSMP?

Audrey Desserault
Project Specialist
Packwood Lake Hydroelectric Project
509.840.2067 cell

From: Desserault, Audrey J. <AJDESSERAULT@energy-northwest.com>
Ruth,  

As a follow-up to our consultation meeting on Wednesday, March 6, 2019, we have written up brief notes.

Pipeline, Surge Tank and Penstock Monitoring – 4(e) Condition No. 15

EN is requesting that the Forest Service accept EN’s current Dam Safety Surveillance and Monitoring Plan (DSSMP) and Report (DSSMR). EN is willing to add elements that the Forest Service identifies as enhancements to the DSSMP and DSSMR that will satisfy the 4(e) Condition.

Ruth is working with the Forest Service’s FERC point of contact, Rene Renteria, to determine the options and enhancements.

Meeting attendees on 3/619: Ruth Tracy and Ken Wieman, Forest Service; Audrey Desserault and Kenny Williams, Energy Northwest; Cory Warnock, McMillen Jacobs & Associates

Audrey Desserault  
Project Specialist  
Packwood Lake Hydroelectric Project  
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Ruth,  

Per my voicemail, here are the topics we would like to discuss with you in a phone call.

Condition No. 9 - Entrainment in Project Intake

Energy Northwest submitted the Intake Fish Entrainment Monitoring Final Plan
(Plan) with FERC in April 2012. In the new license order, it states the following.

*The Licensee must, in consultation and coordination with and subject to review and approval by the USDA Forest Service, develop a Packwood Lake Intake Fish Entrainment Monitoring Plan within 3 months of issuance of the new license.*

Energy Northwest could refile the Plan by mid-January (3 months of issuance of the new license), however, collaboratively with you, we would like to propose an extension. Project personnel have been gathering impingement data for over 10 years now and we feel that the data set and the associated context it provides with respect to Project impact (or lack thereof) warrants a bit more discussion with the agencies and potentially some revisions to the plan. With the data available, Energy Northwest would like to discuss with the resource agencies during the annual meeting (targeted for the end of March 2019), a set of methods and implementation measures that accurately assess the current condition and a path forward for revising the plan accordingly. Energy Northwest would like to align the filing of the Intake Fish Entrainment Monitoring Plan with other plans due within one year of license issuance (due October 2019).

**Condition No. 11 - Amphibian Monitoring at Site B**

*Within in the first year after License issuance, the Licensee must monitor the lacustrine fringe wetland habitat at the head of Packwood Lake known as Site B for northwestern salamander larvae presence and to determine whether the larvae are able to move into the lake after the annual September 16 change in minimum lake elevation or if there is a physical barrier to their movement.*

*The Licensee must monitor Site B as follows:*

1. *Monitoring for larvae must begin prior to September 16 when winter operating lake levels are in effect,*
   
   a. *Detection methods must include the use of dip-net and/or aquatic funnel traps to record the number and size (snout-vent length) of larvae found.*

2. *Following the annual drawdown, Site B will be re-visited:*
   
   a. *If Site B is not dewatered, the site will again be sampled for larvae using the above detection methods;*
   
   b. *The topography of the site will be documented by field notes and photographs, and the depth of any remaining water within Site B will be measured; and*
   
   c. *The outlet of Site B to the lake will be examined to determine whether there is a barrier to larval movement into the lake (i.e., do logs screening Site B from the lake and a sill of accumulated sediments block movement).*

*The Licensee must in coordination and consultation with the USDA Forest Service, review the monitoring results at the forthcoming Annual Resource Coordination meeting (Condition No. 2). If the results show that there is not a physical barrier to northwestern salamander larval movement into Packwood Lake, the next phase of*
monitoring would not be required.

If the first year monitoring demonstrates that northwestern salamander larvae are unable to move into the lake to survive winter operating levels, the Licensee must conduct a second year of monitoring to determine the relative importance of Site B to the local population of the species. A post-breeding (probably late May) survey for northwestern salamander egg masses will be conducted in Site B and in the wetland complex southeast of the lake. Because northwestern salamander egg masses are large and conspicuous, a survey at this time would have the highest probability of detection. Two biologists will systematically survey wetlands up to 0.5 miles from the Packwood Lake and will record the number and location of egg masses. If the survey indicates that the number of northwestern salamander egg masses at Site B is 10% or less than the number of egg masses found elsewhere, no further action will be required. If Site B is found to be relatively more important, then Licensee must consult with the USDA Forest Service regarding appropriate habitat improvements (e.g., reconfiguring Site B to improve connectivity to the lake).

Given the modifications to lake operations associated with the new license (Condition No. 4), Energy Northwest would like to discuss how this measure may need to be altered to accurately and efficiently assess (biologically and temporally) the existing condition.

Condition No. 15 - Pipeline, Surge Tank and Penstock Monitoring

Energy Northwest initiated a Dam Safety Surveillance and Monitoring program at the direction of the FERC Portland Regional Office in December 2009. The Dam Safety Surveillance and Monitoring Plan was finalized in December 2009. The DSSMP is reviewed annually and revised as necessary. The first Dam Safety Surveillance and Monitoring Report (DSMMR) was submitted for 2009 and has continued annually. Energy Northwest believes that the DSSMP covers the elements described for the Pipeline, Surge Tank, and Penstock Monitoring Plan. Energy Northwest would like to discuss the option of retaining the DSSMP and the option of the DSSMP satisfying Condition No. 15.

Within one year of License issuance, the Licensee must, in consultation with and approved by the USDA Forest Service prepare a Pipeline, Surge Tank and Penstock Monitoring Plan and file the plan with the Commission for approval. The goal of the plan is to provide protection to NFS lands from Project waterway system leakage or failure. The plan must:

1. Document the requirements, tasks, methods and reports related to monitoring the Project waterway system.

2. Document detailed technical descriptions of monitoring methods and data analysis and techniques necessary for the Licensee to conduct specific monitoring tasks.

3. Provide a mechanism for revising monitoring strategies and methods to reflect improvement in sampling procedures and/or changes in regulations or environmental conditions.
4. Identify practices for record keeping and reporting.

5. Include provisions for the routine updating of the monitoring plan, in consultation with and approved by the USDA Forest Service, and subsequent filing with the Commission.

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