

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp

Project No. 2337-077

ORDER ISSUING NEW LICENSE

(September 27, 2019)

INTRODUCTION

1. On December 30, 2016, PacifiCorp filed, pursuant to sections 4(e) and 15 of the Federal Power Act (FPA),¹ an application for a new license to continue operation and maintenance of the Prospect No. 3 Hydroelectric Project No. 2337 (project). The 7.2-megawatt (MW) project is located on the South Fork Rogue River (South Fork), in Jackson County, Oregon, near the town of Prospect. The project currently occupies 32.4 acres of federal land within the Rogue River-Siskiyou National Forest, administered by the U.S. Department of Agriculture, Forest Service (Forest Service).²
2. As discussed below, this order issues a new license for the project.

BACKGROUND

3. The Commission issued the current license for the project on January 30, 1989, which expired on December 31, 2018.³ Since then, PacifiCorp has operated the project under an annual license pending disposition of its application for a new license.

¹ 16 U.S.C. §§ 797(e) and 808 (2018).

² Because the project occupies federal land, section 23(b)(1) of the FPA, 16 U.S.C. § 817(1) (2018), requires that it be licensed.

³ *Pacific Power & Light Company*, 46 FERC ¶ 62,085 (1989).

4. On March 15, 2017, the Commission issued a public notice that was published in the *Federal Register* accepting the application for filing,⁴ indicating the application was ready for environmental analysis, and setting May 15, 2017,⁵ as the deadline for filing motions to intervene, protests, comments, recommendations, preliminary terms and conditions, and preliminary fishway prescriptions. The Forest Service, the U.S. Department of the Interior (Interior), the Oregon Department of Fish and Wildlife (Oregon DFW), and the Oregon Department of Environmental Quality (Oregon DEQ), each filed a notice of intervention.⁶ Trout Unlimited and American Whitewater filed timely motions to intervene.⁷ None of the intervenors oppose the project.

5. The Forest Service filed preliminary conditions. Interior filed a reservation of authority to prescribe fishways. Oregon DFW filed comments and recommendations. PacifiCorp filed reply comments.

6. On October 17, 2017, Commission staff issued a draft environmental assessment (EA), analyzing the effects of the proposed project and alternatives to it, and setting a deadline for comments of December 1, 2017. PacifiCorp, Kevin Goodrich, Oregon DFW, Oregon DEQ, Forest Service, and American Whitewater filed comments on the draft EA. On April 16, 2018, Commission staff issued a final EA.

7. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue the license.

⁴ 82 Fed. Reg. 14,885-14,887 (2017).

⁵ The Commission's Rules of Practice and Procedure provide that if a filing deadline falls on a Saturday, Sunday, holiday, or other day when the Commission is closed for business, the filing deadline does not end until the close of business on the next business day. 18 C.F.R. § 385.2007(a)(2) (2019). Because the 60-day filing deadline fell on a Sunday (i.e., May 14, 2017), the filing deadline was extended until the close of business on Monday, May 15, 2017.

⁶ Under Rule 214(a)(2) of the Commission's Rules of Practice and Procedure, the Forest Service, Interior, Oregon DFW, and Oregon DEQ became parties to the proceeding upon timely filing of their notices of intervention. 18 C.F.R. § 385.214(a)(2) (2019).

⁷ Timely, unopposed motions to intervene are granted by operation of Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1) (2019).

PROJECT DESCRIPTION

A. Project Area

8. The project is located on the western slope of the Cascade Mountain Range in southwestern Oregon, about 9 miles from the town of Prospect, Oregon. The project is located slightly upstream of where the South Fork, Middle Fork Rogue River (Middle Fork), and North Fork Rogue River (North Fork) combine to form the Rogue River. The three forks originate near the crest of the Cascade Mountain Range and flow generally west to the project area.

9. The project's South Fork Dam is located at river mile (RM) 10.5 on the South Fork. Flows diverted at South Fork Dam for power generation are not returned to the South Fork, but instead are routed through the project's water conveyance system and powerhouse, and then through an inverted siphon (sag pipe) over the Middle Fork which connects to the Middle Fork Canal of the Prospect Nos. 1, 2, and 4 Hydroelectric Project No. 2630 (Prospect Nos. 1, 2, and 4 Project). Under normal operating conditions, flows from Project No. 2630 generally are discharged into the North Fork. Project flow diversions from the South Fork to the North Fork create a 10.5-mile-long bypassed reach between South Fork Dam and Lost Creek Lake, which is the impoundment created by the U.S. Army Corps of Engineers' William L. Jess Dam. The Middle Fork flows into the South Fork bypassed reach, and at Lost Creek Lake, the South Fork and North Fork combine to form the Rogue River, which flows unimpeded from William L. Jess Dam about 160 miles to the Pacific Ocean.

10. The total drainage area of the Rogue River Basin is about 5,156 square miles. At South Fork Dam, the South Fork drains about 84 square miles.

B. Project Facilities

11. The project consists of a dam and small impoundment, a water conveyance system, penstock, powerhouse, and transmission line.

12. The project's South Fork Dam is a 24.7-foot-high, 172-foot-long concrete dam with an integrated 98-foot-long ungated ogee spillway. The dam creates a 1-acre impoundment with a gross storage capacity of 19 acre-feet at normal full pool elevation of 3,375.7 feet mean sea level.

13. Water from the South Fork Dam impoundment is conveyed to the powerhouse through an intake structure at the dam and into the 15,894-foot-long water conveyance system consisting of a combination of concrete-lined canals, woodstave pipeline (flowline), concrete-lined tunnel, a concrete forebay, and steel penstock.

14. The powerhouse contains a 7.2-MW Francis turbine-generator unit. Flows pass through the turbine and exit the powerhouse into a 20-foot-long, 20-foot-wide, 5-foot-deep concrete tailrace box. A 5.5-foot-diameter, 887-foot-long, sag pipe routes flow from the tailrace box over the Middle Fork and into the Prospect Nos. 1, 2, and 4 Project Middle Fork Canal.⁸ The sag pipe is primarily of woodstave construction with the exception of an approximately 250-foot-long section of steel pipe where it crosses over the Middle Fork. Stream flow continues to the Prospect Nos. 1, 2, and 4 Project powerhouses via the Middle Fork Canal, where it is discharged into the North Fork.

15. The project also includes two spillway channels, located at the forebay and at the tailrace box, that discharge to Daniel Creek.⁹ The spillway channels are rarely used except for maintenance or operational emergencies.

16. Electricity generated at the powerhouse is transmitted via a 6.97-mile-long, 69-kilovolt transmission line to the Prospect Substation.

17. Upstream fish passage is provided past South Fork Dam by an 86-foot-long, 15-pool concrete pool and weir type fish ladder. Downstream fish passage is provided by a 25-foot-long, 9.75-foot-wide inclined-plane fish screen in the diversion canal that directs fish into a bypass pipe that discharges to the lower portion of the fish ladder where fish can continue downstream to the bypassed reach below the dam.

18. There are no project recreational facilities. A more detailed project description is contained in Ordering Paragraph (B)(2).

C. Project Boundary

19. The current project boundary encloses 336.7 acres of land, including 32.41 acres of federal land within the Rogue River-Siskiyou National Forest. The project boundary encloses all of the facilities identified above.

D. Project Operation

20. The project is operated in a run-of-river mode. The powerhouse is operated remotely by a programmable logic controller, but can also be operated manually by an

⁸ The woodstave sag pipe is also a project feature of the Prospect Nos. 1, 2, and 4 Project.

⁹ Daniel Creek is a tributary of the Middle Fork that flows into the Middle Fork just upstream of the sag pipe crossing.

on-site operator, as needed. The powerhouse operates using inflows between the 3-cubic-foot-per-second (cfs) minimum and 150-cfs maximum hydraulic capacity of the turbine.

21. The current license requires PacifiCorp to maintain a 10-cfs minimum flow in the bypassed reach as measured at a U.S. Geological Survey (USGS) stream gage located about 0.25 mile downstream of South Fork Dam.¹⁰ When inflow to South Fork Dam exceeds the 10-cfs minimum flow and the 3-cfs minimum hydraulic capacity of the turbine, the project diverts up to 150 cfs into the powerhouse to generate electricity. Minimum flows are currently provided through the fish ladder and the fish screen bypass pipe. The combined fish ladder and fish bypass flows exit the ladder and enter the bypassed reach just below South Fork Dam. Inflows exceeding 160 cfs are released through a combination of spill and higher flows through the fish ladder.

E. Proposed Facility Modifications

22. PacifiCorp proposes to replace the existing woodstave flowline and sag pipe with steel pipe to reduce leakage, ruptures from rock falls, and associated erosion. In addition, PacifiCorp proposes to reconstruct the vehicle access bridge over the flowline near South Fork Dam with a new structure that meets Forest Service design standards following flowline replacement, and to construct a new 117-foot-long, 10-foot-wide spur road downstream of South Fork Dam to facilitate gravel augmentation in the bypassed reach.

F. Proposed Operation and Environmental Measures

23. PacifiCorp proposes to continue operating the project in a run-of-river mode.

24. To minimize erosion during the flowline and sag pipe replacement, PacifiCorp proposes to prepare a final Erosion and Sediment Control Plan.¹¹

25. To enhance aquatic habitat in the bypassed reach, PacifiCorp proposes to:
(1) increase minimum flows in the bypassed reach from 10 cfs year-round to 30 cfs from March 1 to July 31 and 20 cfs from August 1 to February 28, or inflow, whichever is less;
(2) implement ramping rates of 0.2 foot per hour from May 1 to September 30, and 0.3 foot per hour from October 1 to April 30; and
(3) conduct any maintenance that requires dewatering of the water conveyance system between July and September.

26. To more reliably provide the proposed higher minimum flows in the bypassed reach, PacifiCorp proposes to construct an auxiliary flow release system in the diversion

¹⁰ *Pacific Power & Light Company*, 46 FERC ¶ 62,085, at 63,103 (1989).

¹¹ PacifiCorp filed a draft Erosion and Sediment Control Plan with the license application on December 30, 2016.

canal to augment the minimum flow releases through the fish ladder and fish screen bypass.

27. To monitor compliance with proposed operating requirements, PacifiCorp proposes to install a communication link between the USGS gage in the bypassed reach and project control systems to provide real-time monitoring of the minimum flows and ramping rates.
28. To enhance trout habitat in the South Fork bypassed reach, PacifiCorp proposes to augment spawning gravel below South Fork Dam with dredged gravel from the impoundment, and pass large woody debris collected at South Fork Dam downstream into the bypassed reach.
29. To ensure that project fish passage facilities are operating effectively, PacifiCorp propose to implement a Fish Passage Facilities Operation and Maintenance Plan filed with the license application.
30. To protect trout during planned maintenance outages of the water conveyance system and fish ladder, PacifiCorp proposes to salvage live fish from the diversion canal and ladder and return them to the South Fork.
31. To enhance wildlife habitat connectivity along the water conveyance system, PacifiCorp proposes to widen the 6 existing 4-foot-wide wildlife crossings over the canal to 12 feet; construct 5 new 12-foot-wide wildlife crossings either over or under the flowline; and construct 8 new, 2-foot wide wildlife crossings over the canal.
32. To protect birds from electrocution and collision, PacifiCorp proposes to continue implementing its corporate-wide Avian Protection Plan that includes measures for designing all new or rebuilt transmission lines to meet avian-safe standards; documenting all bird mortalities, bird-caused outages, and problem nests; and notifying agencies of mortalities and remedial actions.
33. To minimize project effects on vegetation, PacifiCorp proposes to implement a Vegetation Management Plan filed with the license application that includes measures for promoting the reestablishment and maintenance of native plant communities, protecting sensitive plant species, promptly revegetating disturbed areas, and controlling noxious weeds.
34. To protect cultural resources, PacifiCorp proposes to implement a Historic Properties Management Plan (HPMP) filed with the license application.

G. Proposed Project Boundary

35. PacifiCorp proposes to remove from the project boundary 9 acres of uplands surrounding the reservoir¹² that are not needed for project operation or other project purposes, and add 39.5 acres needed for access routes and power and communication lines. The revised project boundary would occupy a total of 367.2 acres, of which 52.5 acres would be federal land within the Rogue River-Siskiyou National Forest.

SUMMARY OF LICENSE REQUIREMENTS

36. This license, which authorizes 7.2 MW of renewable energy generation capacity, requires most of the proposed measures listed above and the conditions required by Oregon Department of Environmental Quality's (Oregon DEQ) water quality certification (Appendix A) and the Forest Service's section 4(e) conditions (Appendix B). The license also requires certain staff-recommended modifications and additional measures described below. The license does not include PacifiCorp's proposed 0.3-foot-per-hour limits on ramping from October 1 to April 30, and 20-cfs minimum flow from August 1 to October 31. Instead, it requires the more-restrictive ramping rates of 0.2 foot per hour and higher minimum flows of 30 cfs specified in Oregon DEQ's water quality certification during these periods.

37. To verify compliance with the project's operational requirements, the license requires PacifiCorp to develop an operation compliance monitoring plan.

38. To help ensure that PacifiCorp reports emergency incidents and deviations from the operational requirements of the license that could affect environmental resources, and evaluates the extent of any environmental effects associated with an incident or deviation, the license requires reporting procedures based on the duration of the event, and any observed or reported environmental effects.

39. To help ensure that dredged gravel placed along the bypassed reach stream bank is effectively transported downstream to enhance trout spawning habitat, the license requires PacifiCorp to develop a sediment and dredging plan that identifies the specific size and location of the sediment disposal site.

40. To protect trout during fish salvage activities, the license requires PacifiCorp to develop a fish salvage plan.

41. To ensure that proposed wildlife crossing enhancements are effective, the license requires PacifiCorp to develop a wildlife crossing plan that includes crossing locations,

¹² The boundary will be reduced to follow a 10-foot offset from the normal maximum pool elevation (3375.7 feet mean sea level) of the impoundment.

installing a fine-mesh screen at the base of the existing fencing and new canal crossings, photographically documenting wildlife use of the new large animal crossings for five years, and filing a report with any proposals for modifying or adding crossings to improve deer and elk access across the flowline. To ensure proper maintenance of the crossing structures and fencing, the license requires PacifiCorp to revise its annual inspection program to define the procedures and schedule for inspecting and repairing the crossing structures and fencing, and photographically documenting any signs of wildlife use observed during inspections.

42. To protect birds, the license requires PacifiCorp to develop a project-specific avian protection plan that incorporates the applicable provisions of PacifiCorp's corporate-wide Avian Protection Plan.

43. To protect cultural resources, the license requires PacifiCorp to implement a Programmatic Agreement and revise its Historic Properties Management Plan to include specific protocols and procedures to address the protection of cultural resources over the term of the license.

WATER QUALITY CERTIFICATION

44. Under section 401(a)(1) of the Clean Water Act (CWA),¹³ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification must become a condition of any federal license that authorizes construction or operation of the project.¹⁴

45. On March 27, 2017, PacifiCorp applied to Oregon DEQ for water quality certification for the Prospect No. 3 Project, which Oregon DEQ received on March 29, 2017. On February 13, 2018, PacifiCorp withdrew its application and filed a new application that included a revised auxiliary minimum flow release system. Oregon DEQ received the revised application on the same day. Oregon DEQ issued a certification for the project on February 7, 2019. The certification includes five conditions, which are set forth in Appendix A of this order and incorporated into the license by Ordering Paragraph (D). Conditions 1 through 4 are specific requirements to protect water quality and beneficial uses, and ensure compliance with state water quality standards and are summarized below.

¹³ 33 U.S.C. § 1341(a)(1) (2012).

¹⁴ 33 U.S.C. § 1341(d) (2012).

46. Condition 5 consists of 9 requirements, 8 of which (conditions 5.a – 5.h) are general or administrative and are not addressed further in this order. The remaining requirement (condition 5.i) requires that PacifiCorp provide funding to Oregon DEQ for its costs related to overseeing implementation of the certification conditions. The type of funding contemplated by condition 5.i must be consistent with the requirements of sections 10(e) and 17 of the FPA.¹⁵ Pursuant to section 10(e), the Commission collects annual charges from licensees to reimburse the United States for the costs incurred in administering Part I of the FPA, including costs incurred by state and federal agencies. The portion of annual charges that covers the reasonable and necessary costs of these agencies is available to the agencies “subject to annual appropriations,” which Congress has never made. Section 17 provides that all charges arising from licenses (except for proceeds arising from Indian reservations, which are credited to the tribes) are to be paid into the U.S. Treasury. Because the funding measure would result in charges arising from the license being paid to the state and not into the treasury, the measure is contrary to the express terms of the FPA and the Commission cannot enforce it. Therefore, Ordering Paragraph (D) states that this funding measure is unenforceable.¹⁶

47. As discussed below, in the final EA staff did not recommend some of the water quality certification conditions and recommended modifying others. Also as discussed below, on February 22, 2019, PacifiCorp filed a copy of its appeal of certain water quality certification conditions. Although PacifiCorp has appealed the certification, the certification has not been stayed.

48. Condition 1 requires PacifiCorp to operate the project in a run-of-river mode as proposed. However, the certification does not define run-of-river operation or specify the procedures that PacifiCorp must follow to ensure run-of-river operation, nor does it require any compliance monitoring and reporting measures (i.e., minimum flows and ramping rates). Therefore, Articles 403 and 404 are included in the license to establish monitoring and reporting procedures for purposes of compliance administration of Condition 1.

49. Conditions 2, 3, and 4(a) – (d) require PacifiCorp to develop plans for dissolved oxygen and macroinvertebrate monitoring in the South Fork, and total dissolved gas

¹⁵ 16 U.S.C. § 803(e) and 810(b) (2018). *See, e.g. City of Seattle, Washington*, 142 FERC ¶ 62,231, at P 56 (2013); *Gibson Dam Hydroelectric Company, LLC*, 138 FERC ¶ 62,019, at P 29 n.16 (2012).

¹⁶ While this measure is included as condition 5.i in Appendix A of the license because the Commission has no authority to revise mandatory conditions, it cannot enforce them. *See, e.g., Blue Heron Hydro, LLC*, 140 FERC ¶ 61,049 (2012) (including certification conditions in appendix while noting their unenforceability).

monitoring in Daniel Creek and the Middle Fork during spill events at the forebay and powerhouse tailrace. These conditions also require PacifiCorp to prepare adaptive management plans with corrective actions if monitoring indicates that the project is causing deviations from Oregon water quality or macroinvertebrate biocriteria standards.

50. Water temperature, dissolved oxygen, pH, and turbidity in the project area generally are at levels well within the applicable minimums and maximums established by Oregon under its water quality standards, indicating very good water quality at the project.¹⁷ Further, specific, project-related water quality concerns were not raised in the proceeding, and there is no reason to expect that the project, under a new license, would adversely affect water quality relative to existing conditions. For these reasons, there is no project-specific need for the water quality monitoring and adaptive management measures specified in the certification. Nevertheless, the measures are included in the license because they are mandatory under section 401 of the CWA.

51. Condition 4(e) requires PacifiCorp to provide its proposed 30-cfs minimum flows from March through July and 20-cfs from November through February. However, the condition also requires PacifiCorp to increase minimum flows to 30 cfs from August through October, instead of providing 20 cfs as it proposes. In the EA,¹⁸ staff did not recommend a 30-cfs minimum flow during August, September, and October because the additional habitat gains for trout are not justified in light of their \$85,043 annualized cost. Nevertheless, the higher minimum flows are included in the license because they are mandatory.

52. Condition 4(f) requires PacifiCorp's proposed seasonal limits on project-induced ramping rates of 0.2 foot per hour from May through September. However, consistent with staff's recommendation in the EA,¹⁹ the condition also requires PacifiCorp to restrict ramping to 0.2 foot per hour during October through April, instead of 0.3 foot per hour during these months as PacifiCorp proposes. As explained in the EA,²⁰ flow fluctuations in the South Fork due to heavy runoff from storm events can naturally cause ramping rates to exceed 0.2 foot per hour. The ramping rate requirements of condition 4(f) only apply to changes in river flows that are caused by project operation, and not those attributed to natural flow fluctuations. However, the certification does not specify how PacifiCorp would differentiate between project-induced and natural ramping rate exceedances. Accordingly, Article 404 requires PacifiCorp to develop an operation

¹⁷ Final EA at 26-28.

¹⁸ Final EA at 139.

¹⁹ Final EA at 132-133.

²⁰ Final EA at 76.

compliance monitoring plan that includes an explanation of how it will differentiate between project-induced and natural ramping rate exceedances.

53. Conditions 4(g) and 4(h) require PacifiCorp to: report project-induced ramping rate deviations, within 24 hours of discovery, to Oregon DEQ and Oregon DFW; submit an annual report on ramping rate compliance to these agencies by January 31 of each year; and prepare an adaptive management plan to reduce the frequency of project-induced ramping rate deviations, if determined necessary by Oregon DEQ. However, the certification does not specify a location where the ramping rates must be monitored. Therefore, staff recommended in the EA²¹ and Article 403 requires that PacifiCorp monitor compliance with the ramping rates at the existing USGS gage in the bypassed reach.

54. Conditions 4(i) and 4(j) require PacifiCorp to develop a plan within 18 months of license issuance to modify the fish ladder to provide consistent flow through the ladder and limit fish jump heights within the ladder to 9 inches, and complete the ladder modifications within one year of Oregon DEQ's approval of the plan. In the EA,²² staff did not recommend any modifications to the fish ladder because the ladder already provides sufficient upstream fish passage for most size classes of trout in the bypassed reach; therefore, there would be minimal benefits to the trout population from any fish ladder modifications. Nevertheless, the fish ladder modifications are included in this license because they are mandatory.

55. Conditions 4(k) and 4(l) require PacifiCorp to update the Fish Passage Facilities Operations and Maintenance Plan filed with the license application to include the design, operation, and construction of PacifiCorp's proposed auxiliary flow release system; and operate and maintain the project's fish passage facilities as specified in the updated plan. In the EA,²³ staff did not recommend any modifications to the Fish Passage Facilities Operations and Maintenance Plan because it did not recommend any modification to the project's fish passage facilities that would need to be addressed in the plan. Nevertheless, PacifiCorp must modify the plan because Conditions 4(k) and 4(l) are mandatory.

²¹ Final EA at 133-134.

²² Final EA at 140.

²³ Final EA at 144-145.

COASTAL ZONE MANAGEMENT ACT

56. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),²⁴ the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state's CZMA agency concurs with the license applicant's certification of consistency with the state's Coastal Zone Management Act program, or the agency's concurrence is conclusively presumed by its failure to act within six months of its receipt of the applicant's certification.

57. The project is located in the Cascade Mountains well outside of the boundary of the state-designated coastal management zone, which extends inland to the community of Agness at river mile 27 on the Rogue River. By email dated January 11, 2016, and filed September 25, 2017, the Oregon Department of Land Conservation and Development stated that no Coastal Zone Management Act review is necessary for the project.²⁵

SECTION 4(e) OF THE FPA

58. Section 4(e) of the FPA²⁶ provides that the Commission can issue a license for a project located within a federal reservation only if it finds that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired. As noted above, the Prospect No. 3 Project occupies land within the Rogue River-Siskiyou National Forest.

59. Commission staff reviewed the Organic Administration Act of 1897,²⁷ which established the purposes for forest reservations, and the presidential proclamation that created the Rogue River-Siskiyou National Forest (Rogue River National Forest).²⁸

²⁴ 16 U.S.C. § 1456(c)(3)(A) (2018).

²⁵ See Oregon Department of Land Conservation and Development letter filed September 25, 2017.

²⁶ 16 U.S.C. § 797(e) (2018).

²⁷ 16 U.S.C. § 473 *et seq.* (2018).

²⁸ The Rogue River National Forest, initially called Crater National Forest, was created by Executive Order 867, issued on June 30, 1908; expanded by Presidential Proclamation 1302, 39 Stat. 1735, issued on July 18, 1915; and renamed in Executive Order 5882, issued on July 9, 1932. At the time the forest was established, the Organic Administration Act of 1897, 16 U.S.C. § 475 (2006), stipulated that all national forest lands were established and administered only for watershed protection and timber production. See *Symbiotics LLC*, 129 FERC ¶ 62,207, at P 38 n.17 (2009).

There is no evidence or allegation in this proceeding to indicate that relicensing the Prospect No. 3 Project would interfere with the purposes of the Rogue River-Siskiyou National Forest. Therefore, the license, as conditioned, will not interfere or be inconsistent with the purposes for which the Rogue River-Siskiyou National Forest was created.

60. FPA section 4(e) further requires that Commission licenses for projects located within federal reservations include conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of such reservation.

61. The Forest Service filed 11 conditions for the project on May 9, 2017, and filed modifications to conditions 3 and 11 on November 30, 2017. The terms and conditions are set forth in Appendix B of this order and incorporated into the license by Ordering Paragraph (E).

62. Conditions 1 through 7 are administrative in nature and are not discussed further. The remaining conditions require: (1) revising the Erosion and Sediment Control Plan filed with the license application to include additional provisions for monitoring and repairing or mitigating disturbed sites (condition 8); (2) a fire and fuels management plan with measures to prevent and respond to fires should they occur as a result of the project (condition 9); (3) the HPMP filed with the license application (condition 10); and (4) a plan for reconstructing the vehicle access bridge over the flowline and constructing the new road spur to the bypassed reach (condition 11).

SECTION 18 FISHWAY PRESCRIPTIONS

63. Section 18 of the FPA²⁹ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.

64. By letter filed May 8, 2017, the Secretary of Interior requested that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 410 of the license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Prospect No. 3 Project.

²⁹ 16 U.S.C. § 811 (2018).

THREATENED AND ENDANGERED SPECIES

65. Section 7(a)(2) of the Endangered Species Act of 1973³⁰ (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat.

66. Two listed species may occur in the project area: the endangered gray wolf and the threatened northern spotted owl. There is no critical habitat within the project boundary for these species.

67. In the EA,³¹ Commission staff determined that the project would have no effect on the gray wolf or northern spotted owl. Any wolf use of the project area is transitory and infrequent, and no occupied spotted owl habitat occurs within or immediately adjacent to the project boundary. Therefore, no further action is required for either of these species.

NATIONAL HISTORIC PRESERVATION ACT

68. Under section 106 of the National Historic Preservation Act,³² and its implementing regulations,³³ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (defined as historic properties) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

69. As discussed in the EA,³⁴ the project includes contributing elements of the Prospect Hydroelectric Project Historic District (District), which is eligible for listing on the National Register. The removal of the project's woodstave flowline and sag pipe (both contributing elements) would adversely affect the District's historic properties if

³⁰ 16 U.S.C. § 1536(a) (2018).

³¹ Final EA at 5.

³² 54 U.S.C. § 300101 *et seq.* (Pub. L. No. 113-287, 128 Stat. 3187, Dec. 19, 2014).

³³ 36 C.F.R. pt. 800 (2018).

³⁴ Final EA at 114-115.

the replacement of these structures are not managed properly. PacifiCorp filed an HPMP to address project effects on the District. Staff recommended in the EA,³⁵ and Forest Service condition 10 requires, that PacifiCorp implement the HPMP. On March 16, 2018, the Oregon SHPO recommended that the HPMP be revised to include specific protocols and procedures for addressing impacts to cultural resources over the new license term. Consistent with the Oregon SHPO's recommendations, the Commission prepared a Programmatic Agreement (PA) that stipulates that PacifiCorp must revise the HPMP to incorporate specific protocols and procedures for addressing any effects on any previously-undiscovered historic properties identified during the operation, maintenance, and modification of the project over the life of the project. The Commission executed the PA with the Oregon SHPO on December 22, 2018, and invited PacifiCorp, the Forest Service, and the Cow Creek Band of Umpqua Indians to concur with the stipulations of the PA. PacifiCorp concurred. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 415 requires the licensee to implement the PA and revise the HPMP.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES PURSUANT TO SECTION 10(j) OF THE FPA

70. Section 10(j)(1) of the FPA³⁶ requires the Commission, when issuing a license, to include conditions based on recommendations submitted by federal and state fish and wildlife agencies pursuant to the Fish and Wildlife Coordination Act,³⁷ to “adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)” affected by the project.

71. On May 12, 2017, in response to the March 15, 2017 public notice that the project was ready for environmental analysis, Oregon DFW filed 33 recommendations under section 10(j). Oregon DFW later revised its recommendations,³⁸ resulting in a final total of 29 recommendations submitted pursuant to section 10(j).³⁹ Fifteen of the

³⁵ Final EA at 129.

³⁶ 16 U.S.C. § 803(j)(1) (2018).

³⁷ 16 U.S.C. §§ 661 *et seq.* (2018).

³⁸ Oregon DFW revised its recommendations by letter filed on March 1, 2018.

³⁹ In its filing of revised section 10(j) recommendations, Oregon DFW also filed a new recommendation, but did not identify the new recommendation as a section 10(j) recommendation; therefore, the recommendation is considered under section 10(a) of the FPA.

recommendations are outside the scope of section 10(j) and are discussed in the next section.

72. The license includes conditions consistent with 12 of the 14 recommendations that are within the scope of section 10(j), as follows: (1) modify the fish ladder to ensure the safe passage of juvenile and adult trout (certification condition 4(i) and 4(j)); (2) update the Fish Passage Facilities Operation and Maintenance Plan to include the fish passage facility modifications required by the certification (certification conditions 4(k) and 4(l)); (3) salvage live fish during dewatering of the water conveyance system or fish ladder (Article 408); (4) maintain minimum flows ranging from 20 to 30 cfs in the bypassed reach (certification condition 4(e)); (5) restrict ramping rates in the bypassed reach to 0.2 foot per hour (Article 403, certification condition 4(f)); (6) ensure the operation and maintenance of the USGS gage in the bypassed reach for operation compliance monitoring purposes (Article 404, certification condition 4(e)); (7) develop a sediment and dredging plan to enhance trout spawning habitat in the bypassed reach (Article 406); (8) pass large woody debris collected at South Fork Dam to the bypassed reach (Article 407); (9) conduct planned maintenance activities that require dewatering of the water conveyance system between July and September (Article 409); (10) install five new 12-foot-wide wildlife crossings over or under the flowline and widen the six existing 4-foot-wide canal crossings to 12 feet (Article 412); (11) install eight new 2-foot-wide small animal crossings over the canal, and fine-mesh fencing to a height of 40 inches at the base of the existing canal fencing and around the large and small animal canal crossings (Article 412); and (12) inspect all wildlife crossings once per year as part of PacifiCorp's existing wildlife crossing inspection and maintenance program, and photographically document any wildlife use of the crossings, including that of gray wolves, during the annual inspections (Article 413).

73. If the Commission believes that any such recommendation may be inconsistent with the purposes and requirement of part 1 of the FPA or other applicable law, section 10(j)(2) requires the Commission and the agencies to attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies.⁴⁰ If the Commission still does not adopt a recommendation, it must explain how the recommendation is inconsistent with Part 1 of the FPA or other applicable law and how the conditions imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources.

⁴⁰ 16 U.S.C. § 803(j)(2) (2018).

74. Below, we provide the required explanation with respect to the two conditions that are within the scope of section 10(j) but are not included in the license.

Downstream Fish Passage

75. In the draft EA,⁴¹ Commission staff made an initial determination that Oregon DFW's recommendation to modify the fish screen and bypass system to ensure the safe downstream passage of all juvenile and adult trout by ensuring the facilities comply with current Oregon DFW fish passage criteria may be inconsistent with the comprehensive planning standard of section 10(a)(1) and the public interest standard of section 4(e) of the FPA because the measure would not provide benefits justifying its cost.

76. By letter issued October 18, 2017, Commission staff advised Oregon DFW of its preliminary determination and attempted to resolve the inconsistency in a January 12, 2018 section 10(j) meeting. The inconsistency could not be resolved.

77. In the final EA,⁴² staff determined that the existing fish screen generally prevents trout that are 60 millimeters or greater from entering the powerhouse. The new fish screen proposed by Oregon DFW would prevent trout fry smaller than 60 millimeters from entering the powerhouse. However, entrainment losses of trout fry less than 60 millimeters are not significantly affecting trout density in the bypassed reach because the density in the bypassed reach is comparable to that of the unaffected reach of the South Fork upstream of the project. Therefore, the benefit of increased survival through a new screen and bypass system do not justify the \$114,780 annual cost.

Fish Passage Facility Effectiveness Monitoring

78. In the draft EA,⁴³ Commission staff made an initial determination that Oregon DFW's recommendation to develop a post-construction hydraulic and biological monitoring plan for any new or modified fish passage facilities to ensure that the facilities are effective at passing fish may be inconsistent with the comprehensive planning standard of section 10(a)(1) and the public interest standard of section 4(e) of the FPA.

79. By letter issued October 18, 2017, Commission staff advised Oregon DFW of its preliminary determination and attempted to resolve the inconsistency in a January 12, 2018 section 10(j) meeting. The inconsistency could not be resolved.

⁴¹ Draft EA at 136.

⁴² Final EA at 140-142.

⁴³ Draft EA at 137.

80. In the final EA, staff explained that it already has sufficient information to determine the effectiveness of the fish passage facilities both under their existing configuration and with any recommended modifications to improve passage;⁴⁴ therefore, there would be minimal benefit from additional hydraulic or biological testing of the project's fish passage facilities at an annual cost of \$6,240.

81. The license requires PacifiCorp to enhance minimum flows, restrict ramping rates at South Fork Dam, restrict the timing of annual project maintenance, salvage live trout from dewatered project facilities, operate and maintain the fish ladder and fish screen and bypass system to provide fish passage past South Fork Dam, and pass large woody debris and dredged gravels from the impoundment to the bypassed reach. These measures would protect the trout population and other aquatic resources in the South Fork bypassed reach during project operation. For the above reasons, the license does not include Oregon DFW's recommendations for downstream fish passage improvements and fish passage facility effectiveness monitoring because they are inconsistent with the comprehensive planning standard of sections 4(e) and 10(a) of the FPA. In accordance with section 10(j)(2)(B) of the FPA, the measures required by the license, including Articles 403, 404, 406-409, 412, 413, and certification conditions 4(e) and 4(f) as discussed above, will adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources affected by the project.

SECTION 10(a)(1) OF THE FPA

82. Section 10(a)(1) of the FPA⁴⁵ requires that any project for which the Commission issues a license be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

83. Recommendations submitted by Oregon DFW not considered under section 10(j) and measures proposed by the licensee are considered below under the broad public interest standard of section 10(a)(1) of the FPA.

A. Oregon DFW Recommendations

84. Oregon DFW made 15 recommendations under section 10(j) that are not specific measures to protect, mitigate damages to, or enhance fish and wildlife. Consequently,

⁴⁴ Final EA at 58.

⁴⁵ 16 U.S.C. § 803(a)(1) (2018).

they are not considered under section 10(j) of the FPA, but rather under the broad public-interest standard of section 10(a)(1).⁴⁶ These measures include: notifying agencies of planned maintenance outages or during emergency situations at the project; constructing a spur road to facilitate sediment augmentation in the bypassed reach; consultation and reporting requirements for the design of various measures and plans (i.e., wildlife crossings, avian protection, fish passage facilities); developing erosion and sediment control plans for future project activities; complying with general guidelines for avian protection on project power lines and during project operation and maintenance activities; implementing non-specific future restorative measures in response to emergency situations at the project; developing plans to address future potential failures of the water conveyance system; amending the license if unanticipated effects on fish and wildlife occur or if there is a change in the Endangered Species Act status of a species at the project; obtaining all necessary permits prior to modifying or repairing the project; and limiting the license term to 30 years.

1. Agency Notification

85. Oregon DFW recommends that PacifiCorp: (1) notify the Oregon Emergency Response System within 24 hours of an accidental spill or water conveyance system failure; (2) notify Oregon DFW in the event of any emergency or unanticipated situations that endanger, harm, or kill wildlife at the project; and (3) notify Oregon DFW and FWS two weeks prior to planned maintenance outages. In the EA,⁴⁷ staff recommended these notification requirements, which Articles 405 and 408 require.

2. Spur Road

86. To facilitate sediment augmentation in the bypassed reach to enhance trout spawning habitat, Oregon DFW recommends that PacifiCorp construct the proposed new spur road, which will extend from South Fork Dam to the new sediment disposal site along the bypassed reach. Staff recommended the road in the EA⁴⁸ and Forest Service condition 11 requires PacifiCorp to develop a plan for constructing it.

3. Wildlife Crossing Monitoring

87. Oregon DFW recommends that PacifiCorp develop and implement a plan to monitor the efficacy of large and small wildlife crossings, and prepare a written annual inspection and maintenance program for the crossings and fencing. Oregon DFW also

⁴⁶ *Id.*

⁴⁷ Final EA at 134-135.

⁴⁸ Final EA at 129.

recommends that PacifiCorp: (1) prepare annual inspection reports that include photographic documentation of wildlife use of the crossings, and provide the reports to Oregon DFW, the Forest Service, and FWS by March 1 of each year; and (2) install up to five additional large wildlife crossings over the new steel flowline if photographic monitoring shows no deer and elk use of the five new large animal crossings within five years of their installation.

88. PacifiCorp asserts that further monitoring of wildlife use of crossings is unnecessary because the results of its 3-year study of wildlife use of the 12-foot-wide crossings of the Middle Fork and North Fork canals at the nearby Prospect Nos. 1, 2, and 4 Project already demonstrates that herds of large animals, specifically elk, will cross the kind of large wildlife bridges proposed at the Prospect No. 3 Project. Further, PacifiCorp agrees to maintain the existing fencing, but disagrees with the need for a written annual inspection and maintenance program for the crossings and fencing. PacifiCorp states that a license requirement to annually inspect and maintain the fencing would be sufficient to maintain compliance and would render a written plan unnecessary.

89. PacifiCorp's existing inspection program defines when it inspects the project's canal crossings and fencing (April). The inspection program also includes: a checklist for personnel to record the condition of the fencing and canals and criteria by which to judge when remedial actions are needed; a means to make recommendations for remediation; and internal reporting requirements to ensure that any remediation efforts are completed. PacifiCorp provides an annual summary of the inspections and any remedial actions undertaken to Oregon DFW.⁴⁹ In the EA,⁵⁰ staff determined that continuing PacifiCorp's current inspection program would be sufficient to ensure proper maintenance of the wildlife crossings and fencing, but including photographs of wildlife use would document wolf and other large animal use of the project area and provide information on the effectiveness of the crossings at little or no cost to PacifiCorp. Article 413 requires PacifiCorp to revise its annual inspection and maintenance program to include photographs of wildlife use and to include the new crossings and fencing required by Article 412.

90. Staff did not recommend immediately installing up to five additional crossings if the monitoring shows no deer and elk use of the new crossings after five years, as recommended by Oregon DFW. Staff concluded in the EA⁵¹ that it would be premature to require the additional crossings at an annual cost of up to \$9,455 because there is little

⁴⁹ See *Pacific Power and Light*, 48 FERC ¶ 62,173 (1989) (Order Approving Annual Maintenance Program for Wildlife Crossings and Fencing).

⁵⁰ Final EA at 146.

⁵¹ Final EA at 146.

reason to suspect that the new crossings would not be used by deer and elk. Therefore, staff recommended that PacifiCorp monitor the new crossings for five years and then file a report with any proposals to modify or add new crossings. Monitoring and reporting the results in this manner will allow staff to consider the monitoring results and, if needed, potentially find a more efficient solution to increase deer and elk use of the crossings than constructing additional crossings. Accordingly, Article 412 requires PacifiCorp to include a provision in the wildlife crossing plan for preparing a monitoring report after the initial 5 years of monitoring the five new large animal crossings, and providing the report to Forest Service, FWS, and Oregon DFW for review and comment prior to filing it with the Commission for approval.

4. Erosion and Sediment Control

91. Oregon DFW recommends that PacifiCorp develop site-specific erosion control plans 90 days before commencing any land-clearing, spoil-producing, or ground-disturbing activities at the project. Consistent with Oregon DFW's recommendation and staff's recommendation in the EA,⁵² Forest Service condition 8 and Article 301 require PacifiCorp to develop a final Erosion and Sediment Control Plan for the ground-disturbing activities authorized by the license. These include construction of the new spur road and replacement of the woodstave flowline, sag pipe, and vehicle access bridge.

5. Water Conveyance System Monitoring and Maintenance

92. Oregon DFW recommends that PacifiCorp develop plans to address the potential for future failures of the project's water conveyance system. These include a monitoring and maintenance plan with provisions for installing unspecified technology that would enable the early detection of water conveyance system failure and protocols for stopping flow within an hour of such a failure, a plan to guide remediation work after a failure occurs, and an environmental damage action plan to ensure compensation for all losses of fish and wildlife and their habitat caused by unanticipated project-related events that cause environmental damage. Oregon DFW also recommends that PacifiCorp prepare an annual report on water conveyance system failures, remediation, and monitoring measures.

93. Staff did not recommend these measures in the EA⁵³ because PacifiCorp's proposal to replace the aging woodstave flowline and sag pipe would significantly reduce the potential for a water conveyance system failure. Additionally, if a failure were to occur, PacifiCorp's existing control systems would enable it to quickly detect and address

⁵² Final EA at 127.

⁵³ Final EA at 145-146.

the failure before substantial harm occurs. Further, the Commission has the authority to require the licensee to complete any additional repairs or remedial actions that are necessary to respond to any failure of a project works. Therefore, there is no need for any additional plans to detect or respond to a future potential failure of the water conveyance system.

6. Consultation on the Design of Modified Fish Passage Facilities and Updates to Fish Passage Facilities Operation and Maintenance Plan

94. Oregon DFW recommends that PacifiCorp consult with it and the FWS on the design of modified fish passage facilities and on any updates to the Fish Passage Facilities Operation and Maintenance Plan. Staff did not recommend these consultation requirements⁵⁴ because it did not recommend modifications to the project's fish passage facilities or updates to the Fish Passage Facilities Operation and Maintenance Plan. Although the license requires modifications to fish passage facilities and updates to the operation and maintenance plan because they are mandatory under section 401 of the CWA, there is no need to include a consultation requirement with Oregon DFW and FWS because Oregon DEQ typically consults with the resource agencies during administration of certification conditions that are designed to protect and enhance fish and wildlife resources at the project.

7. Avian Protection

95. Oregon DFW recommends the following measures to protect birds at the project: (1) retrofit or rebuild any power pole involved in a bird fatality in accordance with Avian Powerline Interaction Committee (APLIC) guidelines for raptor protection, (2) follow the most current spatial and temporal guidelines for avian protection during any project operation and maintenance activity, (3) follow all APLIC guidelines for raptor protection at the project, and (4) maintain a database of avian mortalities associated with the project and provide annual reports on the mortalities to Oregon DFW and FWS. PacifiCorp operates and maintains its hydro projects according to a corporate-wide avian protection plan that addresses what is requested by Oregon DFW. However, because the corporate-wide plan is not project-specific and includes measures that do not apply to the project, staff recommended that PacifiCorp develop a project-specific avian protection plan⁵⁵ that: (1) includes only the specific provisions of PacifiCorp's existing corporate-wide Avian Protection Plan that apply to the project; (2) considers APLIC's guidelines in Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006; and (3) includes provisions for maintaining a record of avian mortalities associated with

⁵⁴ Final EA at 143-145.

⁵⁵ Final EA at 138.

the project and providing annual reports on the mortalities. Article 414 requires PacifiCorp to develop the project-specific avian protection plan after consultation with Oregon DFW and FWS.

8. Unanticipated Effects on Fish and Wildlife

96. Oregon DFW recommends that PacifiCorp implement any restorative measures required by the agencies in the event of an emergency affecting fish or wildlife at the project. Oregon DFW also recommends that PacifiCorp amend the license at any time if unanticipated effects on fish and wildlife occur or if there is a change in the Endangered Species Act status of a species at the project. Staff did not recommend these measures in the EA⁵⁶ because they are general and speculative, and Standard Article 15 of the license already provides a means to reopen the license to consider reasonable modifications of project operations and facilities for fish and wildlife.

9. Future Project Modifications and Repairs

97. Oregon DFW recommends that PacifiCorp consult with all appropriate local, state, or federal agencies, and obtain and comply with all required permits, before repairing or modifying the hydroelectric project. This measure is unnecessary because Standard Article 5 of the license requires PacifiCorp to obtain all rights necessary to construct, operate, and maintain the project. In addition, the Commission's regulations require the licensee to consult with all applicable agencies prior to filing an amendment application should there be a need to modify the project.

B. Auxiliary Minimum Flow Release System

98. Under current operation, when the project is not spilling flows over South Fork Dam, PacifiCorp releases a 10-cfs minimum flow to the bypassed reach via the fish ladder. During pre-filing, PacifiCorp determined that it could not reliably use the fish ladder to meet its higher proposed minimum flow of 30 cfs. Therefore, PacifiCorp initially proposed to construct an auxiliary flow system that would consist of minor modifications to the upper portion of the fish ladder (i.e., narrowing pools 13 through 15) and constructing a flow trough from one of the two fish ladder exit orifices to a discharge point in the bypassed reach. However, on February 12, 2018, PacifiCorp modified its proposed design. PacifiCorp now proposes to construct the following within the diversion canal: (1) a 3-foot-wide automated downward-opening gated weir at the downstream end of the existing canal overflow section; (2) an 8-foot-long by 5-foot-wide concrete plunge pool; and (3) a 130-foot-long, 2-foot-diameter pipe that extends from the

⁵⁶ Final EA at 170.

concrete plunge pool to a discharge point in the South Fork adjacent to the fish ladder entrance.

99. Because the auxiliary flow system weir would be constructed upstream of the existing fish screen, fish passing downstream through the canal could be drawn over the weir and into the system. For this reason, PacifiCorp designed the pipe segment of the system to meet Oregon DFW's criteria for safe downstream fish passage. However, Oregon DFW states that all of the components of the system do not meet its recommended fish passage criteria, and therefore recommends that PacifiCorp prevent fish entrainment into the system by either installing a fish screen on the weir that meets Oregon DFW's recommended screening criteria, or relocate the weir so that it withdraws water from the diversion canal at a point downstream of the existing canal fish screen.⁵⁷

100. In the EA,⁵⁸ staff determined that fish entrainment into the diversion canal is low, and under normal operating conditions only a portion of any fish in the canal would be drawn over the weir and into the auxiliary flow system. This is because the system would typically only withdraw a small proportion of the total canal flow, while the majority of flow and fish passing downstream would continue past the auxiliary flow system weir and through the diversion canal fish screen and bypass system. Therefore, because there is a low potential for fish to be entrained into the auxiliary flow system, there would be only minor benefits from requiring PacifiCorp to either install a fish screen on the system, or to move it so that it withdraws water from a location downstream of the existing diversion canal fish screen. The minor passage benefits to trout are not justified by the \$47,275 annual cost of the agency-recommended screening measures. Therefore, the agency-recommended screening or relocation measures are not required by the license.

C. Vegetation Management

101. PacifiCorp proposes to implement the Vegetation Management Plan filed with the license application to promote the establishment and maintenance of native plant communities, protect sensitive plant species, promptly revegetate disturbed areas, and control noxious weeds at the project. Staff recommended the plan in the EA,⁵⁹ and Article 411 requires its implementation.

⁵⁷ See Oregon DFW letter filed March 1, 2018.

⁵⁸ Final EA at 142-143.

⁵⁹ Final EA at 129.

ADMINISTRATIVE PROVISIONS

A. Annual Charges

102. The Commission collects annual charges from licensees for administration of the FPA and to compensate for the use and occupancy of United States land. Article 201 provides for the collection of funds for administration of the FPA and the use and occupancy of federal land.

B. Exhibits A and F

103. Commission regulations require that licensees file as part of the license application an Exhibit A that describes the project, and an Exhibit F that consists of general design drawings of the principal project works. Exhibits A and F filed by PacifiCorp on December 30, 2016, do not include the revised auxiliary minimum flow release system described in PacifiCorp's February 12, 2018 filing. Therefore, these exhibits are not approved. Article 202 requires PacifiCorp to file revised Exhibits A and F that include the revised auxiliary minimum flow release system.

C. Exhibit G Drawings

104. The Commission requires licensees to file sets of approved project drawings in electronic file format. Article 203 requires the filing of these drawings in electronic format.

D. As-Built Drawings

105. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as-built. Article 204 provides for the filing of these drawings.

E. Headwater Benefits

106. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 205 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

F. Amortization Reserve

107. The Commission requires that for new major licenses, non-municipal licensees set up and maintain an amortization reserve account upon license issuance. Article 206 requires the establishment of the account.

G. Start of Construction

108. Article 301 requires PacifiCorp to commence construction of the project flowline replacement within two years from the issuance date of the license and complete construction within five years from the issuance date of the license.

H. Review of Final Plans and Specifications

109. Article 302 requires the licensee to provide the Commission's Division of Dam Safety and Inspection (D2SI)-Portland Regional Engineer with final contract drawings and specifications—together with a supporting design report consistent with the Commission's engineering guidelines.

110. Article 303 requires the licensee to provide the Commission's D2SI-Portland Regional Engineer with cofferdam construction drawings.

111. Article 304 requires the licensee to coordinate with the Commission's D2SI-Portland Regional Engineer about any proposed modifications resulting from environmental requirements that would affect project works, dam safety, or project operation.

I. Use and Occupancy of Project Lands and Waters

112. Requiring a licensee to obtain prior Commission approval for every use and occupancy of project land would be unduly burdensome. Therefore, Article 416 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

J. Commission Approval of Resource Plans, Notification, and Filing of Amendments

113. In Appendices A and B there are certain certification conditions and section 4(e) conditions that either do not require the licensee to file plans with the Commission, or contemplate non-specific and uncertain long-term changes to project facilities, operations, or license conditions. Therefore, Article 401 requires the licensee to file the plans with the Commission for approval, and file amendment applications, as appropriate.

K. Operational Deviations

114. To provide for administrative efficiency and allow the licensee the flexibility to quickly address project-related situations requiring short-term deviations, Article 403 allows planned, short-term deviations from the run-of-river, minimum flow, and project-induced ramping rate requirements of the license after mutual agreement among the

licensee, FWS, and Oregon DFW. The article specifies reporting procedures the licensee must follow regarding such planned deviations. Article 403 also includes reporting requirements that the licensee must follow in the event of unplanned deviations from operational requirements, based on the duration of the event, and any observed or reported effects of the deviations. Under the article, unplanned deviations from run-of-river operation and minimum flow requirements that do not exceed three hours in duration (from the time the deviation starts until the time compliance is resumed) and for which there are no observed or reported environmental effects, do not need to be reported to the Commission individually, but can instead be included in an annual report that describes these minor incidents. Unplanned deviations from run-of-river operation and minimum flow requirements that exceed three hours in duration, and any unplanned deviations from project-induced ramping rate requirements, must be reported to the Commission individually.

STATE AND FEDERAL COMPREHENSIVE PLANS

115. Section 10(a)(2)(A) of the FPA⁶⁰ requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.⁶¹ Under section 10(a)(2)(A), Commission staff identified 26 comprehensive plans that are relevant to this project.⁶² No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

116. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,⁶³ Commission staff evaluated PacifiCorp's record as a licensee for these areas: (A) conservation efforts; (B) compliance history and ability to comply with a new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost-effectiveness of plans; and (H) actions affecting the public. This order accepts staff's findings in each of the following areas.

⁶⁰ 16 U.S.C. § 803(a)(2)(A) (2018).

⁶¹ Comprehensive plans are defined at 18 C.F.R. § 2.19 (2019).

⁶² The list of applicable plans can be found in section 5.5 of the EA.

⁶³ 16 U.S.C. §§ 803(a)(2)(C) and 808(a) (2018).

A. Conservation Efforts

117. Section 10(a)(2)(C) of the FPA⁶⁴ requires the Commission to consider the extent of electricity consumption efficiency improvement programs in the case of license applicants primarily engaged in the generation or sale of electric power, like PacifiCorp. Each year, PacifiCorp completes a comprehensive analysis of future load growth and the need for new resources, including customer efficiency programs, to meet its customer demand. Customer conservation is encouraged through PacifiCorp's "wattsmart" energy efficiency programs, which include cash incentives for home energy upgrades. These programs show that PacifiCorp is making an effort to conserve electricity and has made a satisfactory good faith effort to comply with section 10(a)(2)(C) of the FPA.

B. Compliance History and Ability to Comply with New License

118. Based on a review of PacifiCorp's compliance with the terms and conditions of the existing license, PacifiCorp's overall record of making timely filings and compliance with its license is satisfactory. Therefore, PacifiCorp can satisfy the conditions of a new license.

C. Safe Management, Operation, and Maintenance of the Project

119. Staff has reviewed PacifiCorp's management, operation, and maintenance of the project pursuant to the requirements of 18 C.F.R. Part 12 of the Commission's Engineering Guidelines. Staff concludes that the dam and other project works are safe, and that there is no reason to believe that PacifiCorp cannot continue to safely manage, operate, and maintain these facilities under a new license.

D. Ability to Provide Efficient and Reliable Electrical Service

120. Staff has reviewed PacifiCorp's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. PacifiCorp's powerhouse equipment failure is monitored by various general control systems and alarms. Since the project has been in operation, PacifiCorp has undertaken several initiatives to ensure the project is able to operate reliably into the future. Therefore, PacifiCorp is capable of operating the project to provide efficient and reliable electric service in the future.

⁶⁴ 16 U.S.C. §§ 803(a)(2)(C) (2018).

E. Need for Power

121. The project would provide hydroelectric generation to meet part of Oregon's power requirements, resource diversity, and capacity needs. The project has an installed capacity of 7.2 MW and generates approximately 35,050 MWh per year.

122. The project is located in the Northwest Power Pool area of the Western Electricity Coordinating Council (WECC) region of the North American Electric Reliability Corporation (NERC). The NERC annually forecasts electric supply and demand nationally and regionally for a 10-year period. For the 2017-2026 time period, NERC projects that total demand for the summer, the peak season for the entire WECC Region, will increase by 2.5 percent due to generally high temperatures early in the summer season, while the annual energy load is projected to increase by 1.0 percent per year for the same time period.

123. We conclude that power from the proposed project would help meet a need for power in the WECC region in both the short and long-term.

F. Transmission Services

124. The project includes about 7 miles of transmission line which delivers project power to PacifiCorp's bulk transmission grid at the Prospect Central substation. PacifiCorp is proposing no changes that would affect its own or other transmission services in the region. The project and project transmission lines are important elements in providing power and voltage control to over 740,000 retail customers in Washington, Oregon, and California.

G. Cost Effectiveness of Plans

125. PacifiCorp proposes several modifications to project facilities and environmental measures for the enhancement of fish and wildlife at the project. Based on PacifiCorp's record as an existing licensee, staff concludes that these plans are likely to be carried out in a cost-effective manner.

H. Actions Affecting the Public

126. PacifiCorp provided opportunity for public involvement in the development of its application for a new license for the Prospect No. 3 Project. In addition, during the previous license period, PacifiCorp operated the project with consideration for the protection of downstream uses of the South Fork and provided low cost, renewable energy to help meet local power needs.

PROJECT ECONOMICS

127. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corporation*,⁶⁵ the Commission uses current costs to compare the costs of the project and likely alternative power with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In applying this analysis to the Prospect No. 3 Project, staff considered three options: a no-action alternative, PacifiCorp's proposal, and the project as licensed herein.⁶⁶

128. Under the no-action alternative, the project would continue to operate as it does now. The project has an installed capacity of 7.2 MW and generates an average of 35,050 MWh of electricity annually. The average annual project cost is about \$1,336,825, or about \$38.14/MWh. When the average generation is multiplied by the alternative power cost of \$43.39/MWh, the total value of the project's power is \$1,520,820 in 2018 dollars. To determine whether the proposed project is currently economically beneficial, the project's cost is subtracted from the value of the project's power. Therefore, the project costs \$183,995, or \$5.25/MWh, less to produce power than the likely alternative cost of power.

129. As proposed by PacifiCorp, the levelized annual cost of operating the project is \$1,640,395 or \$54.34/MWh. The proposed project would generate an average of 30,186 MWh of energy annually. The average generation is multiplied by the alternative power cost of \$43.39/MWh, resulting in a total value of the project's power of \$1,309,771 in 2018 dollars. Therefore, in the first year of operation, the project would cost \$330,624, or \$10.95/MWh, more than the cost of alternative power.

130. As licensed herein with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$1,756,426 or \$62.14/MWh.⁶⁷ The

⁶⁵ 72 FERC ¶ 61,027 (1995).

⁶⁶ Details of Commission staff's economic analysis for the project as licensed herein, and for the other two alternatives, are included in section 4.0 of the EA.

⁶⁷ The costs of this alternative differ from those presented in the EA because of the additional levelized annual costs of \$106,811 for the mandatory water quality monitoring plans and reports, higher minimum flows in three months, fish ladder modifications, and

project would generate an estimated average of 28,266 MWh of energy annually. The project, therefore, would produce power valued at \$1,226,462 when multiplied by the \$43.39/MWh value of the project's power. Therefore, in the first year of operation, the project would cost \$529,964, or about \$18.75/MWh, more than the cost of alternative power.

131. In considering public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary service benefits). These benefits include the ability to help maintain the stability of a power system, such as by quickly adjusting power output to respond to rapid changes in system load; and to respond rapidly to a major utility system or regional blackout by providing a source of power to help restart fossil-fuel based generating stations and put them back on line.

132. Although staff's analysis shows that the project as licensed herein would cost more to operate than staff's estimated cost of alternative power, it is the applicant who must decide whether to accept this license and any financial risk that entails.

133. Although staff does not explicitly account for the effects inflation may have on the future cost of electricity, the fact that hydropower generation is relatively insensitive to inflation compared to fossil-fueled generators is an important economic consideration for power producers and the consumers they serve. This is one reason project economics is only one of the many public interest factors the Commission considers in determining whether or not, and under what conditions, to issue a license.

COMPREHENSIVE DEVELOPMENT

134. Sections 4(e) and 10(a)(1) of the FPA⁶⁸ require the Commission to give equal consideration to power development purposes and to the purposes of energy conservation; the protection, mitigation of, damage to, and enhancement of fish and wildlife; the protection of recreational opportunities; and the preservation of other aspects of environmental quality. Any license issued must be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

135. The final EA for the project contains background information, analysis of effects, and support for related license articles. Based on the record of this proceeding, including the EA and the comments thereon, licensing the Prospect No. 3 Project as described in

other aquatic measures required by the water quality certification.

⁶⁸ 16 U.S.C. §§ 797(e) and 803(a)(1) (2018).

this order will not constitute a major federal action significantly affecting the quality of the human environment. The project will be safe if operated and maintained in accordance with the requirements of the license.

136. Based on Commission staff's independent review and evaluation of the project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the final EA, the project as licensed herein, is best adapted to a comprehensive plan for improving or developing the South Fork Rogue River.

137. This alternative is selected because: (1) issuance of a new license will serve to maintain a beneficial and dependable source of electric energy; (2) the required environmental measures will protect or enhance fish and wildlife resources, water quality, and cultural resources; and (3) the 7.2 MW of electric capacity comes from a renewable resource that does not contribute to atmospheric pollution.

LICENSE TERM

138. Section 15(e) of the FPA⁶⁹ provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years.

139. In its May 12, 2017 comments on the license application, Oregon DFW recommends that the Commission issue a 30-year license for the project because the level of redevelopment, new construction, and environmental measures proposed by the licensee for the project are consistent with the Commission's policy for a 30-year license term and is consistent with the Commission's license term for the Prospect Nos. 1, 2, and 4 Project No. 2630.⁷⁰

140. On October 19, 2017, the Commission established a 40-year default license term policy for original and new licenses, effective as of October 26, 2017.⁷¹ The Policy Statement provides for exceptions to the 40-year default license term under certain circumstances: (1) establishing a shorter or longer license term if necessary to coordinate license terms for projects located on the same river basin; (2) deferring to a shorter or longer license term explicitly agreed to in a generally-supported comprehensive settlement agreement; and (3) establishing a longer license term upon a showing by the license applicant that substantial voluntary measures were either previously implemented

⁶⁹ 16 U.S.C. § 808(e) (2018).

⁷⁰ *PacifiCorp*, 123 FERC ¶ 62,021 (2008).

⁷¹ *Policy Statement on Establishing License Terms for Hydroelectric Projects*, 161 FERC ¶ 61,078 (2017) (Policy Statement); 82 Fed. Reg. 49,501 (Oct. 26, 2017).

during the prior license term, or substantial new measures are expected to be implemented under the new license.

141. Because none of the above exceptions apply in this case, a 40-year license for the Prospect No. 3 Project is appropriate, and Oregon DFW's recommendation for a 30-year license term is not adopted.

The Director orders:

(A) This license is issued to PacifiCorp (licensee) to operate and maintain the Prospect No. 3 Hydroelectric Project, effective the first day of the month in which this order is issued, for a period of 40 years. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G filed December 30, 2016.

<u>Exhibit G Drawing</u>	<u>FERC No. 2337-</u>	<u>Description</u>
G-1	1001	Project Boundary
G-2	1002	Project Boundary
G-3	1003	Project Boundary
G-4	1004	Project Boundary
G-5	1005	Project Boundary
G-6	1006	Project Boundary Description

(2) Project works that include the following existing project facilities: (a) a 24.7-foot-high, 172-foot-long concrete diversion dam with an integrated 98-foot-long ungated ogee spillway section; (b) a 1-acre reservoir that extends 550 feet upstream from the dam with a gross storage capacity of 19 acre-feet at normal full pool elevation of 3,375.7 feet mean sea level; (c) an 86-foot-long, 15-pool concrete pool-and-weir-type ladder to provide upstream fish passage past the dam; (d) a 15,894-foot-long water conveyance system consisting of: a 273-foot-long concrete-lined canal with a 25-foot-long, 9.75-foot-wide inclined-plane fish screen located about 215 feet downstream of the dam; a 5.5-

foot-diameter, 5,448-foot-long woodstave flowline; another 5,805-foot-long concrete-lined canal; a 5-foot-wide, 6.5-foot-high, 698-foot-long concrete-lined horseshoe-shaped tunnel; a 416-foot-long forebay; and a 5.5- to 5.75-foot-diameter, 3,254-foot-long riveted steel penstock; (e) a 2,486-foot-long spillway channel that discharges flows spilled at the forebay into Daniel Creek; (f) a powerhouse containing one vertical-shaft Francis-turbine with an installed capacity of 7.2 megawatts; (g) a 20-foot-long, 20-foot-wide, 5-foot-deep concrete tailrace with a 172-foot-long concrete overflow spillway that flows into Daniel Creek; (h) a 5.5-foot-diameter, 887-foot-long inverted woodstave and steel siphon that connects to the Middle Fork Canal of the Prospect Nos. 1, 2, and 4 Hydroelectric Project; (i) a 6.97-mile-long, 69-kilovolt transmission line interconnecting at the Prospect Central substation; and (j) appurtenant facilities.

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project, all portable property that may be employed in connection with the project, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibit G described above is approved and made part of the license. Exhibits A and F filed as part of the application for license do not include the revised auxiliary minimum flow release system and are not approved.

(D) This license is subject to the conditions submitted by the Oregon Department of Environmental Quality under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2012), as those conditions are set forth in Appendix A to this order, although condition V.i is not enforceable.

(E) This license is subject to the conditions submitted by the U.S. Forest Service under section 4(e) of the FPA, as those conditions are set forth in Appendix B to this order.

(F) This license is also subject to the articles set forth in Form L-1 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Lands of the United States" (see 54 F.P.C. 1799 *et seq.*), as reproduced at the end of this order, and the following additional articles:

Article 201. Administrative Annual Charges. The licensee must pay the United States annual charges, effective as of the first day of the month in which the license is issued, and as determined in accordance with provisions of the Commission's regulations in effect from time to time, for the purpose of:

(1) reimbursing the United States for the cost of administering Part I of the Federal Power Act. The authorized installed capacity for that purpose is 7.2 megawatts.

(2) recompensing the United States for the use, occupancy, and enjoyment of 52.5 acres of its lands (other than for transmission line right-of-way).

Article 202. Exhibits A and F. Within 30 days of the date of issuance of the license, the licensee must file a revised Exhibits A and F to include the revised auxiliary minimum flow release system as described in the February 12, 2018 filing.

Article 203. Exhibit Drawings. Within 45 days of the date of issuance of the license, as directed below, the licensee must file two sets of the approved exhibit drawings, form FERC-587, and GIS data in electronic file format on compact disks with the Secretary of the Commission, ATTN: OEP/DHAC.

(1) Digital images of the approved exhibit drawings must be prepared in electronic format. Prior to preparing each digital image, the FERC Project-Drawing Number (i.e., P-2337-1001 through P-2337-1006) must be shown in the margin below the title block of the approved drawing. Each drawing must be a separate electronic file, and the file name must include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of the license, and file extension in the following format [P-2337-1001, G-1, Project Boundary, MM-DD-YYYY.TIF].

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for geographic information system (GIS) georeferencing the project boundary drawing to the polygon data, and must be based on a standard map coordinate system. The spatial reference for the drawing (i.e., map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor. All digital images of the exhibit drawings must meet the following format specification:

IMAGERY – black & white raster file

FILE TYPE – Tagged Image File Format (TIFF), CCITT Group 4
(also known as T.6 coding scheme)

RESOLUTION – 300 dots per inch (dpi) desired, (200 dpi minimum)

DRAWING SIZE FORMAT – 22” x 34” (minimum), 24” x 36” (maximum)

FILE SIZE – less than 1 megabyte desired

A third set (Exhibit G only) and a copy of Form FERC-587 must be filed with the Bureau of Land Management office at the following address:

State Director
Bureau of Land Management
Lands and Minerals Adjudication Section (OR 936.1)

PO Box 2965
Portland, OR 97208-2965
ATTN: FERC Withdrawal Recordation

(2) Project boundary GIS data must be in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format). The filing must include both polygon data and all reference points shown on the individual project boundary drawings. An electronic boundary polygon data file(s) is required for each project development. Depending on the electronic file format, the polygon and point data can be included in single files with multiple layers. The georeferenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The file name(s) must include: FERC Project Number, data description, date of the license, and file extension in the following format [P-1234, boundary polygon/or point data, MM-DD-YYYY.SHP]. The filing must be accompanied by a separate text file describing the spatial reference for the georeferenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name must include: FERC Project Number, data description, date of the license, and file extension in the following format [P-1234, project boundary metadata, MM-DD-YYYY.TXT].

Article 204. As-built Exhibits. Within 90 days of completion of construction of the facilities authorized by the license, the licensee must file for Commission approval, revised exhibits A, F, and G, as applicable, to describe and show those project facilities as built.

Article 205. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee must reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license. The benefits will be assessed in accordance with Part 11, Subpart B, of the Commission's regulations.

Article 206. Amortization Reserve. Pursuant to section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project must be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee must set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment.

To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee must deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee must set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee must maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves must be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios must be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity must be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 301. *Start of Construction.* The licensee shall commence construction of the project flowline replacement within two years from the issuance date of the license and shall complete construction within five years from the issuance date of the license.

Article 302. *Contract Plans and Specifications.* At least 60 days prior to the start of any construction, the licensee must submit one copy of its plans and specifications and supporting design document to the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). The submittal to the D2SI-Portland Regional Engineer must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. The licensee may not begin construction until the D2SI-Portland Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

Article 303. *Cofferdam and Deep Excavation Construction Drawings.* Should construction require cofferdams or deep excavations, the licensee must: (1) have a Professional Engineer who is independent from the construction contractor, review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction; and (2) ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 10 days before starting construction of any cofferdams or deep excavations, the licensee must submit one copy to the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy

to the Commission's Director, D2SI), of the approved cofferdam and deep excavation construction drawings and specifications, and the letters of approval.

Article 304. *Project Modification Resulting from Environmental Requirements.* If environmental requirements under the license require modification that may affect the project works or operations, the licensee must consult with the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer. Consultation must allow sufficient review time for the Commission to ensure that the proposed work does not adversely affect the project works, dam safety, or project operation.

Article 401. *Requirements to File Mandatory Plans and Requirement to File Amendment Applications.*

(a) Requirements to File Plans for Commission Approval

Condition 11 of the U.S. Forest Service's (Forest Service) section 4(e) conditions (Appendix B), requires the licensee to prepare a road plan in consultation with the Forest Service for its review and approval, and implement specific measures without prior Commission approval. The road plan must also be submitted to the Commission for approval 60 days prior to the commencement of construction of the flowline replacement.

The licensee must include with the plan documentation that it developed the plan in consultation with, and has received approval from, the Forest Service. The Commission reserves the right to make changes to any plan filed. Upon Commission approval, the plan becomes a requirement of the license, and the licensee must implement the plan, including any changes required by the Commission. Any changes to the plan requires approval by the Commission before implementing the proposed change.

(b) Requirement to File Amendment Applications

Certain conditions of Oregon Department of Environmental Quality's water quality certification and Forest Service conditions contemplate long-term changes to project operations or facilities (e.g., certification conditions 2.e.i, 3.f.i, 4.d.i, and 4.h), or changes to the requirements of the mandatory conditions (e.g., certification condition 5.b, Forest Service condition 1). These changes may not be implemented without prior Commission authorization granted after the filing of an application to amend the license. In any amendment request, the licensee must identify related project requirements and request corresponding amendments or extensions of time as needed to maintain consistency among requirements.

Article 402. *Auxiliary Minimum Flow Release System.* To reliably meet the minimum flow requirements of Appendix A, condition 4(e), the licensee must construct

the auxiliary minimum flow release system described in section E.5.1.1 and shown on Figure 1 of PacifiCorp's letter filed on February 12, 2018.

Within six months of license issuance, the licensee must file for Commission approval a construction schedule for the auxiliary minimum flow release system.

Article 403. Project Operation. The licensee must operate the project as follows:

(1) while operating the project in a run-of-river mode as specified by Appendix A, condition 1(a), the licensee must at all times act to minimize the fluctuation of the impoundment surface elevation by maintaining a discharge from the project such that, at any point in time, the sum of project outflows approximates the sum of inflows to the project; and

(2) operate the project to restrict ramping rates in the bypassed reach to the rates specified in Appendix A, condition 4(f) as measured at the existing U.S. Geological Survey stream gage located about 0.25 mile downstream of South Fork Dam.

The run-of-river, minimum flow, and ramping rate requirements of Appendix A conditions 1(a), 4(e), and 4(f) may be temporarily modified as follows:

Planned Deviations

Run-of-river operation, minimum flow, and ramping rate requirements may be temporarily modified for short periods, of up to 3 weeks, after mutual agreement among the licensee and the U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife (collectively, resource agencies). After concurrence from the resource agencies, the licensee must notify the Commission within 14 days and file a report with the Secretary of the Commission as soon as possible, but no later than 30 days after the onset of the planned deviation. Each report must include: (1) the reasons for the deviation and how project operations were modified, (2) the duration and magnitude of the deviation, (3) any observed or reported environmental effects, and (4) documentation of consultation with the resource agencies. For planned deviations exceeding 3 weeks, the licensee must file an application for a temporary amendment of the operational requirements of this license, and receive Commission approval prior to implementation.

Unplanned Deviations

Run-of-river operation, minimum flow, and ramping rate requirements may be temporarily modified if required by operating emergencies beyond the control of the licensee (*i.e.*, unplanned deviations). For any unplanned deviation from run-of-river operation or minimum flow requirements that lasts longer than 3 hours *or* results in visible environmental effects such as a fish kill; or any deviation from project-induced ramping rate requirements, the licensee must notify the resource agencies within 24

hours, and the Commission within 14 days, and file a report as soon as possible, but no later than 30 days after each such incident. The report must include: (1) the cause of the deviation; (2) the duration and magnitude of the deviation; (3) any pertinent operational and/or monitoring data; (4) a timeline of the incident and the licensee's response; (5) any comments or correspondence received from the resource agencies, or confirmation that no comments were received from the resource agencies; (6) documentation of any observed or reported environmental effects; and (7) a description of measures implemented to prevent similar deviations in the future.

For unplanned deviations from run-of-river operation or minimum flow requirements lasting 3 hours or less that do not result in visible environmental effects, the licensee must include in the annual operation compliance monitoring report required by Article 404, a description of each incident that occurred during the prior October 1 through September 30 time period. The report must include for each 3 hours or less deviation: (1) the cause of the deviation; (2) the duration and magnitude of the deviation; (3) any pertinent operational and/or monitoring data; (4) a timeline of the incident and the licensee's response to each deviation; (5) any comments or correspondence received from the resource agencies, or confirmation that no comments were received from the resource agencies; and (6) a description of measures implemented to prevent similar deviations in the future.

Article 404. Operation Compliance Monitoring Plan. Within one year of license issuance, the licensee must file with the Commission for approval, an operation compliance monitoring plan that describes how the licensee will monitor and report compliance with the operational requirements of the license. The plan, at a minimum, must include:

(1) a detailed description of how the licensee will monitor and document compliance with the run-of-river, minimum flow, and ramping rate requirements of the license, including a description of how the licensee will differentiate between natural and project-induced ramping events;

(2) a provision to install a communication link between the U.S. Geological Survey (USGS) stream gage in the bypassed reach located about 0.25 mile downstream of South Fork Dam and the project's automated control systems so that the licensee can monitor compliance with the minimum flow and ramping rate requirements of the license in real time;

(3) a provision to maintain a log of project operation;

(4) a provision to file with the Commission an operation compliance monitoring report by January 31 of each year following license issuance that documents compliance with the operational requirements of the license for the preceding October 1 to September 30 monitoring period; and

(5) an implementation schedule.

The licensee must prepare the plan after consultation with the Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife Service. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project specific information.

The Commission reserves the right to require changes to the plan. The licensee must not begin implementing the plan until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission.

Article 405. *Notification and Reporting of Unanticipated Events or Emergencies.* Upon the occurrence of unanticipated events or emergencies that affect project operating requirements or the environment, the licensee must provide notifications to the entities specified below.

(1) In the event of a hazardous substance spill, unintended discharge from the project's water conveyance system, or other emergency event, the licensee must notify the Oregon Emergency Response System within 24 hours.

(2) In the event of an unanticipated circumstance or emergency situation in which fish or wildlife are being endangered, harmed, or killed by the project or its operation, the licensee must notify the U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife within 24 hours.

Article 406. *Sediment and Dredging Plan.* Within six months of the filing of the road plan required by Appendix B, condition 11, and at least 60 days prior to any dredging within the project's impoundment on the South Fork Rogue River, the licensee must file for Commission approval a sediment and dredging plan for dredging the impoundment and placing the dredged material along the bypassed reach stream bank for the purpose of enhancing downstream trout spawning habitat. The plan must identify the specific location and size of the sediment disposal site along the bypassed reach stream bank.

The licensee must prepare the plan after consultation with Oregon Department of Fish and Wildlife (Oregon DFW). The licensee must include with the plan

documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to Oregon DFW, and specific descriptions of how Oregon DFW's comments are accommodated by the plan. The licensee must allow a minimum of 30 days for Oregon DFW to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project specific information.

The Commission reserves the right to require changes to the plan. The licensee must not begin implementing the plan until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission.

Article 407. Large Woody Debris Management. The licensee must, to the extent practicable and in consideration of the safety of project personnel and structures, place any large woody debris removed upstream of South Fork Dam at locations downstream of the dam that, during high flow events, could reasonably be expected to result in the transport of the large woody debris.

Article 408. Trout Salvage Plan. Within six months of license issuance, the licensee must file for Commission approval a trout salvage plan for the relocation of trout trapped in the project diversion canal or fish ladder during planned maintenance activities that result in the dewatering of the diversion canal or fish ladder. At a minimum, the plan must include the following: (1) a provision to notify the Oregon Department of Fish and Wildlife (Oregon DFW) and U.S. Fish and Wildlife Service (FWS) at least two weeks in advance of any planned canal or fish ladder maintenance shutdowns that would dewater either the diversion canal or fish ladder; (2) a specific description of the procedures for capturing, handling, and relocating any fish trapped in the diversion canal between South Fork Dam and the fish screen, or fish ladder; and (3) an implementation schedule.

The licensee must prepare the plan after consultation with Oregon DFW and FWS. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project specific information.

The Commission reserves the right to require changes to the plan. The licensee must not begin implementing the plan until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission.

Article 409. Maintenance Activities. The licensee must conduct any planned maintenance activities that will require dewatering the water conveyance system between July 1 and September 30.

Article 410. Reservation of Authority to Prescribe Fishways. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain fishways as may be prescribed by the Secretary of the Interior pursuant to section 18 of the Federal Power Act.

Article 411. Vegetation Management Plan. The Vegetation Management Plan filed on December 30, 2016, as Appendix C of the final License Application Exhibit E is approved and made part of the license.

Article 412. Wildlife Crossing Plan. Within two years of license issuance, the licensee must file for Commission approval a wildlife crossing plan that includes: (1) detailed design drawings and map showing the location of eight new 2-foot-wide small animal crossings to be installed over the project canal, based on the description in Exhibit E, page E-94 of the Final License Application; (2) a detailed design drawing and a map showing the location, and type (over or under) of five new 12-foot-wide wildlife crossings provided across the new steel pipeline based on the designs shown on Exhibit F, drawing F-4 of the Final License Application; (3) a detailed design drawing for enlarging the six existing 4-foot-wide large wildlife crossings over the project canal to 12 feet in width based on the description in Exhibit E, page E-93 of the Final License Application; (4) a provision to install 40-inch-tall fine mesh fencing at the base of the existing wildlife fencing along both sides of the canal and the existing and new wildlife crossings to prevent small animals from entering the canal; (5) a construction schedule for installing the crossings and new fencing; (6) a provision to monitor deer and elk use of the new 12-foot-wide crossings for five years following their installation via photographic methods as described in the Wildlife Crossing and Inspection Program required by Article 413, and (7) a provision for filing a report for Commission approval by December 31 of the sixth year following installation that summarizes deer and elk use of the new crossings and includes proposals, if any, for adding new crossings or modifying the existing crossings to ensure deer and elk use.

The licensee must select the locations of all new wildlife crossings, and the fine-mesh fencing material, after consultation with the U.S. Forest Service (Forest Service), Oregon Department of Fish and Wildlife (Oregon DFW), and U.S. Fish and Wildlife Service (FWS). The monitoring report of deer and elk use of the new wildlife crossings must be provided to Forest Service, Oregon DFW, and FWS for review and comment before being filed with Commission.

The licensee must include in its filing documentation of consultation, copies of

comments and recommendations on the plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-disturbing or land-clearing activities must begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

Article 413. Wildlife Crossing Fencing and Inspection Program. Within two years of license issuance, the licensee must file for Commission approval a revised Wildlife Crossing and Fencing Inspection Program that includes all existing and new crossings and fencing required by Article 412. The revised program must include the provisions of the program approved September 7, 1989, plus a provision to photographically document any signs of wildlife use of the crossings observed during the inspections, particularly any deer, elk, or wolf observations, and to provide a written report of the previous year's inspection and maintenance activities to the U.S. Forest Service, Oregon Department of Fish and Wildlife, and U.S. Fish and Wildlife Service by January 31 of each year following Commission approval of the program.

The Commission reserves the right to require changes to the inspection program. Upon Commission approval, the licensee must implement the program, including any changes required by the Commission.

Article 414. Avian Protection Plan. Within six months of license issuance, the licensee must file for Commission approval an avian protection plan specific to the project.

The project-specific plan, at a minimum, must: (1) include those provisions of the licensee's corporate-wide Avian Protection Plan applicable to the project; (2) address how the licensee considered the Avian Power Line Interaction Committee's guidelines in "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006"; (3) include a provision to maintain a database of avian mortalities associated with the project; and (4) a schedule for submitting an annual report on any mortalities that occurred during the previous year to the Oregon Department of Fish and Wildlife (Oregon DFW) and the U.S. Fish and Wildlife Service (FWS).

The licensee must prepare the plan after consultation with Oregon DFW and FWS. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and

provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-disturbing or land-clearing activities must begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

Article 415. *Programmatic Agreement and Historic Properties Management Plan.* The licensee must implement the "Programmatic Agreement Between the Federal Energy Regulatory Commission and the Oregon Historic Preservation Officer for Managing Historic Properties that May be Affected by Issuance of a License to PacifiCorp for the Continued Operation of the Prospect No. 3 Hydroelectric Project in Jackson County, Oregon (FERC No. 2337-077)," executed on December 22, 2018, and including but not limited to the Historic Properties Management Plan (HPMP) for the project required by Forest Service condition 10. Pursuant to the requirements of this Programmatic Agreement, the licensee must revise the HPMP and file it for Commission approval within six months of the effective date of the license. In addition to the existing provisions in the HPMP, the revised HPMP must include detailed procedures and protocols for the following: (1) identifying and managing existing historic properties; (2) determining National Register eligibility and effects to historic properties; (3) resolving adverse effects to historic properties resulting from the operation, maintenance or modification of the project over the term of the new license, and (4) periodic review of the HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license.

The licensee must prepare the revised HPMP after consultation with Oregon State Historic Preservation Office, U.S. Forest Service, and Cow Creek Band of Umpqua Indians. The licensee must include with the revised HPMP documentation of consultation, copies of comments and recommendations on the completed HPMP after it has been revised and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the HPMP. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

If the Programmatic Agreement is terminated prior to Commission approval of the revised HPMP, the licensee must obtain approval from the Commission and Oregon SHPO before engaging in any ground-disturbing activities or taking any other action that may affect any historic properties within the project's area of potential effect.

Article 416. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee must have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee must also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee must take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee must require multiple use and occupancy of facilities for access to project lands or waters. The licensee must also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee must: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project impoundment. No later than January 31 of each year, the licensee must file with the Commission a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must file a letter with the Commission, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Commission's authorized representative, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee must consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee must determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed must not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; ; and (ii) the grantee must take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee must not unduly restrict public access to project lands and waters.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project must be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article must not apply to any part of the public lands and reservations of the United States included within the project boundary.

(G) The licensee must serve copies of any Commission filing required by this order on any entity specified in the order to be consulted on matters relating to that filing. Proof of service on these entities must accompany the filing with the Commission.

(H) 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. § 825*l* (2018), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2019). The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order. The licensee's failure to file a request for rehearing constitutes acceptance of this order.

Terry L. Turpin
Director
Office of Energy Projects

Form L-1
(October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

TERMS AND CONDITIONS OF LICENSE
FOR CONSTRUCTED MAJOR PROJECT AFFECTING
LANDS OF THE UNITED STATES

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and

supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15

of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

Article 7. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 9. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 10. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other

projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the

relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 16. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity

for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 19. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Timber on lands of the United State cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 22. The Licensee shall do everything reasonably within its power, and

shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 23. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 24. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 25. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 26. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 27. The Licensee shall make provision, or shall bear the reasonable cost,

as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 28. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 29. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice and opportunity for hearing.

Article 30. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may

prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 31. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

Article 32. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

APPENDIX A**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CLEAN WATER
ACT SECTION 401 CERTIFICATION CONDITIONS****Prospect No. 3 Hydroelectric Project
FERC Project No. 2337**

Upon Federal Energy Regulatory Commission (FERC) issuance of a license for the Prospect 3 Hydroelectric Project (Project), PacifiCorp must comply with the following § 401 Certification conditions:

I. Project Operation

- a. Throughout the life of the FERC license, PacifiCorp must continue to run the Prospect 3 hydroelectric Project in “run-of-river” mode with a maximum diversion of 150 cubic feet per second from the South Fork Rogue River. In accordance with applicable law, PacifiCorp shall notify DEQ if FERC authorizes modification to these operations so as to allow DEQ to determine whether such changes may affect compliance with water quality standards.

II. Dissolved Oxygen

- a. Within 90 days of FERC License issuance, PacifiCorp shall submit a Dissolved Oxygen Monitoring Plan to DEQ, which addresses the dissolved oxygen monitoring and reporting requirements presented below. Upon DEQ approval, PacifiCorp shall submit to FERC this Monitoring Plan as part of the required § 401 Certification Conditions for the Project for the purposes of any federal license or permit.
- b. At a minimum the dissolved oxygen monitoring plan shall contain the following:
 - i. Identification of monitoring locations. PacifiCorp shall monitor at locations that are representative of dissolved oxygen levels in the South Fork Rogue River above and below the diversion dam.
 - ii. PacifiCorp shall measure dissolved oxygen, percent saturation, temperature and flow in the Project at monitoring locations in the South Fork Rogue River above and below the diversion dam. Dissolved oxygen shall be measured continuously at a minimum interval of one hour from April 1 through July 31 of the first project year of new project operations.

- iii. The Dissolved Oxygen Monitoring Plan shall describe the equipment, calibration procedures, monitoring methods, monitoring locations, and frequency of monitoring necessary to quantify the effects of project operations on dissolved oxygen.
- c. PacifiCorp shall implement the Dissolved Oxygen Monitoring Plan in accordance with DEQ's approval.
- d. Dissolved Oxygen Reporting:
 - i. Subject to this section II.e.ii, PacifiCorp shall submit annual water quality monitoring reports to DEQ by January 31 of each year. Each report shall include an analysis of dissolved oxygen monitoring data from each station including graphical representation of daily minimum, maximum, and average temperature measurements. To evaluate dissolved oxygen data with the applicable criteria given in Table 21 of OAR 340-041-0016, PacifiCorp shall also present data as 7-day mean minimum (7D).
- e. Dissolved Oxygen Adaptive Management Plan:
 - i. If DEQ determines monitoring indicates the project is causing or contributing to a violation of the dissolved oxygen criteria, PacifiCorp shall develop and propose measures to address the dissolved oxygen deficit as part of an adaptive management plan. PacifiCorp shall develop and submit to DEQ an adaptive management plan to ensure that project does not cause or contribute to a violation of the dissolved oxygen criteria. Following DEQ approval, PacifiCorp shall implement the plan in accordance with DEQ's approval.
 - ii. If DEQ determines monitoring demonstrates that the project does not cause or contribute to a violation of dissolved oxygen criteria, then DEQ may allow PacifiCorp to cease monitoring for a period of time or for the remaining term of the license.

III. Total Dissolved Gas

- a. Following FERC License issuance, PacifiCorp shall submit annual water quality monitoring reports to DEQ by January 31 of each year summarizing the frequency of spill events to Daniels Creek. Following DEQ review of the annual report, DEQ may request PacifiCorp meet with DEQ to discuss the spill events.
- b. Following the meeting, if requested by DEQ, PacifiCorp shall submit a Total Dissolved Gas Monitoring Plan to DEQ, which addresses the total dissolved gas monitoring and reporting requirements presented below. Upon DEQ

- approval, PacifiCorp shall submit to FERC this Monitoring Plan as part of the required § 401 Certification Conditions for the Project for the purposes of any federal license or permit. At a minimum PacifiCorp shall measure total dissolved gas in Daniels Creek and Middle Fork Rogue River during an overflow or other non-routine discharge of diverted flows via the forebay and tailrace spillways to Daniels Creek and the Middle Fork Rogue River.
- c. The monitoring plan shall include the following minimum components:
 - i. Proposed data collection procedures including description of equipment and methods.
 - ii. Identification of monitoring locations.
 - iii. Proposed evaluation procedures.
 - d. PacifiCorp shall implement the Total Dissolved Gas Monitoring Plan in accordance with DEQ's approval.
 - e. Total Dissolved Gas Reporting:
 - i. Subject to this section III.f.ii, PacifiCorp shall submit annual water quality monitoring reports to DEQ by January 31 of each year.
 - f. Total Dissolved Gas Adaptive Management Plan:
 - i. If DEQ determines monitoring indicates the total dissolved gas criteria are not met, PacifiCorp shall develop and propose measures to address the total dissolved gas criteria exceedance as part of an adaptive management plan. PacifiCorp shall develop and submit to DEQ an adaptive management plan to ensure that project does not cause or contribute to a violation of the total dissolved gas criteria. Following DEQ approval, PacifiCorp shall implement the plan in accordance with DEQ's approval.
 - ii. If DEQ determines monitoring demonstrates that the total dissolved gas criteria are met, then DEQ may allow PacifiCorp to cease monitoring for a period of time or for the remaining term of the license.

IV. Biological Criteria; Statewide Narrative Criteria; Protection of Designated Beneficial Uses; Antidegradation; Compliance with Other Appropriate Requirements of State Law

- a. Within 180 days of FERC License issuance, PacifiCorp shall submit a Macroinvertebrate Monitoring Plan to DEQ that addresses the macroinvertebrate monitoring and reporting requirements presented below. Upon DEQ approval, PacifiCorp shall submit to FERC this Monitoring Plan as part of the required § 401 Certification Conditions for the Project for the purposes of any federal license or permit. At a minimum, PacifiCorp shall include the following components in the monitoring plan:

- i. A description of an appropriate sampling technique for macroinvertebrate monitoring below the diversion dam, which shall include standard bioassessment metrics including densities, abundance, richness and tolerance.
 - ii. Identification of monitoring locations below the diversion dam, which shall include, at a minimum, two sampling locations in the South Fork Rouge River between the diversion dam release point and river mile 7.
 - iii. Identification of the frequency of macroinvertebrate monitoring below the diversion dam, which shall include proposed sampling from mid to late summer.
 - b. PacifiCorp shall implement the Macroinvertebrate Monitoring Plan in accordance with DEQ's approval.
 - c. Macroinvertebrate Reporting:
 - i. Subject to this section IV.d.ii, PacifiCorp shall submit annual monitoring reports to DEQ by January 31 of each year.
 - d. Macroinvertebrate Adaptive Management Plan:
 - i. If DEQ determines monitoring indicates the resident biological community below the diversion dam is impaired or in poor condition based on comparison of the standard bioassessment metrics to the monitoring results, PacifiCorp shall develop and propose measures to address compliance with the biocriteria standard as part of an adaptive management plan. PacifiCorp shall develop and submit to DEQ an adaptive management plan to ensure that the project does not cause or contribute to a violation of biocriteria standard. Following DEQ approval, PacifiCorp shall implement the plan in accordance with DEQ's approval.
 - ii. If DEQ determines monitoring demonstrates that the resident biological community below the diversion dam is in fair or good condition, then DEQ may allow PacifiCorp to cease monitoring for a period of time or for the remaining term of the license.
 - e. PacifiCorp shall discharge a continuous minimum flow from the Project diversion dam into the South Fork Rogue River. The minimum flow released to the South Fork Rogue River shall be equal to or greater than 30 cubic feet per second from March 1 through October 31 and equal to or greater than 20 cubic feet per second from November 1 through February 28 as measured at the United States Geological Survey gage at RM 10.25. If natural inflow to the Project is less than the minimum flow requirement, then all the flow will be discharged into the bypass reach.
 - f. PacifiCorp shall implement an operational ramping rate of 0.2 foot per hour all year.

- g. Ramping Rate Reporting:
 - i. PacifiCorp shall report any operational ramping rates in excess of 0.2 foot per hour within 24 hours of discovery to DEQ and ODFW via electronic mail.
 - ii. PacifiCorp shall submit an annual report to DEQ and ODFW by January 31 of each year summarizing the frequency of operational ramping events exceeding 0.2 foot per hour. PacifiCorp shall meet annually with DEQ and ODFW to discuss the frequency of operational ramping events exceeding 0.2 foot per hour.
- h. Ramping Rate Adaptive Management Plan:
 - i. If requested by DEQ, PacifiCorp shall develop and submit to DEQ an adaptive management plan to reduce the frequency of operational ramping events exceeding 0.2 foot per hour. PacifiCorp shall implement this plan in accordance with DEQ's approval.
- i. Within 18 months of FERC license issuance, PacifiCorp must submit to DEQ a plan to modify the fish ladder to provide consistent flow throughout the fish ladder with jump heights not to exceed 9 inches.
- j. Unless an extension is permitted by DEQ, PacifiCorp must complete modifications to the fish ladder within a year of DEQ's approval of the plan in accordance with its approved terms and specifications.
- k. Within 18 months of FERC license issuance, PacifiCorp must update the Fish Passage Facilities Operations and Maintenance Plan, which must include among others components, the design, operation, and construction of an auxiliary bypass flow system.
- l. After approval of the Fish Passage Facilities Operations and Maintenance Plan and following completion of modifications to the fish passage facilities, PacifiCorp shall operate and maintain the fish passage facilities in accordance with the approved terms of that Plan, including but not limited to the operation of the auxiliary bypass flow system.
- m. PacifiCorp shall integrate its obligations set forth in this section into any plans, proposals, or proposed activities for review by other government agencies.

V. 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 33 USC 1341, DEQ may modify the Certification to add, delete, or modify Certification conditions as authorized by OAR 340-048-0050.

- c. **Project Changes.** PacifiCorp shall notify DEQ of any change in ownership, scope, or operation of the Project. PacifiCorp shall obtain DEQ's review and approval before undertaking any such change to the Project, including but not limited to changes to Project structures, construction, operations, and flows, which, among other changes, may potentially affect water quality.
- d. **Project Repair or Maintenance.** PacifiCorp shall obtain DEQ's review and approval before undertaking Project repair or maintenance activities that may potentially affect water quality (other than repair or maintenance activities authorized by the new FERC license). DEQ may, at PacifiCorp's request, approve specified repair and maintenance activities on a periodic or ongoing basis.
- e. **Project Inspection.** PacifiCorp shall 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.
- f. **Posting of § 401 Certification.** PacifiCorp shall post a copy of these Certification conditions in prominent locations at the Project Powerhouse.
- g. **Water Quality Standards Compliance.** Notwithstanding the conditions of this Certification, no wastes shall be discharged and no activities shall be conducted which will violate state water quality standards.
- h. **Conflict Between Certification Conditions and Application.** To the extent that there are any conflicts between the terms and conditions in this Certification and how activities, obligations, and processes are described in the Application, the terms and conditions in this Certification, as interpreted by DEQ, shall control.
- i. **Project Specific Fee.** PacifiCorp shall pay the project-specific fee as required by applicable law and in the manner and amount as particularly described in Exhibit A, which is incorporated here in its entirety by this reference.

APPENDIX B**USDA FOREST SERVICE FEDERAL POWER ACT FINAL SECTION 4(e)
TERMS AND CONDITIONS⁷²****Prospect No. 3 Hydroelectric Project
FERC Project No. 2337****Condition No. 1 – Revision of Forest Service Conditions**

The USDA Forest Service reserves its authority to amend or add new terms and conditions, as deemed necessary by the Secretary of Agriculture, in order to address significant new information, changing circumstances and amendments to the License.

Condition No. 2 - Implementation of the License on National Forest System Lands

Special-Use Authorization (SUA). The Licensee shall obtain a SUA from the USDA Forest Service for the occupancy and use of lands previously covered by the SUA issued on September 25, 1989, and any additional NFS lands added to the Project by the new Project License. The Licensee shall apply for this new SUA six (6) months prior to the expiration of its existing SUA. Following issuance of the SUA by the USDA Forest Service, the Licensee shall file it with the Preliminary 4(e) Terms and Conditions Commission. The Licensee shall be responsible for the USDA Forest Service costs of reviewing the application for and issuance of the SUA as described in 36 CFR 251.58.

Approval of Changes on NFS Lands after License Issuance. Notwithstanding any License authorization to make changes to the Project, the Licensee shall receive written approval from the USDA Forest Service prior to making changes in the location of any constructed Project features or facilities on NFS lands, or in Project uses of NFS lands, or any departure from the requirements of any approved exhibits for Project facilities located on NFS lands filed by the Licensee with the Commission. Following receipt of such approval from the USDA Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission describing the changes, the reasons for the changes, and showing the approval of the USDA Forest Service for such changes. The Licensee shall file an exact copy of the report with the USDA Forest Service at the time it is filed with the Commission.

⁷² The Forest Service filed preliminary conditions on May 9, 2017. On November 30, 2017, the Forest Service filed modified conditions 3 and 11, and re-affirmed the remaining preliminary conditions filed on May 9, 2017.

Coordination with Other Authorized Uses on NFS Lands. In the event that portions of the Project area are under federal authorization for other activities and permitted uses, the Licensee shall consult with the USDA Forest Service to coordinate such activity with authorized uses before starting any activity on NFS land that the USDA Forest Service determines may affect another authorized activity.

Site-Specific Plans. The Licensee shall prepare site-specific plans subject to review and approval by the USDA Forest Service for habitat and ground-disturbing activities required by the License on NFS lands, including such activities contained within resource management or maintenance plans required by the License. The Licensee shall prepare site-specific plans for planned activities one year, or as otherwise agreed to by USDA Forest Service, in advance of implementation dates required by the License. For those activities planned in the first year after License issuance, the Licensee shall timely prepare site-specific plans for activities to allow USDA Forest Service review in advance of implementation. USDA Forest Service will initiate discussions with Licensee regarding the plan and any issues within 30 days of plan submittal. For emergency situations, where corrective or mitigation actions must be implemented immediately, the Licensee will coordinate with the USDA Forest Service to expedite approvals and/or permits.

Site-specific plans shall include:

1. A map depicting the location of the proposed activity, the total acres impacted, and GPS coordinates.
2. A description of the USDA Forest Service land management area designation for the location of the proposed activity, the source where the description was obtained, and applicable standards and guidelines.
3. Where required by regulatory procedures, a description of alternative locations, implementation designs and mitigation measures considered including erosion control and effectiveness monitoring designed to meet applicable standards and guidelines.
4. Draft biological evaluations or assessments including survey data as required by regulations applicable to habitat or ground-disturbing activities on NFS lands in existence at the time the plan is prepared. An environmental analysis of the proposed action consistent with the USDA Forest Service policy and regulations for implementation of the National Environmental Policy Act in existence at the time the plan is prepared for a Commission licensed project on NFS lands. Environmental analysis completed by the Commission or others may be relied upon as appropriate on a project specific basis as agreed to by USDA Forest Service.
5. A Spill Prevention and Control and Hazardous Materials Plan for hazardous materials storage, spill prevention and cleanup on NFS lands.
6. A description of the proposed use of any pesticides or herbicides on NFS lands.

Condition No. 3 – Resource Coordination

The Licensee shall hold an Annual Resource Coordination (ARC) meeting by April 15 of each year for the term of the License with the USDA Forest Service. The purpose of the ARC meeting is to exchange information and coordinate efforts for implementing the License and ongoing Project operations and maintenance (O&M) activities subject to approval by USDA Forest Service under Condition No. 2. The timing and frequency of the ARC meetings may be revised, if agreed to, in writing within 30 days of notice, by the USDA Forest Service and Licensee.

At least 30 days before the ARC meeting, the Licensee shall provide to the USDA Forest Service a draft Annual Work Plan consisting of the following elements:

- A. summary of the previous calendar year's Project management activities, monitoring results, and compliance with the License terms and conditions unless otherwise specified by the USDA Forest Service;
- B. draft current year Work Plan which describes planned Project activities underway or to be implemented in the current year on National Forest System (NFS) lands; and,
- C. draft out-year Work Plan which describes the Project activities planned on NFS lands for the following year.

The USDA Forest Service will review the draft Annual Work Plan with the following objectives:

- A. providing comments with respect to the timing and content of work submitted for USDA Forest approval under Condition No. 2; and,
- B. discussing any revisions to the current year Work Plan and discussing and agreeing to the out year Work Plan.

Within thirty (30) days following the ARC meeting, the Licensee shall provide a revised Annual Work Plan to the USDA Forest Service that is responsive to concerns and comments discussed at the ARC.

If the Licensee and USDA Forest Service agree not to have an Annual Resource Coordination meeting then the Licensee shall provide the USDA Forest Service a draft Annual Work Plan by April 15. Within thirty (30) days of receiving the draft Annual Work Plan, the USDA Forest Service will provide comments to the Licensee. The Licensee shall provide USDA Forest Service a revised Annual Work Plan that is responsive to USDA Forest Service concerns.

Condition No. 4 - Surveys, Land Corners

Licensee shall avoid disturbance to all public land survey monuments, private property corners, and forest boundary markers. In the event that any such land markers or monuments on National Forest System lands are destroyed by an act or omission of Licensee, in connection with the use and/or occupancy authorized by this License, depending on the type of monument destroyed, Licensee shall reestablish or reference same in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," (2) the specifications of the County Surveyor, or (3) the specifications of USDA Forest Service. Further, Licensee shall ensure that any such official survey records affected are amended as provided by law.

Condition No. 5 - Surrender of License

Concurrent with filing an application for License surrender with the Commission, the Licensee shall file a restoration plan for National Forest System lands for approval by the USDA Forest Service. The restoration plan shall identify improvements to be removed, restoration measures to be implemented, and describe financial mechanisms that ensure performance of the restoration measures.

Condition No. 6. – Indemnification

The Licensee shall indemnify, defend, and hold the United States harmless for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the Licensee in connection with the Licensee's use and/or occupancy of National Forest System (NFS) lands authorized by this License. This indemnification and hold harmless provision applies to any acts and omissions of the Licensee or the Licensee's assigns, agents, employees, affiliates, subsidiaries, fiduciaries, contractors, or lessees in connection with the Licensee's use and/or occupancy of NFS lands authorized by this License that result in: (1) violations of any laws and regulations that are now or that may in the future become applicable, and including but not limited to environmental laws such as the Comprehensive Environmental Response Compensation and Liability Act, Resource Conservation and Recovery Act, Oil Pollution Act, Clean Water Act, Clean Air Act; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States (other than as contemplated by the License); or (4) the release or threatened release of any solid waste, hazardous substances, pollutant, contaminant, or oil in any form in the environment.

Condition No. 7 - Special Status Species

Annual Review of Special-Status Species Lists and Assessment of New Species on Federal Land

The Licensee shall, beginning the first full calendar year after License issuance, in consultation with the USDA Forest Service, annually review the current lists of special status species (species that are federally endangered or threatened, proposed threatened or endangered, USDA Forest Service sensitive, state threatened or endangered, and state species of special concern) that might occur on National Forest System (NFS) lands, as appropriate, in the Project Area that may be directly affected by Project operations. When a species is added to one or more of the lists, the USDA Forest Service, in consultation with Licensee shall determine if the species or unsurveyed suitable habitat for the species is likely to occur on NFS lands within the Project boundary, as appropriate. For such newly added species, if the USDA Forest Service determines that the species is likely to occur on such NFS lands within the Project boundary and that the Project has the potential to impact such species, Licensee shall develop and implement a study plan in consultation with and subject to USDA Forest Service approval to reasonably assess the effects of the Project on the species. Licensee shall incorporate USDA Forest Service approved protocols when developing study plans. The study plan shall be developed within one year of the USDA Forest Service determining that a newly added species may occur on NFS lands within the Project boundary and may potentially be impacted by the Project. Licensee shall prepare a report on the study including objectives, methods, results, recommended resource measures where appropriate, and a schedule of implementation, and shall provide a draft of the final report to the USDA Forest Service for review and approval. Licensee shall file the report, including evidence of consultation, with the Commission and shall implement those resource management measures required by the Commission. All surveys and reports shall be completed by a journey-level biologist or botanist. Subject to the approval of the USDA Forest Service, the journey-level biologist or botanist may be an employee of the Licensee, USDA Forest Service, or an approved contractor. All incurred costs to complete survey and associated reports are the responsibility of the Licensee.

If new occurrences of USDA Forest Service special status species as defined above are detected on NFS lands prior to or during ongoing construction, operation, or maintenance of the Project or during Project operations, Licensee shall notify the USDA Forest Service within three business days. If the USDA Forest Service determines that the Project-related activities are adversely affecting USDA Forest Service special status species, the Licensee shall, in consultation with and subject to USDA Forest Service approval, develop and implement appropriate protection measures.

If new occurrences of state or federally listed or proposed threatened or endangered species are detected prior to or during ongoing construction, operation, or maintenance of the Project or during Project operations, Licensee shall immediately notify the Commission, USDA Forest Service, and the relevant Service Agency for consultation or conference in accordance with the Endangered Species Act. If state listed or fully protected species are affected, Oregon Department of Fish and Wildlife shall be notified.

Condition No. 8 – Erosion and Sediment Control and Management

The Licensee shall, within six (6) months following License issuance, revise the Erosion and Sediment Control Plan, Prospect No. 3 Final License Application Volume III, Appendix A (December 2016), in consultation with and subject to the USDA Forest Service approval. The Erosion and Sediment Control Plan is to include the following minimum components:

- A. Methods for initial and periodic inventory and monitoring of the entire Project area and Project-affected National Forest System lands to identify erosion sites and assess site condition for each. Periodic monitoring and inventory will include recording effectiveness of erosion treatment measures, and identification of new erosion sites for the term of the new License.
- B. Criteria for ranking and treating erosion sites including a risk rating and hazard assessment for scheduling erosion treatment measures and monitoring at each site.
- C. Erosion control measures that incorporate current standards, follow USDA Forest Service regulations and guidance (e.g., Land Resource Management Plan, and Best Management Practices), are customized to site-specific conditions, and approved by the USDA Forest Service.
- D. Develop and implement a schedule for treatment (e.g., repair, mitigate, monitor) of erosion sites, including a list of sites requiring immediate mitigation and schedule for their implementation.
- E. Effectiveness monitoring of completed erosion control treatment measures after treatment in order to determine if further erosion control measures are needed. If erosion control measures on or affecting National Forest System lands are not effective, Licensee will implement additional erosion control measures approved by USDA Forest Service and continue monitoring until the site has stabilized.
- F. Protocols for emergency erosion and sediment control.
- G. Process for documenting and reporting inventory and monitoring results including periodic plan review and revision. Documentation shall include a USDA Forest Service compatible GIS database for maps keyed to a narrative description of detailed, sitespecific, erosion treatment measures and sediment monitoring results.
- H. Licensee shall develop site-specific temporary erosion control measures, approved by the USDA Forest Service, for new construction or non-routine maintenance on or affecting National Forest System lands. These temporary measures shall prevent erosion, stream sedimentation, dust, and soil mass movement during the period of ground disturbance until replaced by permanent measures.

The Erosion and Sediment Control Plan shall be filed with the Commission for approval. After Commission approval, the Licensee shall immediately implement the Erosion and Sediment Control Plan.

If the Licensee revises the Erosion and Sediment Control Plan as required by this condition prior to License issuance and the revised plan is incorporated into the new Project License, the requirements of this condition shall have been met.

Condition No. 9 – Fire and Fuels Management Plan

Sixty (60) days prior to any Project ground disturbance, the Licensee shall complete, in consultation with and subject to USDA Forest Service approval, a Fire and Fuels Management Plan (FFMP). Upon Commission approval, Licensee shall implement the FFMP. The FFMP shall describe the Licensee's responsibility for the prevention, including fuels treatment, reporting, emergency response, and investigation of fires related to Project operations, including, but not limited to, the following components:

- Identify fire hazard reduction measures and reoccurring maintenance measures to prevent the escape of Project-induced fires.
- Address fire danger and public safety associated with the Project.
- Identify water drafting sites and other fire suppression support resources.
- Emergency Response Preparedness: identify and analyze fire prevention needs including equipment type and personnel availability.
- Reporting: Licensee shall report any Project-related fires immediately to Forest Service.
- Provide Forest Service a list of the locations of available fire suppression equipment and type and the location and availability of fire suppression personnel.

The Licensee shall monitor the Industrial Fire Precaution Level (IFPL) restrictions as they change throughout fire seasons. As IFPL changes, waiver requests may be required and approved by the USDA Forest Service in order to continue Project operations during elevated fire conditions.

Condition No. 10 – Historic and Archaeological Resources

The Licensee shall implement the Historic Properties Management Plan (HPMP), Final License Application Volume III, Appendix D (December 2016).

The Licensee shall notify the USDA Forest Service if the HPMP is amended or terminated before the end of the term of the License. If there is an unanticipated discovery of historic property or human remains located on National Forest System (NFS) lands, the protocols for discovery and treatment in the HPMP shall be followed. The Licensee shall immediately cease all construction and maintenance activities should

the Licensee or its contractors encounter any cultural material (i.e., historic or prehistoric) on NFS lands and shall immediately notify the Rogue River-Siskiyou National Forest (RRSNF) Archaeologist of the discovery. Ground disturbing activity in the vicinity of the discovery shall not proceed until approved by the Forest Supervisor (RRSNF).

Condition No. 11 – Project Roads and Bridges

Six months prior to planned reconstruction of the vehicle access bridge over the flowline and road spur that would extend from the flow line vehicle access bridge to the bypass reach, as described in the Prospect No. 3 Final License Application (FLA) Volume I, page C-4 (December 2016), the Licensee shall submit a Road Plan to the USDA Forest Service for review and approval. The Road Plan shall include: a) bridge and road spur engineering specifications and design drawings, b) a description of all slide removals, c) a description of slump repairs, and d) identification of slide removal material disposal sites.

No reconstruction or construction of these features or exiting Project access routes on National Forest System lands shall proceed without written Forest Service approval. The Licensee can carry out routine road surface maintenance that includes grading, brushing, pothole repairs, drainage maintenance, and tree blow down removal consistent with the Best Management Practices described in FLA Volume III, pages 10-21 (December 2016).

The Licensee shall notify the USDA Forest Service High Cascades District Ranger before removal of any slide material from the roads on National Forest System (NFS) lands. All slide material removal and slump repairs on NFS lands must have High Cascades District Ranger approval prior to commencement of work. For slide material disposal on NFS lands, suitable waste areas shall be approved by the USDA Forest Service.