

Clean Water Act § 401 Certification Conditions

For the Wallowa Falls Hydroelectric Project

(FERC No. P-308)

Grande Ronde River Basin

Wallowa County, Oregon

March 31, 2016

Upon Federal Energy Regulatory Commission (FERC) issuance of a license for the Wallowa Falls Hydroelectric Project (Project), PacifiCorp must comply with the following § 401 Certification conditions:

1) Project Operation:

- a) Throughout the life of the FERC license, PacifiCorp must continue to operate its hydroelectric facility in a “run of river” mode. PacifiCorp shall discharge a continuous minimum flow from the Project diversion dam into the East Fork Wallowa River. The minimum flow released to the East Fork shall be equal to or greater than 4 cubic feet per second (cfs) from November 1 through April 30, and equal to or greater than 5 cfs from May 1 through October 31. If natural inflow to the Project is equal to or less than the required minimum flow, than all flow from the Project forebay shall be discharged into the East Fork Wallowa River. These minimum flow requirements shall be implemented within 18 months of issuance of the new FERC license for the Project. The minimum flows may be temporarily modified if required by operating emergencies beyond the control of PacifiCorp and for short periods upon agreement between the licensee, DEQ, ODFW, USFW, USFS. Deviations from the minimum flow requirements, as observed at the compliance gage, will be reported to DEQ, ODFW, WRD, USFW, and USFS (Agencies) by the next business day.
- b) Within 1 year of the issuance of a new FERC license, PacifiCorp shall install and maintain an operational compliance monitoring flow gage at the existing BPL gage location. The flow gage shall provide for continuous real time recording of flow in the bypass reach measured in 15 minute intervals and reported as an hourly average (top of the hour average) during the duration of the hydropower license. Flow data will be provided to Agencies through the PacifiCorp internet reporting system. Additional flow data not available on the PacifiCorp website (including but not limited to: historical values for

hourly, daily, monthly and yearly time periods; and including measurements of stream flow and gage height used to supplement and/or verify the accuracy of the automatically recorded observations) will be provided to Agencies as electronic spreadsheet files or other format agreeable to the requesting Agency and PacifiCorp within the target of three to five business days of the request to PacifiCorp. PacifiCorp will develop rating curves to enable accurate flow measurements at flows up to a level that is greater than or equal to bank-full stage at the gage location. The flow gage will be established in conformance with United States Geological Survey criteria and maintained as such thorough the life of the project license. The regular maintenance and calibration of the gage may be carried out by PacifiCorp or an agreed upon agency (Oregon Department of Water Resources, US Geologic Survey) or other reputable contractor. Preliminary design of the flow gage, reporting of flow measurements, development of the rating curve, and maintenance responsibilities will be described in the Operation Compliance Monitoring Plan described in Condition 1e.

- c) Beginning within 18 months of the acceptance of a new FERC license, PacifiCorp shall restrict down-ramping in the East Fork bypass reach during Project start-up after a Powerhouse shutdown following a target rate of no more than 0.1 feet per hour from April 1 to October 31, when salmonid fry are present, and 0.17 feet per hour from November 1 to March 31. Within nine months of FERC license acceptance, PacifiCorp shall complete a site-specific study to develop operating procedures to meet the down-ramping rate targets identified above for inclusion in the Operation Compliance Monitoring Plan (as specified in Condition 1e below). The objective of the ramping rate operating procedures study is to identify the correlation between generation changes in kilowatts (kW) and corresponding stage change in the Project bypassed reach. For study purposes, bypassed reach stage change will be measured at the compliance monitoring gage. The study results will indicate the rate of generation change per hour necessary to meet the target ramping rates. The rate of generation change per hour will be no lower than 300 kilowatts per hour (kW/h). Upon completion of the study, ramping rates will be reported in kW/h for compliance purposes. Project operation shall to the extent possible maintain stable flow in the East Fork bypass reach during the bull trout spawning period of September 1 to October 31. Any scheduled Project maintenance that would alter flows in the East Fork bypass reach shall occur outside of this time period. In the event of an unscheduled Project outage during this period, PacifiCorp shall follow ramping rates as specified above. Unscheduled Project outages shall be reported to Agencies within one business day.

- d) The minimum flows or run of river operations may be temporarily modified if required by operating emergencies beyond the control of PacifiCorp upon agreement between PacifiCorp and the USFS, USFWS, ODFW, and DEQ. The procedure for gaining approval for these modifications shall be described in the Operation Compliance Monitoring Plan described in Condition 1e.
- e) Within nine months of issuance of a new FERC license, PacifiCorp shall develop a written Operation Compliance Monitoring Plan. The Operation Compliance Monitoring plan will be developed in consultation with, and subject to approval of Agencies. Upon FERC approval, PacifiCorp shall implement the plan. The Plan will include the following: Procedures required to maintain minimum instream flows, adhere to specified ramping rates as specified in Conditions 1a, 1b, 1c, and 1d. The plan will also include procedures to operate and maintain the proposed realigned tailrace channel and upstream fish passage barrier, perform fish salvage in the existing tailrace channel, and flush the forebay of sediment. The Operation Compliance Monitoring Plan shall include procedures for prior notification and coordination with Agencies regarding maintenance scheduling including forebay flushing and planned dewatering of the tailrace, procedures for emergencies that affect water quality and fish and wildlife resources, and notification of Agencies when minimum flow violations occur.

Within three months of completion of the construction of the tailrace realignment channel, upstream fish passage barrier (tailrace barrier), and a modified forebay flow release gate or valve, PacifiCorp will revise the Operations Compliance Monitoring Plan to include operations and monitoring procedures for these facilities. Revisions to the plan will be subject to the same review and approval requirements as the original plan.

2) Reconfigure Tailrace:

- a) Within three years of issuance of a new license, PacifiCorp shall realign the existing project tailrace consistent with plans described in Section 2.2.1 of the updated Final License Application, Exhibit E submitted to FERC on February 10, 2015. As part of the tailrace realignment, PacifiCorp shall design, install, evaluate, and maintain a tailrace barrier to prevent upstream migrating adult salmonids from entering the tailrace channel at its confluence with the West Fork Wallowa River. The tailrace barrier shall be fully functional at the commissioning of the realigned tailrace channel. After construction is complete, PacifiCorp shall perform a hydraulic evaluation of the tailrace barrier to ensure that the jump height and velocity barrier are effective at normal high water levels.

Within three months of completion of the tailrace realignment and tailrace barrier construction, PacifiCorp will revise the Operation Compliance Monitoring Plan to include operation and monitoring procedures for the facilities. Revision to the plan will be subject to the same review and approval requirements as the original plan.

- b) Prior to the commissioning of the proposed tailrace channel and barrier, PacifiCorp shall take interim action to prevent injury or mortality of fish in the existing tailrace channel. From August 1 to November 15, of each year following license issuance until completion of the realigned tailrace barrier, PacifiCorp shall install and maintain a temporary barrier at the mouth of the existing tailrace channel to prevent fish from entering the tailrace. In the event that the tailrace is dewatered at any time, PacifiCorp shall perform fish salvage to remove any fish from the tailrace and relocate them to the West Fork of the Wallowa River. PacifiCorp shall inform ODFW and USFWS no less than 48 hours in advance of planned tailrace dewatering and no more than 24 hours following emergency tailrace dewatering events. Procedures for tailrace dewatering and fish salvage shall be included in the Operation Compliance Monitoring Plan identified in Condition 1(e).

3) Water Quality Monitoring:

- a) Within ninety (90) days of issuance of the FERC license, PacifiCorp, in consultation with the Oregon Department of Environmental Quality (DEQ), must, as necessary to ensure consistency with these § 401 Certification Conditions, develop a Project Water Quality Monitoring and Management Plan (WQMMP). Upon approval, the WQMMP becomes part of these § 401 Certification Conditions for the Project for the purposes of any federal license or permit.

The WQMMP must include: applicable dissolved oxygen (DO) and total dissolved gas (TDG) criteria; monitoring methodology; reporting schedule; and procedures for suspending operation during DO or TDG violations. PacifiCorp must measure DO at the outlet of the new Project tailrace continuously during Project operations for a one-time period of 90 days starting August 1st of the first year of operation of the realigned tailrace. PacifiCorp must download and evaluate DO data on a weekly basis. During Project operation, PacifiCorp must also measure TDG in the Project Tailrace outlet for a minimum of seventy-two (72) hours under lower flow conditions in August-September and higher flow conditions in June-July. Concurrent with DO

and TDG measurements, PacifiCorp must also record flow and water temperature at the Project Tailrace outlet immediately upstream of the velocity barrier, as well as record power generation from the Project. PacifiCorp must report all DO, TDG, flow, water temperature and power generation data to DEQ within 90 days of the conclusion of the monitoring period.

- b) If it is determined based on monitoring results, that Project operations are contributing to downstream violations of the applicable DO standard, TDG standard or the Antidegradation standard, PacifiCorp must follow the procedures in the WQMMP, including project shutdown, as necessary. If taking the actions described in the WQMMP do not correct the problem and allow water quality standards to be achieved, PacifiCorp must consult with DEQ to evaluate whether any modifications to the Project or Project operations can mitigate the impacts to water quality. If DEQ determines that such modifications can reverse such impacts, PacifiCorp must propose the modifications to DEQ, and following DEQ's approval, PacifiCorp must implement the approved modifications. PacifiCorp may operate the Project during the development and implementation of modifications if conditions allow water quality standards to be met. If it can be demonstrated that the DO and TDG criteria are being met, PacifiCorp can request approval to terminate monitoring of these parameters.

- c) The WQMMP must include provisions to address water quality monitoring equipment malfunctions. The WQMMP must include the following:
 - i. Procedures and measures that will be implemented to prevent monitoring equipment malfunctions;
 - ii. Procedures for identifying the occurrence and nature of any monitoring equipment malfunctions that may occur;
 - iii. Plan, schedule, and corrective measures that will be implemented to address monitoring equipment malfunctions;
 - iv. Procedures for notifying DEQ of the occurrence and nature of monitoring equipment malfunctions, corrective measures implemented, and recommencement of monitoring equipment operation.
 - v. Procedures and timelines for Project shutdown as may be necessitated by monitoring equipment malfunctions;
 - vi. Plan and schedule for maintenance and calibration of field test equipment.

4) Protection of Beneficial Uses; Compliance With Other Requirements of State Law: Bull trout population and genetics monitoring.

- a) The Licensee shall conduct periodic monitoring to assess the rate of brook trout introgression in the bull trout population residing in the East Fork and West Fork. Within six (6) months of issuance of a new license, the Licensee shall consult with ODFW, USFWS, and USFS to specify the goals, objectives, protocols and schedule for the monitoring program. The Licensee shall:
- i. Within two (2) years of issuance of a new license or in 2018, whichever is first, perform monitoring which includes electrofishing the East Fork and West Fork in July or August to collect no less than 30, but no more than 50, bull trout. Measure and record the length, weight, and capture location of each bull trout. Remove a 0.75 by 0.75 cm tissue sample from the caudal fin of all bull trout captured for genetic analysis.
 - ii. Conduct genetic analysis on the tissue samples that entails genotyping to species and assessing the rate of brook trout introgression.
 - iii. Within six (6) months of completion of genetic analysis, provide a draft written report of the results to ODFW, USFWS, and USFS including relative abundance, distribution and condition of bull trout captured. The report should compare results of genetic analysis to pre-License information on the status of bull trout genetics and brook trout introgression. Allow agency stakeholders 30 days to review the draft report, provide a revised report that addresses all agency stakeholder comments or explains why comments are not addressed.
 - iv. Repeat the above monitoring, assessment and reporting 15 years after license issuance. The final report shall provide a comparison of the results among pre-license information, year two (2) and year 15 results.

5) Fore Bay flushing Plan

- a) Methodology: PacifiCorp may conduct annual sediment flushing from the Wallowa Dam forebay in accordance with the Sediment Management Program presented in Section 2.2.2 of the FLA, Exhibit E submitted to FERC on February 10, 2015. Sediment flushing may be performed in June for up to 72 cumulative hours. To allow for sediment dispersal, flushing may only be conducted when base flow exceeds 15 cubic feet per second (cfs) in the East Fork Wallowa River. PacifiCorp will provide 10-day prior notice of the planned date of flushing operations to Agencies. If flushing does not occur in June or other DEQ approved high flow period, it will be delayed until the following year to minimize impacts to fish habitat.

- b) Monitoring: PacifiCorp shall monitor turbidity upstream and downstream of the Wallowa Dam forebay in accordance with the Turbidity Monitoring Plan for Maintenance Forebay Flushing presented in Volume III, Appendix D of the FLA filed with FERC on February 28, 2014:
 - i. Representative Background Point: Turbidity shall be monitored at a relatively undisturbed area in the East Fork Wallowa River at least 100 feet upstream of the Project forebay. This datasonde will be deployed at least 24 hours prior to forebay flushing to record background turbidity levels in the East Fork inflow to the Project. The datasonde will remain deployed for five days to ensure that background turbidity is recorded prior to, during and after the forebay flushing event.
 - ii. Downstream Monitoring Point: Turbidity shall be monitored in the lower bypassed reach of the East Fork Wallowa River. This datasonde will be deployed prior to the onset of forebay flushing and will remain continuously deployed for five days to ensure that turbidity effects during and after the forebay flushing event are recorded.
 - c) Reporting: PacifiCorp shall file a Turbidity Monitoring Report with DEQ within 60 days of completing forebay sediment flushing activities. The report shall summarize: dates of the activity, the duration of the event, flushing methods, estimated streamflow, and turbidity monitoring results. The report shall also provide a brief narrative describing visual turbidity observations, bedload movement, sediment dispersal, and any negative environmental impacts identified during the sediment flushing event.
 - d) Compliance: PacifiCorp shall be deemed in compliance with the turbidity standard given in Oregon Administrative Rules (OAR) 340-041-0036 if sediment flushing activities are performed in accordance with the methods and conditions referenced in this certification.
- 6) Erosion and Sediment Control Plan:
- a) For Project construction activities requiring ground disturbance, PacifiCorp shall prepare and follow an Erosion and Sediment Control Plan (ESCP). ESCPs shall be submitted for DEQ approval prior to construction. PacifiCorp must also obtain a NPDES 1200C stormwater permit as applicable, during construction and other ground disturbance activities.
 - b) In-Water Work: For projects that require in-water work other than Forebay Flushing activities addressed in Condition 5, PacifiCorp must obtain, as applicable, a removal-fill permit from Oregon Department of State Lands, a dredge and fill permit from the U.S.

Army Corps of Engineers pursuant to Clean Water Act §404 and a Clean Water Act §401 water quality certification from DEQ. In-water work that could potentially create an artificial obstruction to native migratory fish, as defined by OAR 635-412-0005(3) and (32), respectively, such as rock weirs, must meet Oregon Department of Fish and Wildlife fish passage criteria under OAR 635-412-0035.

7) Spill Prevention Control and Countermeasures Plan:

- a) PacifiCorp must implement and maintain the current Spill Prevention Control and Countermeasures Plan in effect at all times.
- b) In the event of a spill or release or threatened spill or release to waters of the state, PacifiCorp must immediately implement the plan and notify Oregon Emergency Response System (OERS) at 1-800-452-0311.
- c) If PacifiCorp becomes aware that Project operations cause a water quality problem that results in distressed or dying fish, PacifiCorp must immediately: cease operations; take appropriate corrective measures to prevent environmental damage; collect fish specimens and water samples; and immediately notify DEQ, ODFW, WRD, USFWS, USFS and other appropriate regulatory agencies.
- d) PacifiCorp shall manage work and staging areas in a manner which prevents the introduction of sediment, wastes, or hazardous materials into waters of the State in accordance with the project Erosion and Sediment Control Plan.

8) General Conditions:

- a) Implementation: PacifiCorp must provide DEQ evidence that PacifiCorp has received all required permits and approvals before Project construction activities commence.
- b) § 401 Certification Modification: Without limiting DEQ's discretion to take other actions in accordance with OAR Chapter 340, Division 48, and, as applicable, 33 USC 1341, DEQ may modify the Certification to add, delete, or modify Certification conditions as necessary and feasible to address:
 - i. Adverse or potentially adverse Project effects on water quality or designated beneficial uses that did not exist or were not reasonably apparent when this Certification was issued;
 - ii. TMDLs;
 - iii. Changes in water quality standards;

- iv. Any failure of Certification conditions to protect water quality or designated beneficial uses when the Certification was issued; or
- v. Any change in the Project or its operations that was not contemplated by this Certification that might adversely affect water quality or designated beneficial uses.

c) Other Federal Permits: Upon applying for any federal license or permit authorizing a discharge to waters of the United States other than the new FERC license, PacifiCorp must provide written notice of such application and of any proposed changes or new activity requested to be authorized under the application since issuance of this § 401 Certification. DEQ will notify PacifiCorp and the applicable federal agency either that: (1) this § 401 Certification is sufficient for purposes of the federal license or permit; or (2) in light of new information related to the activity requested to be authorized under the application that could result in water quality impacts, there is no longer reasonable assurance of the activity's compliance with state water quality standards. In the latter event, DEQ will consider the new information, solicit and consider public and agency comment as required by law, and issue a 401 certification determination for purposes of the federal license or permit.

d) Project Changes: PacifiCorp must notify DEQ of any change in ownership or to the Project, including changes to Project structures, construction, operations, and flows. PacifiCorp must obtain DEQ review and approval before undertaking any such changes to the Project that might affect water quality (other than changes authorized by the new FERC license required by or considered in the §401 Certification).

e) Project Repair or Maintenance: PacifiCorp must obtain DEQ review and approval before undertaking Project repair or maintenance activities that might affect water quality (other than repair or maintenance activities authorized by the new FERC license required by or considered in this §401 Certification). DEQ may, at PacifiCorp's request, approve specified repair and maintenance activities on a periodic or ongoing basis.

f) Project Inspection: PacifiCorp must allow DEQ such access as necessary to inspect the Project area and Project records required by this Certification at reasonable times as necessary to monitor compliance with § 401 certification conditions.

- g) Posting of § 401 Certification: PacifiCorp must post a copy of these certification conditions in a prominent location in the Wallowa Falls Powerhouse.
- h) Water Quality Standards Compliance: Notwithstanding the conditions of this certification, no wastes will be discharged and no activities will be conducted which will violate state water quality standards.
- i) Project-Specific Fees: In accordance with ORS 543.080, PacifiCorp must pay a Project-specific fee for DEQ's costs of overseeing implementation of the conditions of this Certification as follows:

Project-Specific Fee

To implement the conditions of this Certification, PacifiCorp must pay project-specific fees of \$5,000 during each of the first five (5) years beginning July 1 of each year following issuance of a FERC License in 2015 dollars adjusted according to the formula below, made payable to State of Oregon, Department of Environmental Quality.

Adjustment

Fee amounts must be adjusted annually, according to the following formula:

$$AD = D \times (CPI-U)/(CPI-U-April\ 2016)$$

Where:

AD = Adjusted dollar amount payable to agency.

D = Dollar amount pursuant to Project Specific Fee above,

CPI-U = the most current published version of the Consumer Price Index-Urban. The CPI-U is published monthly by the Bureau of Labor Statistics of the U.S. Department of Labor. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by written agreement between DEQ and PacifiCorp.

Payment Schedule

Fees must be paid pursuant to a written invoice from DEQ. Except as provided below, project-specific fees will be due on July 1 of each year following issuance of a FERC License. PacifiCorp must pay an initial prorated payment to DEQ within thirty

(30) days of license issuance, for the period from the date of license issuance to the first June 30 which follows license issuance.

Credits

DEQ will credit against this amount any fee or other compensation paid or payable to DEQ, directly or through other agencies of the State of Oregon, during the preceding year (July 1 to June 30) for DEQ's costs of oversight.

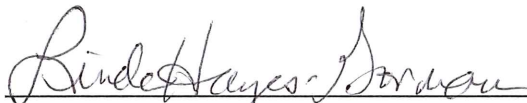
Expenditure Summary

DEQ shall, on a biennial basis, provide PacifiCorp with a summary of project-specific expenditures.

Duration

PacifiCorp will pay a Project-specific fee following FERC license issuance and for five (5) years after the first July 1 following FERC license issuance, unless DEQ terminates it earlier because oversight is no longer necessary. One year before the expiration of the fee, or earlier if mutually agreed, DEQ and PacifiCorp shall review the need, if any, to modify, extend, or terminate the fee, in accordance with ORS 543.080. PacifiCorp must pay any project-specific fee required after such review as provided in ORS 543.080.

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY



Linda Hayes-Gorman
DEQ Eastern Region Administrator

3/31/16
Date

