

135 FERC ¶ 62,094
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp

Project No. 2342-025

ORDER MODIFYING AND APPROVING
WOODY DEBRIS MANAGEMENT PLAN

(Issued April 29, 2011)

1. On March 16, 2011, PacifiCorp (licensee) filed a Woody Debris Management Plan (Plan) pursuant to ordering paragraph (L) of the Order Accepting Surrender of License, Authorizing Removal of Project Facilities, and Dismissing Application for New License (Surrender Order) for the Condit Hydroelectric Project No. 2342.¹ The project is located on the White Salmon River in Klickitat and Skamania counties, Washington.

Background

2. Ordering paragraph (L) of the Surrender Order, requires the licensee to file, for Commission approval, at least 90 days before starting removal activities, a woody debris management plan describing measures to be taken before, during, and after initial reservoir dewatering to minimize any adverse effects from woody debris washout out of the reservoir or dislodged from the canyon downstream of the dam. The Order on Rehearing, Denying Stay, and Dismissing Extension of Time Request (Rehearing Order) deleted ordering paragraph (L) of the Surrender Order as to avoid duplicative requirements since such a plan is also required by section 4.3.4 of the water quality certification (WQC), issued by the Washington Department of Ecology (Ecology), and included in Appendix A of the Order.²

3. Section 4.3.4 of the WQC requires that the licensee manage and monitor woody debris as described in the Woody Debris Management Plan dated May 29, 2009, except as modified by Ecology's order issuing the WQC or revised and approved by Ecology. Monitoring reports shall be submitted to Ecology by the end of the calendar year, starting the calendar year after dam breaching. Excavated large woody debris will be removed from the reservoir for offsite disposal and/or used for approved habitat

¹ *PacifiCorp*, 133 FERC ¶ 61,232 (2010).

² *PacifiCorp*, 135 FERC ¶ 61,064 (2011).

enhancement projects. The licensee shall conduct surveys in the White Salmon River canyon below the dam to identify and dislodge woody debris that may be hindering fish passage or present a threat to public safety. Log jam removal shall only be conducted after consultation with Ecology, Washington State Department of Fish and Wildlife (WDFW), and National Marine Fisheries Service (NMFS).

4. Ordering paragraph (Q) of the Rehearing Order requires the licensee to submit the woody debris management plan required by the WQC, as well as any subsequent changes to that plan, to the Commission for approval. Additionally, ordering paragraph (Q) requires the licensee to consult with NMFS, U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (Forest Service), WDFW, Ecology, U.S. Army Corps of Engineers (Corps), and Klickitat and Skamania counties.

5. The licensee shall submit to the Commission documentation of its consultation, copies of comments and recommendations made in connection with the plan, and a description of how the plan accommodates the comments and recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make changes to the plan. Upon Commission approval, the plan becomes a condition of the surrender, and the licensee shall implement the plan or changes in project removal measures, including any changes required by the Commission.

Licensee's Plan

6. The licensee filed a Woody Debris Management Plan on March 16, 2011. The Woody Debris Management Plan establishes plans for the monitoring, removal, disposal, or reuse of coarse wood material encountered during the dam removal process and, following dam decommissioning, as the river erodes existing reservoir sediments. The primary purpose of the Plan is to provide guidance to evaluate when coarse woody debris causes jams that impede sediment flow, restrict fish passage, or present a public safety concern, and suggest methods to resolve those problems if they occur. The Plan also establishes criteria for making quality woody debris resources available to WDFW or other organizations involved in stream restoration. In the event woody debris is not suitable for reuse, the Plan provides alternative disposal methods. The licensee states that the Plan will be in effect for the five-year monitoring period following dam breach.

Monitoring

7. The Plan outlines pre-breach and post-dam removal monitoring and removal activities. Prior to the dam breach, any woody debris jams that exist in the canyon reach will be removed for purposes of facilitating the flushing of reservoir sediments during the breach event and in the months of reservoir sediment erosion following the breach. A field inspection was conducted in February 2011 to determine if any log jams were present and the licensee proposes another field inspection in September 2011, to verify

that the reach is barrier free. In the event that a new jam has formed, the jam will be removed or broken apart such as not to impede sediment flushing. Additionally, large floating wood will be removed from the reservoir water surface prior to the breach event. The licensee also intends to remove a portion of the accumulated sediment in the reservoir within the first 75-feet upstream of the dam, including as much submerged large wood as possible. Any wood that is removed from the reservoir will be stockpiled near the existing boat ramp, next to the inflow point for Condit Creek.

8. The post-dam removal activities are divided into the following four stages: initial dam breach, immediate post-reservoir drawdown, post reservoir draining to return to pre-dam conditions within the existing reservoir, and extended monitoring. During stage one, the Plan states that monitoring personnel will be located at strategic locations to determine whether a log jam is present, and mechanical extraction equipment and blasting materials will be readily available to grab large debris and trees if necessary. The canyon reach downstream of the dam will also be monitored during this period in order to identify the sites in which jams form and to determine appropriate removal techniques to apply when water levels drop.

9. The second stage is predicted to occur over a period of several days, during which the licensee will monitor the movement of sediment and large wood in the newly exposed bed of the reservoir. During this period of time the likelihood for a blockage of the drain tunnel will remain high, therefore blockage removal equipment and supplies will remain on standby. The jams will be adaptively managed depending on the degree of public risk, unwanted sediment retention, or the potential to cause fish passage problems. Modifications or removal of jams creating problems will be completed as soon as it is safe and feasible to do so, or prior to the fish migration period. The canyon reach and a portion of the river downstream of the powerhouse will also be monitored using a combination of foot and aerial surveys.

10. Stage three will follow stage two and last until approximately one year following dam breach. During this period of time, monitoring will be accomplished using a combination of methods depending on safety and accessibility. Between the time of dam breach and the establishment of stable remaining sediment deposits, the licensee will monitor the reservoir bottom and the eroding river channel for large wood deposits. The large wood deposits will be removed as soon as practicable. Woody debris that is inhibiting bank stabilization within the boundaries of the former reservoir will be identified and dislodged or removed. As soon after stage two is deemed safe, the river will be assessed beginning at the area immediately upstream of the dam and proceeding upstream to the end of the project area to search for woody debris that is preventing the establishment of stable river banks. Additionally, woody debris that impedes erosion of large volumes of reservoir sediments will be actively managed by dislodging or removing wood to a storage area. The area downstream of the dam will also be visually assessed on a monthly basis to determine whether any large woody debris is posing a threat to

public safety or fish passage. Fish passage monitoring, as outlined in the Aquatic Resources Protection Plan, will begin in April following the dam breach, then once a month through September, and after any high flow event. Beginning one year following breach, fish passage surveys will be conducted only following high flow events to capture conditions that may have changed.

11. Stage four monitoring is designed to ensure that woody debris from the reservoir does not create fish passage barriers or hazards to public safety. Fish passage evaluation will continue to be conducted as necessary prior to fish passage timing and immediately following major bank failures that contribute woody debris or a storm event with flows equal to or in excess of 2,000 cubic feet per second. Woody debris will be actively managed during this stage by either dislodging the jam or scheduling it for removal to a storage area to be recycled or utilized for habitat management.

Removal

12. The Plan states that wood will be removed only during certain circumstances, specifically when it is deemed a hazard to public safety and/or impedes fish passage, and all other wood will be left on the landscape. Wood removal and management activities will be coordinated with the local boating community and WDFW to ensure removal activities do not create additional public safety risks or impact aquatic resources. In addition, the Plan includes a provision for storing woody debris a short distance from the dam until it can be mobilized to a project site. The wood that is a minimum of 18 inches in diameter and 20 feet long will be made available to agencies and organizations for habitat restoration projects. Wood will be stored for up to one year following decommissioning of the dam and be disposed of if not utilized within this time. Additionally, once the designated storage area is full, additional wood will be recycled or disposed. Wood that is smaller may be piled and burned, chipped, or spread out within the adjacent forest floor or upper reaches of the reservoir sediment areas considered for re-vegetation, marketed, recycled, sold for compost, or used as landfill.

Pre-Filing Consultation

13. A draft copy of the Woody Debris Management Plan was provided to the USFWS, Forest Service, NMFS, Corps, WDFW, Ecology, and Klickitat and Skamania counties on February 17, 2011. USFWS, Forest Service, and NMFS stated it did not have any comments on the draft plan in emails dated March 4, 2011, March 9, 2011, and March 10, 2011, respectively.

14. Ecology provided comments on the draft Woody Debris Management Plan on March 9, 2011. Ecology comments that the large wood removed from the channel should be stockpiled for later use. Large wood that is outside the navigable channel should be left alone to the extent it is not a danger to boaters/floaters, and large wood left on the

margins of the lake after drawdown should be left as habitat features as long as it is safe for the public. Ecology recommends that specific timelines should be established to consult and determine when it is safe within the project area for habitat restoration. All comments were incorporated into the final plan.

15. On March 10, 2011, Klickitat County provided comments on the draft Woody Debris Management Plan. Klickitat County expresses concern on whether there is a contingency plan for monitoring after five years. The County inquired as to who would conduct the woody debris monitoring and surveys, and requested that Klickitat County be notified of any management actions taken as a result of the monitoring surveys. Klickitat County states in its comments that wood that does not create human hazards and fish passage obstruction should remain. Several concerns raised by Klickitat County involve wood storage, and wood salvage for habitat restoration. All comments were incorporated into the final plan.

Review

16. We reviewed the licensee's Woody Debris Management Plan filed on March 16, 2011, and it satisfies the requirements of ordering paragraph (Q) of the Rehearing Order. The Plan provides measures and guidance on monitoring for woody debris prior to, during, and after the decommissioning of the Condit Hydroelectric Project. Woody debris will only be removed from the reservoir to the extent necessary for public safety, for sediment management during removal, or if the woody debris causes a hindrance to fish passage. The licensee proposes that large woody debris will be removed from the reservoir, stored, and ultimately used for habitat restoration. The remainder of the wood will be properly disposed. Additionally, all agency comments on the draft plan were incorporated into the final plan. The Woody Debris Management Plan should therefore be approved. However, the Woody Debris Management Plan does not require the licensee to consult with Ecology, WDFW, and NMFS prior to log jam removal, as required in section 4.3.4 of the WQC. Therefore, ordering paragraph (B) requires the licensee to perform proper consultation prior to conducting any log jam removal activities. Ordering paragraph (C) requires the licensee to file annual woody debris monitoring reports by December 31 of each year, as required by ordering paragraph (Q)(b) of the Rehearing Order, and section 4.3.4(1) of the WQC. The Plan contemplates a five-year monitoring period. Although we are approving the Plan, we cannot now be certain that such extensive monitoring, or additional woody debris measures based on that monitoring, will be necessary. Ordering paragraph (C) reserves the Commission's right to terminate its oversight over these measures before the end of the five-year period.

The Director orders:

(A) PacifiCorp's Woody Debris Monitoring Plan filed on March 16, 2011, pursuant to ordering paragraph (Q) of the Commission's Order on Rehearing, Denying

Stay, and Dismissing Extension of Time Request for the Condit Hydroelectric Project, as modified by ordering paragraphs (B) and (C) below, is approved.

(B) The licensee shall consult with Washington Department of Ecology, Washington State Department of Fish and Wildlife, National Marine Fisheries Service, and Klickitat County prior to performing any log jam removal, as required by section 4.3.4 of the water quality certification, and as requested by Klickitat County.

(C) The licensee shall submit annual woody debris monitoring reports by December 31 of each year, as required by ordering paragraph (Q)(b) of the Commission's Order on Rehearing, Denying Stay, and Dismissing Extension of Time Request for the Condit Hydroelectric Project, and section 4.3.4(1) of the water quality certification issued by the Washington Department of Ecology. The licensee shall submit to the Commission documentation of any consultation, and copies of any comments and recommendations made by any consulted entity in connection with each report. The Commission reserves the right to require changes to project removal measures based on the information contained in the report and any other available information. The Commission also reserves the right to determine when sufficient woody debris measures have been undertaken for Commission purposes and when it no longer needs to oversee woody debris monitoring or receive monitoring reports.

(D) 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 FPA, 16 U.S.C. § 8251 (2006), and the Commission's regulations at 18 C.F.R. § 385.713 (2010). 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.

William Guey-Lee
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Division of Hydropower Administration
and Compliance