194 FERC ¶ 61,054
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Laura V. Swett, Chairman;
David Rosner, Lindsay S. See,
Judy W. Chang, and David LaCerte.

FFP Project 101, LLC Project No. 14861-002

ORDER ISSUING ORIGINAL LICENSE

(Issued January 22, 2026)

Introduction

1. On June 23, 2020, Rye Development, on behalf of FFP Project 101, LLC (FFP),[1] filed, pursuant to Part I of the Federal Power Act (FPA),[2] an application for an original major license to construct, operate, and maintain the Goldendale Energy Pumped Storage Hydroelectric Project No. 14861 (Goldendale Project). The 1,200-megawatt (MW) closed-loop project will be located about 8 miles southeast of the City of Goldendale, Klickitat County, Washington.[3] The project as proposed by FFP will occupy 18.1 acres of federal land owned by the U.S. Army Corps of Engineers (Corps) and administered by the Bonneville Power Association (BPA).[4] As discussed below, this order issues an original license for the Goldendale Project, subject to certain conditions.

[1] FFP is the applicant and would own and operate the project. Rye Development is FFP's developer and agent for the project. Unless otherwise noted, this order uses FFP to refer to FFP, Rye Development, or both.

[2] 16 U.S.C. §§ 791(a)–825(r).

[3] The project is a closed-loop facility, meaning that it does not have project works located on a natural waterway. However, it will receive fill and replacement water from a non-project pumping station located on an intake pool adjacent to the Columbia River.

[4] The Columbia River is a navigable waterway of the United States. 2 FPC Ann. Rep. 145 (1922). Because the project will occupy federal land and draw water from a navigable waterway, it is required to be licensed by section 23(b)(1) of the FPA. 16 U.S.C. § 817(1).

Background

2. On December 17, 2020, the Commission issued a public notice that was published in the *Federal Register*, accepting FFP's license application for filing and setting February 16, 2021, as the deadline for filing motions to intervene and protests.[5] Washington Department of Fish and Wildlife (Washington DFW), BPA, National Marine Fisheries Service (NMFS), U.S. Department of the Interior (Interior), Washington Department of Ecology (Washington DOE), and Oregon Department of Fish and Wildlife (Oregon DFW) filed timely notices of intervention.[6] Turlock Irrigation District (TID), American Rivers, Friends of the White Salmon River, Columbia Riverkeeper, Sierra Club, and Klickitat County filed timely motions to intervene.[7] Washington Conservation Action Education Fund (WCAEF) filed an untimely motion to intervene, which was denied.[8] TID, in its motion to intervene, and Columbia Gorge Audubon Society filed comments opposing the project.

3. On March 24, 2022, the Commission issued a public notice that was published in the *Federal Register*, indicating the application was ready for environmental analysis and setting May 23, 2022, as the deadline for filing comments, recommendations, terms and conditions, and prescriptions.[9] Washington DFW; Interior; NMFS; American Rivers; TID; the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation); Klickitat County Public Works; jointly, Columbia Riverkeeper, Sierra Club, and Washington Environmental Council; U.S. Environmental Protection Agency (EPA); and NSC Smelter, LLC (NSC Smelter)[10] filed comments and recommendations. FFP filed reply comments.

4. Pursuant to the National Environmental Policy Act of 1969 (NEPA),[11] Commission staff issued a draft environmental impact statement (EIS) on March 31,

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[5] 85 Fed. Reg. 83938 (Dec. 23, 2020).

[6] Under Rule 214(a) of the Commission's Rules of Practice and Procedure, the agencies became a party to the proceeding upon the timely filing of their notices of intervention. 18 C.F.R. § 385.214(a) (2025).

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

[8] Secretary December 1, 2025, Notice Denying Late Intervention.

[9] 87 Fed. Reg. 18363 (Mar. 30, 2022).

[10] NSC Smelter is the landowner of the site for the proposed Goldendale Project.

[11] 42 U.S.C. §§ 4321 *et seq.*; *see also* 18 C.F.R. pt. 380 (2025) (Commission's

2023, analyzing the effects of the proposed project and the alternatives to it. The notice of availability of the draft EIS was published in the *Federal Register* on April 6, 2023, establishing June 6, 2023, as the deadline for filing comments.[12] Commission staff held two meetings on May 3, 2023, in Goldendale, Washington, to receive comments on the draft EIS. The Commission received written comments from FFP, NMFS, Oregon DFW, Washington DFW, Interior, EPA, TID,[13] Klickitat County Public Works, Klickitat County Public Utility District No. 1 (Klickitat PUD), Klickitat County Natural Resources and Economic Development Department, Mayor Mike Canon of the City of Goldendale, Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation (Umatilla Tribes), American Rivers, Columbia Riverkeeper, Mid-Columbia Economic Development District, and members of the public.

5. On February 8, 2024, Commission staff issued the final EIS. The notice of availability of the final EIS was published in the *Federal Register* on February 14, 2024.[14] The final EIS addressed all substantive environmental comments received on the draft EIS. EPA,[15] Columbia Riverkeeper and WCAEF,[16] Mid-Columbia Economic

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regulations implementing NEPA).

[12] 88 Fed. Reg. 20504 (Apr. 6, 2022).

[13] TID filed comments on the draft EIS on behalf of itself and the Tuolumne Wind Project Authority (TWPA), a California Joint Powers Agency formed in 2008 by TID and the Walnut Energy Center Authority. TID June 6, 2023, Draft EIS Comments.

[14] 89 Fed. Reg. 11268 (Feb. 14, 2024)

[15] EPA included comments regarding Commission staff's analysis in the final EIS of the impacts of the project on communities with environmental justice concerns. EPA March 18, 2024, Comments at 1-6. This analysis was based on Executive Orders 12898 and 13985, which were revoked in January 2025. Exec. Order No. 14148, 90 Fed. Reg. 8237 (Jan. 28, 2025) (revoking Executive Order 13985); Exec. Order 14173, 90 Fed. Reg. 8633 (Jan. 31, 2025) (revoking Executive Order 12898). The Commission continues to fulfill its NEPA responsibilities by considering impacts to all potentially affected communities.

[16] Columbia Riverkeeper filed comments on the final EIS on behalf of itself and WCAEF. Columbia Riverkeeper and WCAEF February 21, 2025, Comments. Additionally, Columbia Riverkeeper filed letters opposing the project signed by individuals. Columbia Riverkeeper October 29, 2025, Comments; Columbia Riverkeeper January 2, 2025, Comments; Columbia Riverkeeper December 20, 2024, Comments; Columbia Riverkeeper August 30, 2024, Comments; Columbia Riverkeeper May 15, 2024, Comments; Columbia Riverkeeper May 8, 2024, Comments.

Development District, Mayor Dave Jones of the City of Goldendale, Yakama Nation, Washington State Environmental Justice Council (Washington EJ Council), Mayor Paul Blackburn of the City of Hood River, Klickitat Valley Health, Saint Michael & All Angels Episcopal Church,[17] and U.S. Congressman Dan Newhouse filed comments on the final EIS. Those comments are addressed below.

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

Project Description

A. Project Area

7. The Goldendale Project will be located along the north side of the Columbia River, primarily within a rural and agricultural area just downstream of the Corps' John Day Dam[18] and approximately 8 miles southeast of the City of Goldendale, Washington. The project as proposed by FFP will occupy 529.6 acres of land owned by NSC Smelter, 18.1 acres owned by the Corps and administered by BPA as part of its transmission system, and 133.9 acres of state and other private lands, for a total of 681.6 acres.

8. Portions of the project's lower reservoir will be located on the site of the former Columbia Gorge Aluminum smelter, which is a Resource Conservation and Recovery Act (RCRA) contaminated site that is the subject of ongoing investigation and clean-up by the potentially liable parties (i.e., NSC Smelter and Lockheed Martin Corporation), overseen by Washington DOE. The upper reservoir will be located on the Columbia Hills area, which overlooks the Columbia River and is currently used for wind farms and "non-irrigated agriculture (e.g., wheat and small grains)" and livestock grazing.[19]

9. The project will be located within the traditional territory of the Yakama Nation, the Umatilla Tribes, the Confederated Tribes of the Warm Springs Reservation of Oregon (Warm Springs Tribes), and the Nez Perce Tribe on land ceded to the United States by

[17] Saint Michael & All Angels Episcopal Church filed a letter opposing the project signed by congregants. Saint Michael & All Angels Episcopal Church May 21, 2024, Comments.

[18] The John Day Dam is the third most downstream dam of the 11 dams on the Columbia River.

[19] The project is within TWPA's Windy Point Phase I Project, which includes 62 wind turbines; two turbines are located west of the proposed project and 15 are immediately east of the project. *See* Final EIS at 76.

the Yakama Nation.[20] The Yakama Nation, along with other Tribes including the Nez Perce, Umatilla, and Warm Springs, have asserted that they retain rights to exercise their treaty and reserved rights on these lands, including the ability to hunt, fish, and gather resources.[21]

B. Existing Facilities to be Used by the Project

10. FFP will purchase from Klickitat PUD 7,640 acre-feet of water to initially fill the reservoirs and 360 acre-feet annually to make up for evaporative and seepage losses. Klickitat PUD will supply the water by pumping water from the Columbia River through its pumping station located on the northwest corner of an intake pool adjacent to the Columbia River, approximately two miles south and east of the lower reservoir site. The intake pool is a backwater slough formed by a 500-foot-long rock and gravel-filled embankment berm constructed to support the Burlington Northern Santa Fe (BNSF) railroad. Water from the Columbia River enters the intake pool via seepage through the railroad berm but can also enter via an existing culvert running through the berm. Klickitat PUD pumps the water from the intake pool via an existing 2-mile-long industrial water conveyance line to its water supply vault located at the former Columbia Gorge Aluminum smelter site. As described below, the project will receive water through a new valve installed in the supply vault.

11. FFP will access the upper and lower reservoir sites from existing public roads and 9.3 miles of private roads. Certain segments of the existing private roads will be improved as necessary to accommodate construction vehicles.

C. Proposed Project Facilities

12. The Goldendale Project will consist of an upper and lower reservoir, an underground water conveyance system leading from the upper reservoir to an underground powerhouse with generating/pumping facilities, an underground water conveyance system from the powerhouse to the lower reservoir, access tunnels, a

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[20] *See* Treaty between the United States and the Yakama Nation of Indians, June 9, 1855, 12 Stat. 951; Treaty between the United States and the Walla Walla, Cayuses, and Umatilla Tribes and Bands of Indians in Washington and Oregon Territories, June 9, 1855, 12 Stat. 945; Treaty between the United States of America and the Nez Perce Indians, June 11, 1855, 12 Stat. 957; and Treaty between the United States and the Confederated Tribes and Bands of Indians in Middle Oregon, June 25, 1855, 12 Stat. 963.

[21] *See, e.g.*, Yakama Nation April 28, 2023, Letter at 1-2; Umatilla Tribes January 23, 2024, Draft EIS Comments at 1.

combination underground and overhead transmission line, a substation, and accompanying facilities.

13. The upper reservoir will consist of a 175-foot-high, 8,000-foot-long concrete-faced rockfill embankment. The reservoir will be lined with concrete to reduce seepage into the embankment and underlying foundation materials. An ungated morning-glory intake-outlet structure[22] will withdraw water from the upper reservoir and deliver it to the underground powerhouse through a 2,200-foot-long vertical shaft, a 3,300-foot-long high-pressure headrace tunnel, a 200-foot-long manifold tunnel, and three 600-foot-long penstocks.

14. The powerhouse will be constructed in an underground cavern and contain three, 400-MW Francis-type pump-turbine units for a total installed capacity of 1,200 MW. Water will be discharged to the new lower reservoir through three 200-foot-long draft tube tunnels, a 200-foot-long low-pressure tunnel, and a 3,200-foot-long tailrace tunnel.

15. The lower reservoir will consist of a 205-foot-high, 6,100-foot-long concrete-faced rockfill embankment. It will be double-lined with interstitial drainage and leak detection, using a geosynthetic liner as the first layer and waterproof concrete liner as the second.

16. When filling the reservoirs, water will be supplied via a new shut-off and throttling valve in Klickitat PUD's water supply vault. The water will be conveyed to the lower reservoir through a new buried 30-inch-diameter steel conduit from the vault to an outlet structure within the reservoir.

17. The project will include two access tunnels. The main access tunnel will be used as the primary access to the underground powerhouse and transformer caverns. The transmission line access tunnel will be constructed to carry the high-voltage transmission line from the underground transformer gallery to the tunnel portal and will be used for secondary access to the powerhouse and transformer cavern during construction and for emergency egress and access during normal operation.

18. Power will be sent from the generators to a new underground transformer cavern adjacent to the powerhouse that will step up generator voltage from 18 kilovolts (kV) to 115 kV. From there, power will be transmitted via a new underground transmission line through the combined access/transmission tunnel to where the line emerges and becomes

[22] A morning glory intake is a type of spillway used in hydraulic engineering. It consists of an open circular intake, a vertical shaft or inclined shaft connected to a horizontal tunnel, allowing water to flow from the upper reservoir in this case to the lower reservoir or to be discharged back into the upper reservoir during the pumping cycle.

an overhead transmission line near the west side of the lower reservoir and extends to a new outdoor substation/switchyard where the voltage will be stepped up to 500 kV. From there, the 500-kV overhead project transmission line will run a short distance east and then south and connect to BPA's existing transmission infrastructure. Power will then be transmitted over about 3 miles of BPA's existing 500-kV transmission line across the Columbia River to BPA's existing John Day Substation.[23]

19. A more detailed project description is contained in ordering paragraph (B).

D. Proposed Project Operation

20. The project will operate as a closed-loop pumped storage system. Consistent with FFP's water agreement with Klickitat PUD, FFP proposes to complete the initial fill of the project reservoirs over a 7-month period spanning two calendar years (i.e., between September 1 and March 31) at an average delivery rate of 21 cubic feet per second (cfs) and a maximum rate of 35 cfs.

21. Once the project is operational, FFP will pump 7,100 acre-feet of water from the lower reservoir to the upper reservoir at times when energy is in excess or in low demand and generate when peak energy is needed. This would occur based on on-peak/off-peak power considerations, the need to augment the production of renewable wind and solar power generation, or to provide ancillary power services (e.g., load following, reactive power-voltage regulation, system protective services, loss compensation service, system control, load dispatch services, and energy imbalance services).

22. The exact daily operating cycle of pumping and generating will be dictated by the power market but the project will typically generate 8 hours a day, 7 days a week (with potential to generate up to a maximum of 12 hours per day if needed), and then pump water back up to the upper reservoir the remaining 12-16 hours each day. The project is projected to generate up to 3,561,000 megawatt-hours (MWh) of electricity annually. The energy produced will be delivered to the wholesale market to be purchased by utilities in the Pacific Northwest and California to help satisfy periods of peak demand and provide grid flexibility.

E. Proposed Project Boundary

23. FFP proposes to include in the project boundary 681.6 acres of land that encloses the new upper and lower reservoirs, the new water conveyance structures between the reservoirs, the new shut-off and throttling valve, the new 30-inch-diameter steel conduit leading from the vault to the lower reservoir, the new main access and transmission line

[23] FFP includes BPA's existing 500-kV transmission line as a project transmission line in Exhibit G. As discussed below, because BPA owns and maintains this line, it does not fall within the Commission's jurisdiction as a primary transmission line.

access tunnels, the new transmission line from the powerhouse to the outdoor substation/switchyard, the 3.13-mile-long, 500-kV overhead transmission line across the Columbia River, the 0.7-mile-long private road off John Day Dam Road needed to access the lower reservoir site, and the 8.6-mile-long private road off Hoctor Road needed to access the upper reservoir site. As discussed below, FFP's proposed project boundary does not include the following existing facilities owned and operated by Klickitat PUD: the pump station, water conveyance line from the pump station to the water supply vault, and water supply vault. Additionally, one wind turbine associated with TWPA's Windy Point Phase I Project is located on the surface directly above where the new project water conveyance tunnels near the upper reservoir will be sited. FFP proposes excluding the wind turbine because it is unrelated to the project and vertically separated from the proposed project tunnels.

F. Proposed Operation and Environmental Measures

24. To minimize erosion and sedimentation during construction, FFP proposes to develop a soil erosion and sediment control plan that includes best management practices for controlling wind and water erosion.

25. To monitor potential effects of vibration on the foundations and underground utilities of nearby wind turbines from drilling the tunnels and powerhouse cavern, FFP proposes to develop a vibration monitoring plan.

26. To prevent the release of hazardous materials from the contaminated RCRA site during construction of the lower reservoir, FFP proposes to implement a Cleanup Action Plan that includes methods and procedures for excavating and disposing of contaminated soils and liner materials associated with the West Surface Impoundment waste disposal site.[24] As part of the proposed Cleanup Action Plan, FFP will decommission 10 existing groundwater monitoring wells that will be displaced to construct the lower reservoir and install new groundwater monitoring wells at locations selected in consultation with Washington DOE.[25]

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[24] The contents of the West Surface Impoundment site were determined not to be hazardous or dangerous and the site was closed and capped in 2004 as part of the RCRA clean-up process for the smelter.

[25] Because FFP will have no ongoing responsibilities regarding the groundwater monitoring wells, the wells are not licensed project facilities. *See Portland Gen. Elec. Co.*, 111 FERC ¶ 61,450, at P 96 (2005), *order on reh'g*, 117 FERC ¶ 61,112 (2006) ("We will not require ongoing actions requiring Commission oversight of non-project lands without those lands being brought into the project boundary.").

27. To prevent project-related flow reductions in the Columbia River that could delay salmon smolt migration, FFP proposes to initially fill the project reservoirs between September 1 and March 31.

28. To ensure that hazardous materials are handled and contained appropriately, FFP proposes to implement its Spill Prevention, Control, and Countermeasure Plan.

29. To prevent any sediment and contaminated groundwater from reaching the Columbia River during construction, FFP proposes to implement its Dewatering Plan that includes procedures for sampling and managing groundwater encountered while constructing the tunnels, powerhouse cavern, and lower reservoir.

30. To prevent contamination of surface waters from construction, operation, and maintenance activities, FFP proposes to implement its Stormwater Pollution and Prevention Plan (SWPPP) that includes best management practices for managing stormwater.

31. To ensure that dissolved solids, nutrients, and heavy metals in the project reservoirs do not rise to and remain at concentrations that could adversely affect wildlife, FFP proposes to implement its Reservoir Water Quality Monitoring Plan that includes procedures for monitoring and reporting reservoir water quality on an annual basis and determining the need for additional protective measures in consultation with Washington DOE.

32. To re-establish native vegetation on disturbed land and reduce the spread and introduction of noxious weeds and invasive plants, FFP proposes to implement its Vegetation Management and Monitoring Plan.

33. To mitigate for and protect wetland resources affected by project construction, FFP proposes to implement its Mitigation and Planting Plan.

34. To minimize effects to wildlife during project construction, FFP proposes to implement its Wildlife Management Plan, which includes: (1) conducting two years of pre-construction surveys to document bald eagle, golden eagle, and prairie falcon nesting and bald eagle roosting sites and developing appropriate spatial and temporal restrictions on construction activities; (2) implementing a training program to inform employees of sensitive biological resources; (3) implementing procedures to limit the construction zone to avoid sensitive areas; (4) hiring a construction monitor; (5) limiting construction activities to the hours of 8:00 a.m. to 6:00 p.m. to avoid disrupting crepuscular and nocturnal wildlife; and (6) limiting project vehicle speed limits on-site to reduce wildlife collisions.

35. To deter wildlife from using the project reservoirs during project operation, FFP proposes to implement the following measures as part of the Wildlife Management Plan: (1) install a chain link fence that is at least 8 feet high around the reservoirs; (2) mark all

fences with vinyl strips and/or reflective tape to reduce avian collision risks; (3) prevent the establishment of vegetation around the reservoirs; (4) cover the reservoir surfaces with floating plastic shade balls[26] to reduce the open-water habitat that could attract waterfowl, water birds, and other raptor prey species; (5) monitor for and remove carcasses of livestock and other animals from the project area that may attract scavenging wildlife, foraging eagles, or other raptors; (6) develop a monitoring program to identify bird and mammal usage of the reservoirs and measure the effectiveness of wildlife deterrents in using the reservoirs; and (7) develop a reporting system to document wildlife mortalities, injuries, nuisance activity, and other interactions.

36. To mitigate for the permanent and long-term disturbance of golden eagle habitat, FFP proposes to work with the U.S. Fish and Wildlife Service (FWS) and Washington DFW to select and purchase 277 acres of off-site land and manage the land for golden eagle nesting and foraging habitat.

37. To minimize avian electrocution and collision hazards with the project transmission line, FFP proposes to construct the project overhead transmission line to ensure there is at least 40 inches of vertical clearance and 60 inches of horizontal clearance between energized conductors or energized conductors and grounded hardware.

38. To ensure public safety during construction and operation, FFP proposes to develop a fencing and/or public safety plan that restricts public access to hazardous areas.

39. To enhance recreation, maintain access for visitors recreating at nearby sites, and to reduce the aesthetic effects of the project on the landscape, FFP proposes to develop a visual and recreation resources management plan that includes provisions for installing an interpretive sign describing the project at a location that provides views of the project and is accessible to people with disabilities, and implementing measures to reduce the contrast of the project with the landscape (e.g., selecting natural paint colors and dulling reflective surfaces that cannot be painted; planting native vegetation and/or trees to break up the lines of roads and facilities; ensuring facilities are free of debris and store unused or damaged equipment offsite; allowing surface night-lighting in the central project area to be turned on only as needed for safety; and using directional, fully shielded, low pressure sodium lighting to prevent casting light in surrounding areas at night).

40. To protect cultural resources and to mitigate unavoidable adverse impacts to historic properties, FFP proposes to implement the Historic Properties Management Plan (HPMP) filed on January 25, 2022, with the following additional measures FFP proposed

[26] Shade balls, also known as bird balls, are floating plastic balls, typically about 10 inches in diameter and varying in shape, that can be used to cover the surface of reservoirs to reduce evaporation and deter wildlife from resting on the surface of the reservoir.

on July 31, 2024:[27] (1) develop unanticipated discovery protocols; (2) conduct off-site First Food inventories on potential mitigation properties and, based on the results of these inventories, secure one or more "mitigation properties" with First Foods resources for use by Tribal members[28] at a ratio of 1:1 acres of impact area to mitigation property; (3) document Tribal oral histories through digital recordation or similar means; (4) consult with the Tribes during construction planning to provide post-construction access to the project area for cultural programs or initiatives and to ensure construction plans do not constrain access to traditional fishing areas; (5) incorporate a vegetation screen or other visual screening measures to minimize viewshed changes from the project; (6) develop detailed appropriate treatments plans (possibly including integrated rapid data recovery, monitoring, alternative mitigation measures, or other measures); and (7) redesign laydown areas and/or incorporate protective measures (e.g., restrict ground disturbances through use of mats or other means) to minimize construction effects on resources located within the proposed lower reservoir construction area. Additionally, to facilitate the development of the HPMP and to ensure a robust and collaborative process for finalizing the HPMP, FFP proposes to work with the consulting parties[29] to identify, retain, and fully fund a mutually agreeable and qualified facilitator; offer individual and large-group meetings and both in-person and virtual meetings to meet the needs of each consulting party; and offer to reimburse reasonable travel expenses incurred by consulting parties to attend meetings.[30]

41. To address traffic-related issues during construction, FFP proposes to develop a traffic management plan that includes coordinating construction schedules and any associated road closures or delays with Washington Department of Transportation (Washington DOT) and Klickitat County.

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[27] FFP's Draft HPMP identified several "conceptual measures" that FFP states could be considered for resolving adverse effects to known historic properties. *See* FFP January 25, 2022, Draft HPMP at 31-32. FFP later clarified that it was committing to implement all the measures and provided more details on its proposed measures. *See* FFP August 1, 2024, Letter at 2-3.

[28] Unless otherwise specified, this order uses the terms "Tribal members" or "Tribes" to refer to the following Tribes: The Yakama Nation, Umatilla Tribes, Confederated Tribes of the Warm Springs Reservation of Oregon, and Nez Perce Tribe.

[29] Consulting parties are the Washington State Historic Preservation Office (SHPO), Oregon SHPO, Advisory Council on Historic Preservation (Advisory Council), and the Tribes.

[30] FFP June 6, 2025, Letter at 2.

Jurisdiction Over Klickitat PUD's Intake Facilities

42. As explained above, FFP will purchase water to fill the reservoirs from Klickitat PUD, which will be delivered to the lower reservoir through Klickitat PUD's municipal pumping station located along the Columbia River.[31] FFP maintains that Klickitat PUD's pump station and the intake pool are not project facilities and should remain outside of the project boundary because Klickitat PUD's facilities are existing, multi-use facilities currently supporting other uses in Klickitat County and are unrelated to the project.[32] Klickitat PUD also opposes including any of its municipal water supply facilities as project facilities, arguing that the intake pool is not owned or controlled by Klickitat PUD,[33] and that its municipal pumping station currently serves one agricultural customer and one industrial customer at the former smelter site,[34] but that it anticipates serving other water system customers in the future.[35] Klickitat PUD states that while it is supportive of the project, its primary role is to provide the project water, and "performance of that role for this project in no way subjects K[lickitat] PUD to FERC's or any other regulatory agency authority absent [its] role as water provider."[36]

43. Interior and Washington DFW state that because the intake and intake pool are necessary for the operation and maintenance of the project, the intake and intake pool should be included in the project boundary to ensure appropriate compliance, operation, and maintenance of the intake facility over the duration of the license term.[37] In addition, as discussed elsewhere in this order, Interior and NMFS recommend screening the intake

[31] Water for the project's initial fill and periodic makeup water will be provided by a service connection to Klickitat PUD's municipal water system, under the auspices of a Klickitat PUD water right with a priority date of March 19, 1969. *See* Klickitat PUD June 7, 2023, Letter at 3; FFP June 6, 2023, Draft EIS Comments at 2.

[32] FFP July 7, 2022, Reply Comments at 19, 21 (citing *Puget Sound Energy, Inc.*, 175 FERC ¶ 62,205, at P 18 (2021) (citing *Pac. Gas & Elec. Co.*, 85 FERC ¶ 61,411 (1998)); *City of Tacoma*, 118 FERC ¶ 61,202, at P 45 (2007)).

[33] Klickitat PUD June 7, 2023, Letter at 4.

[34] *See* Transcript of May 3, 2023, Public Meeting Morning Session at 64-65 (filed June 6, 2023).

[35] FFP June 23, 2020, Application, app. K at 3 (Application).

[36] Klickitat PUD September 17, 2021, Letter at 2.

[37] *See* Interior May 23, 2022, Letter at 19; Washington DFW May 18, 2022, Letter at 8-9.

and the culvert spanning the BNSF railroad embankment to prevent entrainment of federally listed salmon and steelhead trout as well as non-listed resident fish.[38]

44. Section 4(e) of the FPA authorizes the Commission to issue licenses for "project works necessary or convenient for . . . the development, transmission, and utilization of power."[39] Section 3(12) defines "project works" as the physical structures of a project[40] and section 3(11) defines "project" as a "complete unit of improvement or development," including "a power house, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, . . . all miscellaneous structures used and useful in connection with said unit or any part thereof and all water rights, rights-of-way, ditches, dams, reservoirs, lands, or interests in lands the use and occupancy of which are necessary and appropriate in the maintenance and operation of such unit[.]"[41]

45. As the definition of a "project" in FPA expressly includes "water conduits," many licensed projects include various types of water conveyance structures, including canals, ditches, flumes, penstocks, and pipelines. Depending on where they are located and how they are used, these conveyance structures could be considered "a part of" the unit of development, structures that are "used and useful in connection with said unit," or structures that are "necessary or appropriate in the maintenance and operation of such unit."

46. Here, FFP proposes to purchase water from Klickitat PUD, whose facilities serve multiple water supply customers. While these facilities will serve the project intermittently, they have other, regular uses, and it does not appear necessary to require FFP to obtain an interest in them (as would be the case were we to conclude that they were project works), which could disrupt the PUD's water supply operations. Thus, we find that Klickitat PUD's intake facilities and BNSF's embankment and culvert[42] are not part of the Goldendale Project.

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[38] *See* Interior May 23, 2022, Letter at 10; NMFS May 23, 2022, Letter at 11-13.

[39] 16 U.S.C. § 797(e).

[40] *Id.* § 796(12).

[41] *Id.* § 796(11).

[42] Klickitat PUD stated in its comments on the draft EIS that the railroad embankment containing the culvert is owned by the BNSF railway company and is not owned or controlled by Klickitat PUD. Klickitat PUD June 7, 2023, Letter at 4.

Summary of License Requirements

47. This license, which authorizes 1,200 MW of renewable energy generation capacity, requires the proposed environmental measures listed above, as modified, and the Commission staff-recommended measures described below. The license also includes the Washington DOE section 401 water quality certification (certification) conditions (Appendix A) and the incidental take terms and conditions of the Biological Opinion (BO) submitted by NMFS (Appendix B). Combined, these measures will protect, enhance, or help minimize effects to soils, water quality, aquatic and terrestrial resources, threatened and endangered species, recreation, aesthetics, cultural resources, and air quality at the project.

48. To minimize fugitive dust emissions and protect air quality, the license requires FFP to include in the soil erosion control plan specific measures to monitor and control fugitive dust emissions during construction.

49. To protect and minimize adverse effects on rare plants and plants important to Tribes, the license requires FFP to modify the proposed Vegetation Management and Monitoring Plan to include: (1) pre-construction surveys for federal and state listed plants during the spring and early summer to improve the chances of detecting and protecting rare species; (2) the addition of seeds for shrubs and other plants of traditional cultural importance (identified in consultation with the Tribes), if they are available, into the revegetation seed mix to offset the loss of culturally important plants and better achieve the revegetation goals; (3) an integrated pest management approach to controlling noxious weeds; and (4) protocols for preventing and controlling wildfires during project construction and operation.

50. To protect sensitive wildlife species and ensure that the proposed wildlife habitat measures achieve their goals and objectives, the license requires FFP to modify the proposed Wildlife Management Plan to include: (1) provisions to conduct pre-construction surveys for peregrine falcons and ferruginous hawks (in addition to surveying other raptor species already identified in the plan), Dalles sideband snail, northwestern pond turtle, monarch butterfly and its preferred milkweed host plants, juniper hairstreak butterfly, and Suckley's cuckoo bumble bee, and develop a mitigation plan if any of the species are found; (2) provisions for wildlife deterrent measures for the project reservoirs, including monitoring methods and metrics for evaluating the effectiveness of the deterrents in reducing the attraction of the project reservoirs to birds, bats, and other wildlife; and (3) provisions to manage the 277 acres of land to be acquired for the protection of golden eagles.

51. To protect birds from electrocution and collision hazards, the license requires FFP to develop an avian protection plan for the project transmission line that includes FFP's proposed protection measures and procedures for monitoring bird fatalities and

addressing problem poles and updating the plan as needed in consultation with FWS and Washington DFW.

52. To minimize project-related flow reductions in the Columbia River that could delay salmon smolt migration, the license requires FFP to limit initial fill and periodic refill of the project reservoirs to between September 1 and March 31.

53. To minimize disrupting access to the Corps' recreation facilities, Tribal fishing access, and the Lewis and Clark National Historic Trail,[43] the license requires FFP to develop the proposed visual resources and recreation management plan in consultation with the National Park Service (Park Service) and Tribes and include a provision in the plan to coordinate construction schedules and any associated road closures or delays on John Day Dam Road with the Corps, the Bureau of Indian Affairs (BIA), and Tribal governments through the Columbia Inter Tribal Fish Commission, in addition to Klickitat County and Washington DOT.

54. To mitigate construction effects to cultural resources, the license requires FFP to revise the proposed HPMP to include specific treatment measures for all affected archaeological sites and traditional cultural properties (TCP); the additional measures FFP proposed on July 31, 2024, and on June 6, 2025; and a specific plan for construction site monitoring. The construction site monitoring plan must include: (1) the specific areas that will be monitored during construction; (2) the location of the National Register of Historic Places (National Register)-eligible cultural sites to be avoided and how they will be marked and avoided where possible; (3) procedures for surveying the archaeological sites using specially trained canines for historic and prehistoric human remains detection to minimize the potential for disturbing any undetected burial sites; and (4) protocols for training construction workers on the importance of cultural sites, how to identify cultural sites, the need to avoid damage to cultural sites, and procedures to follow if previously unidentified cultural sites, including Indian graves, are encountered during construction.

Water Quality Certification

55. Under section 401(a)(1) of the Clean Water Act (CWA),[44] the Commission may not issue a license authorizing the construction or operation of a hydroelectric project

[43] Interior states that the Goldendale Project is located along and crosses portions of the Lewis and Clark National Historic Trail and the auto-tour route for the trail (specifically State Route 14 in Washington along the north side of the Columbia River and Interstate 84 in Oregon along the south side of the Columbia River). *See* Interior June 6, 2023, Letter at 3-4.

[44] 33 U.S.C. § 1341(a)(1).

unless the state water quality certifying agency has either issued a certification for the project, has expressly waived certification, 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 shall become a condition of any federal license that authorizes construction or operation of the project.[45]

56. On June 24, 2020, FFP applied to Washington DOE for a certification for the project. On June 23, 2021, Washington DOE denied FFP's request without prejudice, citing a lack of sufficient information to process the application. On May 23, 2022, FFP submitted a new request for certification, which Washington DOE received the same day. On May 22, 2023, Washington DOE issued a certification for the project with 77 conditions which are divided into nine sections: general conditions (conditions A1 through A12); permits or authorizations (conditions B1 through B4); water quality criteria and monitoring (conditions C1 through C6); plans to be implemented by the project proponent (conditions D1 through D3); notification requirements (conditions E1 through E3); timing (conditions F1 and F2); construction (conditions G1 through G25); aquatic resource mitigation conditions (conditions H1 through H17); and emergency/contingency measures (conditions I1 through I5).

57. Conditions A1 through A12 and F1 are general or administrative in nature and are not discussed further. Conditions B1 through B4 require FFP to obtain relevant state permits prior to a discharge, including to Swale Creek,[46] and prior to filling the project reservoirs, and to implement a Washington DOE-approved Cleanup Action Plan. Conditions C1 through C6 require FFP to monitor and report reservoir water quality data

[45] *Id.* § 1341(d).

[46] The upper reservoir would be constructed near the headwaters of Swale Creek, which flows west to join the Klickitat River which then flows south and discharges to the Columbia River roughly 35 miles downstream of the proposed project. The first 12 miles of Swale Creek from the mouth are designated by Washington DOE as waters requiring supplemental protection for salmonid spawning and incubation, dictating more stringent water quality standards for water temperature. Constructing the upper reservoir would require the filling of two ephemeral streams and one stock watering pond. Once constructed, the upper reservoir would capture 86 acre-feet per year of rainfall that would normally drain through the ephemeral streams to Swale Creek. In the final EIS, Commission staff determined that the amount of water captured within the reservoirs is negligible and would have minimal impacts on Swale Creek, the Klickitat River, and the Columbia River because each reservoir represents less than 1% of Swale Creek and Columbia River Tributaries subwatersheds, and even less when compared to the larger drainages for the Klickitat River (where Swale Creek drains into) and the Middle Columbia River basin. Final EIS at 29-33.

to Washington DOE;[47] ensure that any reservoir water discharge to Swale Creek meet specified water temperature, pH, and dissolved oxygen (DO) limits; and revise the proposed Draft Reservoir Water Quality Monitoring Plan to be consistent with the requirements of the certification. Conditions D1 through D3 require that the following plans be finalized and reviewed and approved by Washington DOE prior to implementation:[48] Mitigation and Planting Plan Rev 2; Goldendale Draft SWPPP (CSGP) Rev 2; Goldendale Draft Dewatering Plan Rev 2; Goldendale Draft WQ Monitoring Plan Rev 2; engineering design documents; and protocols prepared by FFP when conducting cleanup activities associated with the former Columbia Gorge Aluminum smelter site. Conditions E1 through E3 set forth procedures and timelines for notifying and reporting to Washington DOE: (1) violations of state water quality standards; (2) periods of non-compliance with the certification conditions; (3) pre-construction meetings; (4) construction and operation start dates; and (5) construction status reports. Condition F2 requires FFP to initially fill the reservoirs across two calendar years (i.e., the last 3 months of one calendar year and the first 3 months of the subsequent calendar year). Conditions G1 through G25 require FFP to implement best management practices during construction to control soil erosion, protect wetlands and other surface waters, and manage stormwater and hazardous materials. Conditions H1 through H17 require FFP to implement its Draft Mitigation and Planting Plan and define procedures and protocols for establishing, monitoring, and maintaining a compensatory wetland mitigation site. Conditions I1 through I5 require FFP to provide a "Spill Control Plan" that includes protocols for handling and containing hazardous materials, spill cleanup procedures, and procedures for notifying Washington DOE of any such spills.[49]

[47] Certification Condition C-3 does not specifically state what water quality parameters FFP must monitor in the reservoir or for how long. Article 413 specifies that FFP must monitor dissolved solids, nutrients, and heavy metals during initial fill and each year during project operation to inform the need for additional protective measures for water quality. Article 413 also requires that the monitoring reports required by Certification Condition C-5 include recommendations for remedial measures if warranted.

[48] The certification doesn't specify if these refer to the draft plans FFP previously filed with the Commission. For example, on May 22, 2024, FFP filed a copy of its Water Quality Certification Application which included a Draft Mitigation and Planting Plan, Draft SWPPP, Draft Dewatering Plan, and Draft Water Quality Monitoring Plan as attachments. However, the draft plans required by the certification are titled differently than the draft plans that were previously filed with the Commission.

[49] The certification does not specify if FFP's proposed Draft Spill Prevention, Control, and Countermeasure Plan filed on May 24, 2022, would satisfy the requirement

58. In the final EIS, Commission staff found that no discharges to Swale Creek are anticipated during project operation because the project would be operated as a closed-loop pumped storage project.[50] Because there is no discharge, there is nothing to be monitored. Nevertheless, this license includes conditions B1 and C2 regarding discharges to Swale Creek because they are included in Washington DOE's certification for the project and are thus mandatory.[51] The certification conditions are set forth in Appendix A of this order and incorporated into the license by ordering paragraph (D).

Coastal Zone Management Act

59. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),[52] the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state's coastal zone management agency concurs with the license applicant's certification of consistency with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within 6 months of its receipt of the applicant's certification.

60. On September 15, 2020, FFP requested confirmation from Washington DOE (which administers the CZMA program for the State of Washington) and Oregon Department of Land Conservation and Development (Oregon DLCD) (which administers the CZMA program for the State of Oregon) that the Goldendale Project is not within or affecting these states' coastal zones. On September 15, 2020, Washington DOE confirmed that the project is not included in the State of Washington's coastal zone. On September 17, 2020, Oregon DLCD confirmed that the project is not included in the State of Oregon's coastal zone. Therefore, no consistency certification is required.[53]

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to provide a "Spill Control Plan" or if FFP should submit a new or revised plan.

[50] Final EIS at 36.

[51] Section 401(d) of the Clean Water Act, 33 U.S.C. § 1341(d), provides that the certification must become a condition of any federal license for the project. *Eugene Water & Elec. Bd.*, 169 FERC ¶ 61,124, at P 7 (2019) ("Clean Water Act section 401(d) mandates that the conditions of a water quality certification must become conditions of any issued federal permit or license."); *see Am. Rivers v. FERC*, 129 F.3d 99, 107 (2nd Cir. 1997).

[52] 16 U.S.C. § 1456(c)(3)(A).

[53] *See* FFP November 20, 2020, Filing at attach. 8 (providing email correspondence between FFP, Washington DOE, and Oregon DLCD).

Section 18 Fishway Prescriptions

61. Section 18 of the FPA[54] provides that the Commission must 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.

62. On August 4, 2023,[55] Interior filed a letter requesting that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 403 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Goldendale Project.

Threatened and Endangered Species

63. Section 7(a)(2) of the Endangered Species Act (ESA) of 1973[56] 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 their designated critical habitat.

64. The following federally listed fish have the potential to use the Columbia River near the project as a migration route both as adults during their spawning run and as juveniles returning to the ocean: the endangered Upper Columbia River (UCR) spring Chinook salmon (*Oncorhynchus tshawytscha*) and Snake River (SR) sockeye salmon (*O. nerka*); and the threatened Lower Columbia River (LCR) Chinook salmon, SR fall Chinook salmon, SR spring/summer-run Chinook salmon, Columbia River chum salmon (*O. keta*), the LCR coho salmon (*O. kisutch*), LCR steelhead (*O. mykiss*), Middle Columbia River (MCR) steelhead, UCR steelhead, and SR steelhead.[57] The Columbia River near the project is designated critical habitat for each of these 11 fish species.

65. The FWS's Information for Planning and Consultation (IPaC) system[58] identifies the following federally listed and proposed species as having the potential to occur near

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[54] 16 U.S.C. § 811.

[55] Interior August 4, 2023, Draft EIS Comments at 8-9.

[56] 16 U.S.C. § 1536(a).

[57] *See* NMFS June 5, 2023, Letter at 1-2; *see also* NMFS September 6, 2024, BO at 1.

[58] *See* Commission Staff October 30, 2025, Memorandum Forwarding FWS's List of Threatened, Endangered, Proposed, and Candidate Species; *see also* FWS, IPaC, https://ipac.ecosphere.fws.gov/ (accessed Oct. 30, 2025).

the project: the threatened bull trout (*Salvelinus confluentus*) and its designated critical habitat in the Columbia River, the threatened yellow-billed cuckoo (*Coccyzus americanus*), the proposed endangered Suckley's cuckoo bumble bee (*Bombus suckleyi*),[59] the proposed threatened northwestern pond turtle (*Actinemys marmorata*), and the proposed threatened monarch butterfly (*Danaus plexippus*).[60] No proposed or designated critical habitats for any of the terrestrial species occurs within the project area.

A. Chinook Salmon, Sockeye Salmon, Chum Salmon, Coho Salmon, Steelhead, and Bull Trout

66. In the draft EIS, Commission staff determined that the project may affect, but is not likely to adversely affect, the listed salmon, steelhead, and bull trout, or these species' designated critical habitats because: (1) FFP's plans for the project would contain standard best management practices and sufficient monitoring to ensure that project construction and operation would not degrade water quality in the Columbia River;[61] (2) the proposal to purchase water from Klickitat PUD for reservoir filling would result in relatively small, temporary withdrawals from the Columbia River by Klickitat PUD for project purposes that would not be expected to impede salmon smolt migrations;[62]

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[59] The Suckley's cuckoo bumble bee was proposed as federally endangered on December 17, 2024, after the issuance of the final EIS. 89 Fed. Reg. 102074 (Dec. 17, 2024).

[60] At the time of Commission staff's analysis in the final EIS, FWS's list included the following terrestrial species: the endangered gray wolf (*Canis lupus*), the threatened North American wolverine (*Gulo gulo luscus*), the threatened yellow-billed cuckoo, the proposed threatened northwestern pond turtle, and the candidate monarch butterfly. *See* Commission Staff December 7, 2023, Memorandum Forwarding FWS's List of Threatened, Endangered, Proposed, and Candidate Species. FWS subsequently proposed to list the monarch butterfly as threatened and to designate critical habitat on December 12, 2024. 89 Fed. Reg. 100662 (Dec. 12, 2024). However, as of October 30, 2025, FWS's IPaC system no longer includes the endangered gray wolf or the threatened North American wolverine in the list of species that may be affected by the project. *See* Commission Staff October 30, 2025, Memorandum Forwarding FWS's List of Threatened, Endangered, Proposed, and Candidate Species; *see also* FWS, IPaC, https://ipac.ecosphere.fws.gov/ (accessed Oct. 30, 2025).

[61] Those plans include FFP's proposed soil erosion and sediment control plan; Draft SWPPP; Draft Spill Prevention, Control, and Countermeasure Plan; Draft Cleanup Action Plan; Draft Dewatering Plan; and Draft Reservoir Water Quality Monitoring Plan.

[62] The maximum rate at which Klickitat PUD can withdraw water (i.e., 35 cfs) that could be purchased and utilized by FFP represents approximately 0.03% of the median

and (3) even if salmon, steelhead, and bull trout could enter Klickitat PUD's intake pool (the source of project water) through the railway embankment,[63] they would not be likely to penetrate the 30 feet of gravel that would be required to enter Klickitat PUD's infiltration gallery where they could eventually become entrained by the project.[64] On March 31, 2023, Commission staff requested NMFS's concurrence on its determinations for listed salmon and steelhead and their designated critical habitat. On the same day, Commission staff requested FWS's concurrence on its determinations for bull trout and its designated critical habitat.

67. On June 5, 2023, NMFS filed a letter stating that it needed more information regarding FFP's proposed timing for filling the reservoirs and the likelihood of fish being entrained into the intake pool before NMFS could concur with Commission staff's ESA determinations.[65] FWS requested similar details before it could concur with staff's determinations for bull trout and bull trout critical habitat.[66] Additionally, NMFS and Interior filed revised 10(j) recommendations on June 6, 2023, and August 4, 2023, respectively, that recommended that FFP not withdraw water from the Columbia River for initial fill or annual refill at any time from April 1 through August 31 to ensure sufficient Columbia River flows for out-migrating juvenile salmonids and to reduce the likelihood of fish entrainment into the intake pool during the peak spring and summer smolt migration period.[67]

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flow in the Columbia at this location and 0.08% of the lowest Columbia River flow on record at this location. In terms of volume of flow, the 7,640 acre-feet needed to fill the reservoirs represents approximately 0.01% of the median flow volume and 0.02% of the minimum volume reported in the Columbia River at this location. The estimated 360 acre-feet needed to be purchased each year for annual make-up water would be orders of magnitude smaller as a percentage of the total volume of flow in the Columbia River. Draft EIS at 62.

[63] As discussed previously, the "intake pool" is a backwater slough that was created from the construction of an embankment berm built to support the BNSF railroad. Water moves between the slough and the Columbia River via infiltration through the railroad embankment and via a culvert that penetrates the embankment.

[64] Draft EIS at 62, C-2, & at G8-G10.

[65] NMFS June 5, 2023, Letter at 1-2.

[66] Interior June 6, 2023, Letter at 5.

[67] NMFS June 6, 2023, Draft EIS Comments at 2-3; Interior August 4, 2023, Draft EIS Comments at 5.

68. On June 6, 2023, FFP filed comments on the draft EIS which stated that it agreed not to conduct initial fill of the reservoirs from April 1 to August 30.[68] However, FFP opposed restricting the timing on annual refilling, stating that the water amounts that would be purchased for annual refill would represent small negligible amounts. It contends that Klickitat PUD would continue to have the ability to withdraw water throughout the year under its existing water rights regardless of whether it allows the project to use the water for refill purposes and thus any effects of the withdraw should not be attributed to the project.[69]

69. In the final EIS, Commission staff recommended that FFP limit initial fill and periodic refill of the project reservoirs to between September 1 and March 31 because it would not pose a significant problem to FFP's operation[70] and would prevent the project from contributing to indirect effects to listed salmon and trout from reductions in Columbia River flows during the peak salmon smolt migration period of April 1 through August 31, which is of concern to NMFS and FWS.[71] With this revised recommendation, Commission staff again determined in the final EIS that the project may affect, but is not likely to adversely affect, the listed salmon, steelhead, and bull trout, and these species' designated critical habitats.[72] We agree. On February 8, 2024, Commission staff sent letters to NMFS and FWS requesting concurrence on these determinations.

70. On April 5, 2024, NMFS filed a response stating that it concurs with Commission staff's not likely to adversely affect determinations for "the majority of salmon and steelhead species and their designated critical habitat" but not for "at least one species" and that formal consultation would therefore be required.[73] NMFS stated that it is not likely to adversely affect determinations are contingent on: (1) execution of Commission staff's recommendations in the final EIS requiring that project initial fill and annual refills occur between September 1 to March 31 and (2) Klickitat PUD's commitment to

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[68] FFP June 6, 2023, Draft EIS Comments at 2-3.

[69] *Id.* at 2.

[70] FFP states in its license application that it has some flexibility in the timing of annual refill, indicating that refill could occur once per year, or over multiple, shorter withdrawals per year, depending on site conditions. FFP June 23, 2020, Application, Ex. B at 8.

[71] Final EIS at 70-73 & G8-G10.

[72] *Id.* at 73-74 & at C-2.

[73] NMFS April 5, 2024, Letter at 1.

screen the culvert connecting the Columbia River to the Klickitat PUD intake pool.[74] Because NMFS did not specify for which species formal consultation would be required, on April 18, 2024, Commission staff requested formal consultation with NMFS on all listed salmon and steelhead species and their designated critical habitat.

71. On July 19, 2024, FWS concurred with Commission staff's not likely to adversely affect determination on bull trout and its designated critical habitat.[75]

72. On September 6, 2024, NMFS issued a BO for the SR fall chinook salmon concluding that the project is not likely to jeopardize the continued existence of the species or adversely modify its designated critical habitat. The BO also included NMFS's concurrence with Commission staff's determinations that the project is not likely to adversely affect LCR Chinook salmon, LCR coho salmon, LCR steelhead, Columbia River chum salmon, SR spring/summer-run Chinook salmon, SR sockeye salmon, SR steelhead, UCR spring Chinook salmon, UCR steelhead trout, and MCR steelhead or these species' designated critical habitats. The BO is likewise predicated on initial fill and annual refill occurring between September 1 and March 31 and Klickitat PUD's commitment to screen the culvert.[76] By letter filed June 6, 2023, Klickitat PUD stated that it would work with BNSF to screen the culvert.

73. NMFS's BO for the SR fall chinook salmon contains an incidental take statement with one reasonable and prudent measure to minimize take of the species, as well as terms and conditions to implement the measure. The reasonable and prudent measure requires the licensee to design and carryout a monitoring and reporting program to confirm that the project is implemented as proposed, the terms and conditions of the incidental take statement are effective in avoiding and minimizing incidental take from permitted activities, and the amount and extent of take is not exceeded.[77] The terms and conditions require FFP to: (1) track and monitor the timing and quantity of project water diversions on a daily basis; (2) submit a one-time initial fill completion report and an annual fill report to NMFS by June 1 each year describing the total acre-feet of water withdrawn during each fill period, rate of diversion, and start and end dates of each fill

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[74] *Id.*

[75] NMFS July 19, 2024, Concurrence at 2.

[76] NMFS September 6, 2024, BO at 4.

[77] NMFS's BO states that incidental take would be exceeded if: (1) initial fill or any annual refill operations occur outside of the permitted September 1 to March 31 time period; (2) water diverted for initial fill or any annual refill is greater than 7,640 acre-feet and 360 acre-feet, respectively; or (3) initial fill or any annual refill diverts water at a rate greater than 35.3 cfs, the rate allowed under the Klickitat PUD water right. NMFS September 6, 2024, BO at 17.

period; and (3) stop project activities (initial fill or annual refill) and notify NMFS immediately if the amount or extent of take is exceeded.

74. The terms and conditions are included in Appendix B and are made part of this license in ordering paragraph (E). Additionally, this license includes conditions that are consistent with NMFS's reasonable and prudent measure and terms and conditions for minimizing the impact of take on the SR fall chinook salmon. Article 401 requires that the initial fill and re-fill reports required by NMFS's terms and conditions also be filed with the Commission. Article 402 requires that in addition to planning for the initial fill to occur over two calendar years as required by the Washington DOE's water quality certification condition F2 (Appendix A), the licensee may only fill and annually refill the project reservoirs between September 1 and March 31 to minimize project-related flow reductions in the Columbia River that could indirectly affect listed salmon and trout via delayed salmon smolt migration. No further action under the ESA is required.

B. Yellow-billed Cuckoo

75. In the final EIS, Commission staff determined that no suitable habitat for yellow-billed cuckoo is present at the project.[78] Therefore, staff determined that construction and operation of the project would not affect this species and no further action under the ESA is required. We agree.

C. Northwestern Pond Turtle

76. In the final EIS, Commission staff stated that while there is no evidence of Northwestern pond turtles at the project and the majority of the species' habitat is located further west, the distribution of Northwestern pond turtles includes aquatic, shoreline, and upland habitats within the Columbia River Gorge, including the project area; therefore, it is possible that habitat for the species could be affected by project construction.[79] Staff determined in the final EIS that the project is not likely to jeopardize the proposed threatened Northwestern pond turtle because Commission staff's recommendation that FFP conduct pre-construction surveys and develop protective measures if the turtle is found (e.g., flagging to prevent disturbance, potentially relocating individuals, or revegetating disturbed areas with suitable plants) would prevent harming the species.[80] We agree. On February 8, 2024, Commission staff notified FWS of its determination.[81]

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[78] Final EIS at 70 & 74.

[79] *Id*. at 75.

[80] *Id*. at 75, C-2, & G12-13.

[81] For species proposed for listing, a federal agency must conference with FWS only when the agency determines that its action would likely jeopardize the continued

On July 19, 2024, FWS concurred with Commission staff's findings, concluding that because of the lack of suitable habitat and connectivity to other suitable aquatic water resources, the effects of the proposed action will neither measurably degrade nor diminish habitat for the turtle. Article 407 requires FFP to complete pre-construction surveys and to implement protective measures if the northwestern pond turtle is found. No further action under the ESA is required.

D. Western Monarch Butterfly

77. In comments on the draft EIS, FWS noted that the project is within the spring to late summer occupancy zone for monarch butterfly (then a candidate species) and that two milkweed species that provide the butterfly's preferred habitat are found along waterways in Klickitat County.[82] FWS included a section 10(j) recommendation that FFP include the butterfly and narrow-leaved and showy milkweed species in its pre-construction surveys, and that if the butterfly or milkweed habitat are found, FFP work with FWS and other relevant resource agencies to develop a monarch butterfly management plan containing measures to address impacts.

78. Ground disturbances and herbicide treatment could destroy or disturb potentially suitable habitat for many insect species including the monarch butterfly. In the final EIS, Commission staff recommended, and Article 407 of this license requires, FFP to conduct pre-construction surveys for the monarch butterfly and its preferred milkweed habitat. If the species or its habitat occurs in the area to be disturbed, Article 407 requires FFP to develop a species-specific management plan prior to conducting ground-disturbing activities that includes measures to protect the butterfly and its milkweed habitat (e.g., flagging to prevent disturbance, potentially relocating affected species, or revegetating disturbed areas with suitable milkweed plant species, etc.).[83]

79. On April 8, 2024, FWS reiterated its recommendation that the Commission conduct an informal conference on the candidate monarch butterfly, noting that it expects to make a listing decision in the "near future."[84] FWS states that if the Commission

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existence of the proposed species or destroy or adversely modify proposed critical habitat. 16 U.S.C. § 1536(a)(4).

[82] Interior August 4, 2023, Draft EIS Comments at 8.

[83] Final EIS at 74 & G12-13.

[84] *See* FWS April 8, 2024, Response to Request for Concurrence at 2; *see also* Commission Staff April 28, 2023, Memo at 2 (providing FWS's original recommendation that the Commission conduct an informal conference on the monarch butterfly).

chooses not to conference and the monarch butterfly is listed under the ESA, then it would need to reinitiate consultation. Commission staff responded on May 16, 2024, that it will consult with FWS if the monarch butterfly is listed or proposed for listing before a licensing decision is made.[85] As noted above, FWS proposed to list the monarch butterfly and to designate critical habitat since issuance of the final EIS, but the species has yet to be listed.

80. We find that Commission staff-recommended measures in Article 407 will protect the monarch butterfly. Therefore, issuing a license to construct, operate, and maintain the project is not likely to jeopardize the continued existence of the proposed threatened monarch butterfly. No further action under the ESA is required.[86]

E. Suckley's Cuckoo Bumble Bee

81. As noted above, the Suckley's cuckoo bumble bee was proposed as federally endangered after the issuance of the final EIS. Suckley's cuckoo bumble bee has a broad historical distribution across North America and is associated with a variety of habitats, including meadows and woodlands, as well as urban and agricultural areas. Cuckoo bumble bees require diverse native floral resources for pollen and nectar; however, limited information exists regarding key forage plants. According to historic relative abundance and recent observations in the Pacific Northwest Bumble Bee Atlas, no occurrences of the Suckley's cuckoo bumble bee were documented in Oregon or Washington.[87] Moreover, there is significant uncertainty about the range of Suckley's cuckoo bumble bee, some of which stems from misidentification of the species, often due to its similarity in appearance to other *Bombus* species. Based on its historical distribution, it is unlikely that Suckley's cuckoo bumble bee occurs at the project site. However, ground disturbances and herbicide treatment could destroy or disturb potentially suitable habitat for the Suckley's cuckoo bumble bee, if present. Therefore, Article 407 requires FFP to conduct pre-construction surveys for the Suckley's cuckoo bumble bee and if the species is found, to develop a species-specific management plan prior to conducting ground-disturbing activities that includes measures to protect the bumble bee. Implementing these protection measures will protect the Suckley's cuckoo bumble bee. Therefore, issuing a license to construct, operate, and maintain the project is

[85] Commission Staff May 20, 2024, Request for Concurrence at 3.

[86] 16 U.S.C. § 1536(a)(4).

[87] Xerces Society, Idaho Dep't of Fish and Game, and Wash. Dep't of Fish and Wildlife, *The Pacific Northwest Bumble Bee Atlas: Summary and Species Accounts* (Nov. 2021), https://www.xerces.org/sites/default/files/publications/21-026_01_2.pdf (accessed Dec. 4, 2025).

not likely to jeopardize the continued existence of Suckley's cuckoo bumble bee. No further action under the ESA is required.[88]

Essential Fish Habitat

82. Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act[89] (Magnuson-Stevens Act) requires federal agencies to consult with the Secretary of Commerce regarding any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH) identified under the Act. Under section 305(b)(4)(A) of the Magnuson-Stevens Act, NMFS is required to provide EFH Conservation Recommendations for actions that would adversely affect EFH.[90] Under section 305(b)(4)(B) of the Act, an agency must, within 30 days after receiving recommended conservation measures from NMFS, describe the measures proposed by the agency for avoiding, mitigating, or offsetting the effects of the agency's activity on EFH.[91]

83. There are four salmon Evolutionary Significant Units not listed under the ESA that have designated EFH within the project area: (1) UCR summer/fall Chinook salmon, (2) MCR spring Chinook salmon, (3) Okanogan River sockeye salmon, and (4) Lake Wenatchee sockeye salmon. In the final EIS, [92] Commission staff concluded that licensing the proposed project is not expected to adversely affect Chinook or sockeye salmon EFH. On February 8, 2024, Commission staff informed NMFS of its findings and requested NMFS's EFH conservation recommendations. In its September 6, 2024 BO, NMFS concluded that there are no adverse effects on EFH and stated it was concluding EFH consultation.[93] NMFS did not provide any EFH conservation recommendations. Therefore, no further action under the Magnuson-Stevens Act is required.

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[88] 16 U.S.C. § 1536(a)(4).

[89] 16 U.S.C. § 1855(b)(2).

[90] *Id*. § 1855(b)(4)(A).

[91] *Id*. § 1855(b)(4)(B).

[92] Final EIS at 73.

[93] NMFS September 6, 2024, BO at 24.

Historic and Cultural Resources

A. Tribal Consultation

84. The Commission takes seriously its trust responsibility to the Tribes and has endeavored to work with Tribes on a government-to-government basis to address the effects of the project on Tribal rights and resources.[94] The Commission recognizes the unique relationship between the United States and Indian Tribes and is committed to assuring that Tribal concerns and interests are considered whenever the Commission's actions or decisions have the potential to adversely affect Indian Tribes or Indian trust resources.[95] However, the Commission carries out its fiduciary responsibilities towards Indian Tribes in the context of the FPA.[96] These responsibilities do not require the Commission to afford Tribes greater rights than they would otherwise have under the FPA.[97]

85. As more fully described in the final EIS,[98] Commission staff contacted interested Tribes after FFP filed its notice of intent to seek an original license for the project on January 28, 2019. By letters dated March 1, 2019, and September 22, 2020, Commission

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[94] *Pol'y Statement on Consultation with Indian Tribes in Comm'n Procs.*, Order No. 635, 104 FERC ¶ 61,108 (2003). The policy statement is codified at 18 C.F.R. § 2.1c (2025)

[95] *Id*.

[96] *City of Tacoma, Wash.*, 71 FERC ¶ 61,381, at 62,493 (1995). *See also Band of Mission Indians v. FAA*, 161 F.3d 569, 574 (9th Cir. 1998) ("although the United States does owe a general trust responsibility to Indian tribes, unless there is a specific duty that has been placed on the government with respect to Indians, this responsibility is discharged by the agency's compliance with general regulations and statutes not specifically aimed at protecting Indian tribes").

[97] *Skokomish Indian Tribe v. FERC,* 121 F.3d 1303 (9th Cir. 1997) (affirming Commission's rejection of Tribe's permit application that was barred by the Commission's regulations because it would use the same water resources as an already filed relicense application).

[98] Final EIS at 6-9. In addition to the communications noted herein, the Yakama Nation and Umatilla Tribes staff also participated in the National Historic Preservation Act (NHPA) section 106 consultation, including providing recommendations considered pursuant to FPA section 10(a)(2)(B), as discussed below. *See* 16 U.S.C. § 803(a)(2)(B) (requiring the Commission to consider the recommendations of Tribes affected by the project to ensure that the project will be best adapted to the comprehensive plan).

staff advised the Yakama Nation, Umatilla Tribes, Warm Springs Tribes, and Nez Perce Tribe of the licensing proceeding and offered to meet with Tribal representatives.[99] Staff met with representatives of the Nez Perce Tribe on September 30, 2020;[100] the Yakama Nation on November 10, 2021;[101] and the Umatilla Tribes on December 13, 2023.[102] As requested, staff followed up with additional information after its meetings with the Yakama Nation and Umatilla Tribes.[103] Staff also offered to meet with Tribes on other occasions.[104]

[99] As is Commission staff's practice when reaching out to Tribes to offer to meet early in a licensing proceeding, the letters noted that the meeting could be limited to Commission and Tribal staff or can be open to other Tribes or FFP. Staff also followed up with each of the Tribes. Commission Staff June 19, 2019, Memo on Follow-up with the Umatilla Tribes; Commission Staff June 19, 2019, Memo on Follow-up with the Confederated Tribes of the Warm Springs; Commission Staff June 19, 2019, Memo on Follow-up with the Yakama Nation.

[100] Commission Staff October 7, 2020, Memo on Meeting with the Nez Perce Tribe.

[101] Commission Staff October 21, 2021, Notice of Meeting with the Yakama Nation; Commission Staff November 19, 2021, Summary of Meeting with the Yakama Nation.

[102] Commission Staff January 19, 2024, Summary of Meeting with the Umatilla Tribes.

[103] Commission Staff December 9, 2021, Letter to the Yakama Nation (describing the Commission's *ex parte* regulations and providing instructions for filing confidential and sensitive cultural resources information as privileged); Commission Staff May 30, 2024, Letter to the Umatilla Tribes (explaining how to file and request privileged information).

[104] Commission Staff June 28, 2022, Letter to the Yakama Nation; Commission Staff May 18, 2023, Memo on Tribal Outreach; Commission Staff October 18, 2023, Letter to the Yakama Nation; Commission Staff May 30, 2024, Letter to the Yakama Nation; *see also* Commission Staff May 25, 2023, Letter to the Yakama Nation (requesting a better understanding of the type of information that the Yakama Nation wishes to share with the Commission and how it would inform the Commission's analysis of cultural resources in the EIS in order to inform a discussion of the options that may be available for a meeting on substantive matters with the Tribe).

86. On November 3, 2023, the Yakama Nation requested clarification on whether the Commission's *ex parte* rules[105] conflict with the Commission's duties and obligations under sections 106 and 304 of the NHPA[106] and the Commission's policy statement on consultation with Tribes.[107] Specifically, the Yakama Nation requested consultation without public notice or the opportunity for parties to the proceeding to observe the meeting. On May 30 2024, Commission staff issued a letter explaining that the Commission has implemented regulations and practices to comply with NHPA sections 106 and 304,[108] including, as offered in Commission staff's October 18, 2023, letter, excusing meeting attendees during the disclosure of information about a specific location

[105] 18 C.F.R. § 385.2201 (2025).

[106] 54 U.S.C. § 306108 (requiring federal agencies to take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking, which generally requires the Commission to consult with the State or Tribal Historic Preservation Officer to determine whether and how a proposed action may affect historic properties and to seek ways to avoid or minimize any adverse effects); *id.* § 307103 (requiring federal agencies to withhold from public disclosure information about the location, character, or ownership of a historic property when disclosure may cause a significant invasion of privacy, risk of harm to the property, or impede the use of a traditional religious site by practitioners); *see also* 36 C.F.R. § 800.5(a)(2)(vii), 800.6(a)(5), 800.11(c) (2025) (implementing regulations).

[107] 18 C.F.R. § 2.1c(b)-(c) (2025) (acknowledging that the Commission has a trust responsibility to Tribes and endeavors to work with Tribes on a government-to-government basis to address the effects of proposed projects on tribal rights and resources through consultation, while noting that the Commission's status as an independent regulatory agency places some limitations on the nature and type of consultation that the Commission may engage in during contested proceedings).

[108] *See, e.g.*, 18 C.F.R. § 380.14 (2025) (providing the Commission's regulations for compliance with section 106 of the NHPA); *id.* § 4.32(b)(3)(ii), 16.7(d)(2)(v)(B) (2023) (requiring all applicants and licensees to delete from any information made available to the public specific site or property locations if their disclosure would create a risk of harm, theft, or destruction of archeological or Native American cultural resources); *id.* § 388.112 (2023) (providing specific procedures to follow when requesting privileged treatment of documents that are either filed with the Commission or submitted to the Commission staff).

which could create a risk of harm to an archeological site or Native American cultural resource.

87. The Yakama Nation and Umatilla Tribes,[109] as well as commenters,[110] have objected to the adequacy of the Commission's consultation with Tribes. Commission staff timely responded to comments and information requests by the Tribes and frequently offered to consult virtually or in person or in another manner convenient to the Tribes. Commission staff also sought to reduce procedural impediments to Tribal consultation to the extent permitted by law,[111] offering options for meeting and sharing sensitive cultural resources information. Specifically, the Commission's *ex parte* regulations, consistent with the requirements of the Administrative Procedure Act,[112] preclude, with exceptions not relevant here, the Commission from engaging in *ex parte* communications during the pendency of contested proceedings such as this one. This is why Commission staff offers to meet with Tribes in the early stages of proceedings – before they become contested. As noted, several Tribes, including the Yakama Nation, availed themselves of this opportunity in this case. By the time the Yakama Nation requested additional consultation, the proceeding was contested. Our regulations implementing the NHPA and our practices for meeting with potentially affected Tribes in contested proceedings best ensures the Commission's compliance with its regulations prohibiting *ex parte* communications while still providing Tribes the ability to raise issues related to a proposed project. For these reasons, we disagree that the Commission has not satisfied its Tribal consultation obligations.

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[109] Yakama Nation February 28, 2019, Letter; Yakama Nation December 28, 2020, Letter; Commission Staff November 19, 2021, Summary of Meeting with the Yakama Nation; Yakama Nation May 23, 2022, Letter; Yakama Nation May 1, 2023, Letter; Yakama Nation June 7, 2023, Letter; Umatilla Tribes June 16, 2023, Letter; Yakama Nation November 3, 2023, Letter; Yakama Nation July 18, 2024, Letter; Commission Staff August 6, 2024, Memo Providing Comments by the Yakama Nation; Yakama Nation November 1, 2024, Letter; Yakama Nation November 19, 2024, Letter; Yakama Nation March 28, 2025, Letter; Yakama Nation July 1, 2025, Letter; Yakama Nation August 1, 2025, Letter.

[110] Columbia Riverkeeper and WCAEF February 21, 2025, Comments; Mayor Paul Blackburn of the City of Hood River July 23, 2024, Comments; Washington EJ Council July 19, 2024, Comments; Saint Michael & All Angels Episcopal Church May 21, 2024, Comments.

[111] *See* 18 C.F.R. § 385.2201.

[112] 5 U.S.C. § 557(d)(1).

B. Tribal Treaties and Trust Responsibilities

88. As noted above, the project will be located within the traditional territory of the ancestors of the Yakama Nation, the Umatilla Tribes, the Warm Springs Tribes, and the Nez Perce Tribe on land ceded by the Yakama Nation. In its July 18, 2024, letter, the Yakama Nation urged the Commission to deny the project pending consideration of adverse and destructive environmental impacts to underlying and adjacent TCPs that serve the Yakama Nation's inherent or Treaty-reserved ceremonial activities, traditional gathering, and sacred practices.

89. Columbia Riverkeeper, Sierra Club, Washington Environmental Council, and Washington Conservation Action Education Fund oppose the project because of the potential harm to the Tribes, arguing that the Commission has a trust responsibility to the Tribes to resolve adverse effects on cultural and historic resources before issuing any license. [113]

90. The Yakama Nation, along with other Tribes, including the Nez Perce, Umatilla, and Warm Springs, have noted that they retain rights to exercise their treaty and reserved rights on these lands, including the ability to hunt, fish, and gather resources. Each of these treaties uses nearly identical language to state that the Tribes have the right of taking fish at all usual and accustomed places, in common with the citizens of the territory, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.[114] These treaties have the force of law. However, nothing in the record demonstrates that construction and operation of the project will interfere with the Tribes' treaty rights.

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[113] Columbia Riverkeeper, Washington Chapter of the Sierra Club, and Washington Environmental Council May 24, 2022, Comments at 25; Columbia Riverkeeper and Washington Conservation Action Education Fund June 30, 2025, Comments at 1.

[114] *See* Treaty between the United States and the Yakama Nation of Indians Art. 3, June 9, 1855, 12 Stat. 951; Treaty between the United States and the Walla Walla, Cayuses, and Umatilla Tribes and Bands of Indians in Washington and Oregon Territories Art. 1, June 9, 1855, 12 Stat. 945; Treaty between the United States of America and the Nez Perce Indians Art. 3, June 11, 1855, 12 Stat. 957; and Treaty between the United States and the Confederated Tribes and Bands of Indians in Middle Oregon Art. 1, June 25, 1855, 12 Stat. 963.

C. National Historic Preservation Act

91. Under section 106 of the NHPA[115] and its implementing regulations,[116] federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register, defined as historic properties, and afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment on the undertaking. This process 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.

92. On March 21, 2019, Commission staff issued a notice that was published in the *Federal Register*, stating that it was initiating consultation with the Washington SHPO and the Oregon SHPO, and that the Commission was designating FFP as the Commission's non-federal representative for carrying out day-to-day consultation pursuant to section 106.[117] FFP, acting as the Commission's non-federal representative, consulted with the Washington SHPO and Oregon SHPO to identify historic properties, determine the eligibility of cultural resources for listing on the National Register, and assess potential adverse effects on historic properties within the project's area of potential effects (APE). Five pre-contact archaeological resources, the larger Columbia Hills Archaeological District, and three TCPs (*Pushpum*, *Nch'ima*, and *T'at'alíyapa*) were identified within the proposed project APE. All five archaeological sites were recommended as individually eligible for listing in the National Register and were also recommended as contributing resources to the Columbia Hills Archaeological District and the three TCPs. In addition, the John Day Lock and Dam Historic District is located about 0.5 miles from the lower reservoir site but is not within the project APE.

93. In the final EIS, staff concluded that licensing the project as proposed would directly and indirectly adversely affect the five individual archaeological resources, the larger Columbia Hills Archaeological District, and the three TCPs.[118] All five

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[115] 54 U.S.C. § 300101 *et seq.*

[116] 36 C.F.R. pt. 800 (2025).

[117] 84 Fed. Reg. 11768 (Mar. 28, 2019); *see also* Commission Staff August 13, 2021, Letter to Washington and Oregon SHPOs (reiterating that the Commission has designated FFP as its non-federal representative and authorized FFP to initiate consultation with the Washington and Oregon SHPOs, Tribes, and other consulting parties but stating that the Commission remains ultimately responsible for all findings, determinations, and government-to-government consultation).

[118] Final EIS at 131.

archaeological sites would be removed to construct the upper and lower reservoirs. Project construction activities would also result in permanent indirect visual effects by altering the viewshed to or from a resource, changing its setting and feeling. The addition of the project reservoirs, substation, and overhead transmission line would add to the industrial effects created by the numerous wind turbines along the Columbia Ridge, the John Day Dam, existing transmission lines and substation, and the closed smelter. Such changes to the remaining natural landscape would further alter or degrade Tribal spiritual and teaching practices.

94. To protect cultural resources and to mitigate unavoidable adverse impacts to historic properties, FFP developed a draft HPMP that included general measures to be implemented during operation to manage cultural sites, including procedures for addressing newly discovered sites.[119] The draft HPMP offered conceptual measures intended to facilitate subsequent consultations with the Tribes and deferred the selection of final mitigation measures to after a license is issued for the project.

95. In the final EIS, Commission staff recommended that FFP revise the draft HPMP to include specific treatment measures for all affected archaeological sites and TCPs and include a specific plan for construction site monitoring.[120] The construction monitoring plan would include: (a) identifying the specific areas that will be monitored during construction; (b) the location of the National Register-eligible cultural sites to be avoided and how they will be marked and avoided where possible; (c) surveying the archaeological sites using specially trained canines for historic and prehistoric human remains detection to minimize the potential for disturbing any undetected burial sites, as recommended by the Umatilla Tribes; and (d) protocols for training construction workers on the importance of cultural sites, how to identify cultural sites, the need to avoid damage to cultural sites, and procedures to follow if previously unidentified cultural sites, including Indian graves, are encountered during construction.

96. Throughout the proceeding, Commission staff held multiple meetings with representatives from the Washington SHPO, Oregon SHPO, the Advisory Council, the Yakama Nation, the Umatilla Tribes, and FFP to resolve disagreements over the content of the Programmatic Agreement (PA), which requires the development and implementation of the HPMP, and to discuss measures that could be required by the license.[121] The Warm Springs Tribes and the Nez Perce Tribe were invited but did

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[119] The HPMP was filed with FFP's license application on June 23, 2020, and later revised on January 25, 2022.

[120] Final EIS at G-18 through G-19.

[121] Commission Staff June 5, 2024, Notice of Meeting; Commission Staff November 1, 2024, Notice of Meeting; Commission Staff April 22, 2025, Notice of

not attend the meetings.

97. To satisfy its section 106 responsibilities, the Commission executed a PA with the Advisory Council, Washington SHPO, and Oregon SHPO on September 19, 2025. FFP, the Yakama Nation, the Umatilla Tribes, the Warm Springs Tribes, and the Nez Perce Tribe were consulting parties invited to concur in the agreement. Only FFP chose to concur. The Corps filed comments stating it would complete its own section 106 consultation as needed for the limited potential impacts to properties under its jurisdiction and would not be a signatory to the PA that was being developed.[122]

98. Article 410 requires FFP to implement the PA. The PA requires the licensee to develop and implement within one year of license issuance an HPMP that includes the following additional measures agreed to by FFP and recommended by consulting parties: (1) develop unanticipated discovery protocols; (2) inventory and secure one or more mitigation properties with "First Foods" resources for use by Tribal members;[123] (3) document Tribal oral histories through digital recordation or similar means; (4) consult with the Tribes during construction planning to provide post-construction access to the project area for cultural programs or initiatives and to ensure construction plans do not constrain access to traditional fishing areas; (5) incorporate a vegetation screen or other visual screening measures to minimize viewshed changes from the project; (6) develop detailed treatments plans for the affected archaeological sites; and (7) where practicable, redesign laydown areas and/or incorporate protective measures to minimize construction effects on resources located within the proposed lower reservoir construction area. To facilitate the consultation process for developing and finalizing the HPMP, the PA requires FFP to work with the consulting parties to identify and retain a mutually agreeable and qualified facilitator; fully fund the selected facilitator; ensure that the consultation process involves regular, meaningful engagement through individual and large-group meetings, both in-person and virtual, to meet the needs of each consulting entity; and offer to reimburse reasonable travel expenses incurred by consulting parties.

99. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 410 requires the licensee to implement the PA and to file its HPMP with the Commission within one year of license issuance. Pursuant to the PA and

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Meeting; Commission Staff May 21, 2025, Notice of Meeting.

[122] Corps April 24, 2023, Letter.

[123] "First Foods" refer to water, fish, big game, roots, berries, and other plants that are important in Tribal oral traditions and legendary stories. Final EIS at 92; *see also* Umatilla Tribes January 23, 2024, Draft EIS Comments at 1.

Article 410, FFP may not start ground disturbing activities prior to the Commission's approval of the HPMP.

Pacific Northwest Electric Power Planning and Conservation Act

100. In 1980, Congress enacted the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act).[124] This act created the Northwest Power Planning Council, now known as the Northwest Power and Conservation Council (Council), and directed it to develop a Columbia River Basin Fish and Wildlife Program (Program). The Program is designed to protect, mitigate, and enhance fish and wildlife resources affected by the development and operation of hydroelectric projects on the Columbia River and its tributaries, while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply.[125] Section 4(h)(11)(A) of the Northwest Power Act[126] provides that federal agencies operating or regulating hydroelectric projects within the Columbia River Basin shall exercise their responsibilities to provide equitable treatment for fish and wildlife resources with other purposes for which the river system is utilized and shall take the Council's Program into account "at each relevant stage of decision-making processes to the fullest extent practicable."

101. As part of its Program, the Council has designated over 40,000 miles of river in the Pacific Northwest as not being suitable for hydroelectric development (protected area). Because the project will be a closed-loop system that will not be hydraulically connected to any surface waters, the project will not be located on or develop a protected area; therefore, the protected area provisions of the Program do not apply.

102. To mitigate harm to fish and wildlife resources, the Council has adopted specific provisions to be considered in the licensing or relicensing of non-federal hydropower projects (Appendix F of the Program). This license requires measures to protect fish and wildlife habitat, sensitive species, and water quality and quantity to minimize the effects of the project on the resources for which the Columbia River reach was designated and thus are consistent with the provisions of the Program. Further, Article 412 of this license reserves the Commission's authority to require further alterations in project structures and operations to take into account, to the fullest extent practicable, the applicable provisions of the Program.

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[124] 16 U.S.C. §§ 839(b) *et seq*.

[125] *Id.* § 839(h)(5).

[126] *Id.* § 839(h)(11)(A).

Recommendations of Federal and State Fish and Wildlife Agencies Pursuant to Section 10(j) of the FPA

103. Section 10(j)(1) of the FPA[127] 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[128] to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including spawning grounds and habitat)" affected by the project. If the Commission does not accept a 10(j) recommendation, it must, after attempting to resolve the issue with the relevant agency, explain why the recommendation is inconsistent with section 10(j) or other applicable law and find that the conditions in the license meet the objectives of the section.

104. In response to the March 24, 2022 public notice that the project was ready for environmental analysis, Washington DFW, Interior, and NMFS each filed four preliminary recommendations pursuant to section 10(j).[129] Commission staff made a preliminary determination that 7 of the 12 recommendations were within the scope of 10(j); 2 recommendations could be within the scope of section 10(j) if the Commission were to require that Klickitat PUD's existing intake structures (i.e., infiltration gallery, pump station, and conveyance pipe) be licensed project facilities; and 3 recommendations were outside the scope of section 10(j). The three recommendations that were determined to be outside the scope of section 10(j) and the two recommendations related to Klickitat PUD's existing intake structures are considered below under the broad public interest standard of section 10(a)(1) of the FPA.

105. In the draft EIS, staff recommended four of the seven recommendations considered to be within the scope of 10(j), determined that two were inconsistent with the substantial evidence standard of section 313(b) of the FPA, and concluded that one was inconsistent with the comprehensive planning and equal consideration standard of section 10(a) and 4(e) of the FPA.[130]

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[127] *Id.* § 803(j)(1).

[128] *Id.* §§ 661 *et seq.*

[129] Washington DFW May 18, 2022, Letter; Interior May 23, 2022, Letter; and NMFS May 23, 2022, Letter.

[130] For the two recommendations related to Klickitat PUD's existing intake structures, staff determined that both were inconsistent with the substantial evidence standard of section 313(b) of the FPA. Draft EIS at H1 through H5. FPA Section 313(b), 16 U.S.C. § 825*l*(b), provides that the Commission's findings of fact will be affirmed if

106. On March 31, 2023, Commission staff sent letters to Washington DFW, Interior, and NMFS noting the preliminary determinations of inconsistency. On April 19, 2023, NMFS requested a meeting to discuss their recommendations and attempt to resolve the inconsistencies. Staff conducted a section 10(j) meeting with NMFS on May 3, 2023.[131]

107. On June 6, 2023, NMFS filed a letter modifying two of its four 10(j) recommendations and rescinding the other two recommendations.[132] On August 4, 2023, Interior filed a letter modifying two of its four 10(j) recommendations and adding four new 10(j) recommendations. As a result of these modifications and additions, Washington DFW has filed four recommendations, NMFS has filed two recommendations, and Interior has filed eight recommendations pursuant to section 10(j).[133]

108. Two of Washington DFW's recommendations and two of Interior's recommendations involve including Klickitat PUD's existing water intake and water conveyance structures in the project boundary, filing updated exhibits, and ensuring that Klickitat PUD's infiltration gallery is maintained and conforms to Washington DFW and NMFS fish screening criteria. As discussed above, Klickitat PUD's water supply system facilities are not project facilities and will not be included within the project boundary. Because the Commission has no authority to require measures at non-jurisdictional facilities, these recommendations are inconsistent with the FPA and are not discussed further. One of Interior's recommendations and one of NMFS's recommendations involve requiring FFP to file a written commitment in coordination with Klickitat PUD to screen the culverts within the railroad embankment berm[134] to conform to NMFS's fish screening criteria prior to filling the reservoirs or conduct a fry and juvenile fish entrainment survey in the intake pool within 12 months of license issuance to help inform the need for screening. These two recommendations are also inconsistent with the

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they are supported by substantial evidence.

[131] *See* Commission Staff May 9, 2023, 10(j) Meeting Summary.

[132] NMFS rescinded two recommendations concerning placing structures in the Columbia River and pile driving because, as discussed during the 10(j) meeting, FFP proposes no actions that would involve these activities. NMFS June 6, 2023, Draft EIS Comments at 6 (modifying 10(j) recommendations).

[133] On June 6, 2023, Washington DFW filed a letter commenting on the draft EIS, but did not modify its four 10(j) recommendations. Washington DFW June 6, 2023, Draft EIS Comments at 3-4.

[134] The BNSF railroad berm has one confirmed culvert that can convey water from the Columbia River to the intake pool from which Klickitat PUD draws water.

Commission's jurisdiction as established by the FPA because the culverts within the railroad embankment berm are not project facilities.[135]

109. Interior recommends that FFP modify its Vegetation Management and Monitoring Plan by adding a provision to survey for state or federally listed threatened, endangered, or sensitive plants within areas to be disturbed. The recommended plant surveys are outside the scope of 10(j) because Interior does not explain how these plants relate to the protection, mitigation, and enhancement of fish or wildlife. Recommendations outside of the scope of section 10(j) are considered below under the broad public interest standard of section 10(a)(1) of the FPA.

110. This license includes conditions consistent with seven of the eight remaining recommendations: NMFS's and Interior's recommendations to avoid filling the project reservoirs (both initial fill and annual re-fill) any time between April 1 and August 31 (Article 402); Interior's recommendation to revise FFP's proposed Vegetation Management and Monitoring Plan to include provisions for revegetating disturbed areas with a native seed mix and containerized plants or bareroot nursery stock (including plants of cultural or spiritual importance) if available, monitoring revegetated areas, controlling noxious weeds, and fire suppression measures (Article 406); Washington DFW's recommendation to develop a plan to deter birds and bats from using project reservoirs, including monitoring methods and metrics for evaluating the effectiveness of deployed deterrents (Article 407); Washington DFW's recommendation to develop a management plan for the golden eagle mitigation lands, including controlling noxious weeds, managing public access to avoid disturbing raptors, wildfire mitigation such as replanting of burned areas with native species, fencing to protect and improve the habitat, and development of a wildlife water guzzler if there is an identified need for a source of water for wildlife (Article 407); Interior's recommendation to develop monarch butterfly management plan if pre-construction surveys find monarch butterfly and its preferred milkweed host plants (Article 407); and Interior's recommendation to develop an avian protection plan (Article 408).[136]

111. As to the eighth recommendation, Interior recommends that if a refill of the project reservoirs is scheduled between April 1 and August 31 and the culvert within the BNSF railroad embankment berm is not screened and no juvenile salmonid survey of

[135] We note, however, that, as explained above, Klickitat PUD has committed to screening the culvert.

[136] Interior recommends that FFP consult with Oregon DFW when modifying its Vegetation Management and Monitoring Plan and when developing the avian protection plan. However as discussed below, this license does not include any facilities that extend into Oregon. Therefore, there is no need for FFP to consult with Oregon DFW on these plans.

the intake pool has been conducted, a water flow and smolt monitoring plan should be developed prior to withdrawing water that documents any smolts observed on each end of the culvert, and to report results to the resource agencies. Because the need for the plan and smolt monitoring would be contingent on whether any annual withdrawals occur during this migration window and on the berm not being screened, and because Article 402 of this license requires filling and refilling the project reservoirs outside the migration period, there is no need to include Interior's monitoring and reporting requirement. Therefore, this unnecessary condition is inconsistent with the FPA's comprehensive development/equal consideration standard, and the measures required by the license meet the objectives of section 10(j).

Section 10(a)(1) of the FPA

112. Section 10(a)(1) of the FPA[137] 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.

A. Culvert Screening

113. As discussed previously, both Interior and NMFS recommend that FFP and/or Klickitat PUD file a written commitment to screen the culvert hydrologically connecting the Columbia River to the intake pool in a manner that adheres to NMFS's fish screen guidance. Without such commitment, they recommend that FFP conduct a fry and juvenile fish entrainment survey in the intake pool within 12 months of license issuance to help inform the need for screening. Because Klickitat PUD has committed to screening the culvert, this issue is moot. Further, Article 402 requires FFP to avoid filling of project reservoirs during the peak salmon migration season which minimizes the project's contribution to entrainment of juvenile salmonids within the intake pool. This requirement adequately protects ESA-listed fish from project-related effects.

B. Rare Plant Surveys

114. FFP conducted surveys for rare plants during the development of the license application. However, the surveys were not completed when all the rare plants would be identifiable. In its Vegetation Management and Monitoring Plan, FFP proposes to survey for federally listed plants and sensitive plant communities within the areas to be disturbed prior to land-disturbing activities, and based on the survey results, limit

[137] 16 U.S.C. § 803(a)(1).

construction-related disturbance of the communities by flagging or fencing off sensitive areas and designating specific areas for work and equipment movement.

115. Interior recommends that the surveys be conducted in both upland shrub-steppe and riparian areas, that the surveys be conducted twice prior to ground-disturbing activities, once early in the spring and once in mid-summer to ensure that both early and late-blooming sensitive plants are identified, and that all state or federally listed threatened, endangered, or sensitive plants be documented and avoided.[138]

116. In the final EIS, Commission staff recommended that FFP conduct preconstruction surveys of listed and rare species in the spring and early summer to improve the probability of identifying sensitive plants and defining measures that would avoid or minimize adverse effects on the plants, if found. Commission staff estimated that it would cost $20,000 ($1,087 annualized) for the additional survey above that proposed by FFP and found that the benefits of identifying and protecting these rare plants to be worth the added cost.[139] Commission staff also recommended that FFP ensure that disturbed areas are quickly revegetated using native species, including species that are important to Tribal practices like smooth desert parsley.[140] We agree with staff, and Article 406 therefore requires FFP to revise the Vegetation Management and Monitoring Plan to include these provisions.

C. Fugitive Dust Control

117. Excavating the upper and lower reservoir and improving existing access roads will require the use of heavy equipment, vegetation disturbance and removal, stockpiling of soils, and the transport and disposal of large quantities of soil. If uncontrolled, these land-disturbing activities could cause soil erosion, dust, and sedimentation of aquatic habitat in the Columbia River and several ephemeral tributaries.

118. To minimize the potential for soil erosion during construction, FFP proposes to develop an erosion and sediment control plan. FFP also proposes to include measures to control windblown dust and soil, such as periodic watering of surface roads, applying dust palliatives[141] to disturbed areas, and covering trucks transporting soil, sand, or other loose material on the site.

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[138] Interior May 23, 2022, Letter at 11-12.

[139] Final EIS at G-10 - G-11.

[140] *Id.* at G-11.

[141] Dust palliatives are substances applied to roads or ground surfaces to reduce airborne dust and its associated health impacts. Common types include synthetic

119. EPA recommends that the erosion and sediment control plan include the following for controlling fugitive dust: (1) a surface/roadway watering plan, possibly including chemical dust control and/or gravel roadway cover if necessary; (2) a monitoring and response plan to identify and address periods of significant dust emission; (3) a threshold high windspeed to stop material movement and processing to prevent significant dust emission events; (4) roadway speed limits to limit dust entrainment; (5) truck cleaning and load covering requirements; (6) identification of responsible officials and training procedures; (7) record keeping and reporting schedules; and (8) community/citizen reporting forms/phone-line and contact information to report dust impact events.[142]

120. In the final EIS, Commission staff recommended that the erosion and sediment control plan include EPA's recommended dust control measures because the measures will make the plan more robust and improve monitoring and reporting requirements at little additional cost.[143] We agree. Therefore, Article 404 requires FFP to incorporate the above measures into the erosion and sediment control plan.

D. Wind and Vibration Studies

121. TID is concerned that project construction and operation may affect TWPA's wind turbines.[144] Specifically, TID is concerned that: (1) the new project reservoirs would change the area's topography, causing changes to wind patterns that could damage the turbines, reduce their output, and increase maintenance costs; (2) the new project reservoirs could saturate the foundations of the turbines making them unstable; (3) the new project reservoirs could attract more avian and bat species and their prey, resulting in more frequent avian strikes with the turbines (discussed in the next section) which would, in turn, increase maintenance costs; and (4) project construction could damage turbines due to vibrations resulting from excavation and drilling for the new reservoirs and underground tunnels.

122. TID recommends that FFP conduct a wind analysis study that uses a multiple year dataset to examine how the project would affect wind direction and stresses on

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polymers, magnesium chloride, and water-absorbing salts.

[142] EPA June 6, 2023, Draft EIS Comments at 14.

[143] Final EIS at G-7 - G-8.

[144] TID states that the wind farm is owned by the TWPA and is constructed on land TWPA leases from several landowners, one of which is NSC Smelter. TID purchases all the capacity and energy from the wind farm and pays all its costs. TID June 6, 2023, Draft EIS Comments at 8.

its turbines.[145] TID also recommends that the Commission require "one or more independent studies" that consider the potential damage to its existing wind turbines that could result from vibrations produced by the project's construction and that it be compensated for any losses or damages if the mitigation measures identified through the study fail.[146]

123. FFP proposes to develop a vibration monitoring plan that includes monitoring the effects of drilling of the tunnels and powerhouse cavern on the foundations and underground utilities of nearby wind turbines. As proposed, the plan would include provisions to conduct a baseline survey and assessment of existing utilities, a map of existing utilities, vibration monitoring methods, criteria for evaluating vibration levels, and identifying potential mitigation measures based on the monitoring results. FFP states that the wind analysis study it conducted when preparing its license application reasonably demonstrates that project operation would not substantially alter wind patterns and opposes conducting further wind studies.[147] Further, FFP states that that is has been working cooperatively and in good faith with the landowner NSC Smelter and expects to obtain all sufficient rights to be able to construct the project.[148] Additionally, NSC Smelter states that it "has no intention of limiting FFP's access to the [Goldendale] Project site and is working with FFP in good faith to authorize such access for the construction, development, operation, and maintenance of the [Goldendale] Project."[149]

124. In the final EIS, Commission staff determined that FFP's wind study sufficiently described existing conditions and predicted with reasonable certainty that presence of the upper reservoir would have a negligible effect on the wind farm's operation. Therefore, Commission staff did not recommend an additional wind study at a levelized annual cost of $63,806.[150] We agree.

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[145] *Id*. at 11-22.

[146] *Id*. at 23.

[147] FFP July 7, 2022, Reply Comments at 3-9.

[148] *Id*. at 3.

[149] NSC Smelter July 7, 2022, Comments at 2.

[150] FFP evaluated the potential changes in wind speed and direction and turbulence that would result from project construction, with a focus on the two closest turbines to the proposed upper reservoir. The model shows some increases and decreases in wind and turbulent kinetic energy, but the average change would be near zero. Wind speed and direction changes, on average, are also close to zero at the locations of all turbines, suggesting there would be only minor changes in wind and turbulence due to the presence

125. Regarding vibration effects, the measures to be outlined in the vibration monitoring plan proposed by FFP and required by Article 405 should be sufficient to identify and develop measures to minimize vibration effects on nearby wind turbine foundations and would likely achieve the same outcomes of requiring TID's recommended studies. For these reasons, we are not requiring a vibration or wind study as recommended by TID. Article 405 requires the vibration monitoring plan be developed in consultation with TID.

126. As to compensation for potential damages, the Commission does not have authority to adjudicate claims for, or to require payment of damages for, project-induced adverse effects to the property of others.[151] Rather, if TID believes that construction vibrations damage or interfere with the operations or output of its turbines during excavation or drilling, it can seek redress in the appropriate state or federal court.

127. TID also contends that the lease between TWPA and NSC Smelter is not able to accommodate the project because the lease "prohibits NSC from entering into a lease that would interfere with TWPA's turbines, use of its property, or other rights under the lease."[152] The issuance of a license does not by itself create or alter property rights. Standard Article 5, set forth in Form L-6, requires the licensee to acquire title in fee or the right to use in perpetuity all lands necessary or appropriate for the construction, maintenance, and operation of the project, within five years. Disputes as to current property rights are not matters for the Commission but rather must be resolved through the courts, if necessary.[153] If a licensee does not have the necessary rights, it must acquire them through negotiation or, if that fails, through eminent domain proceedings.[154] The Commission does not interject itself in the process by which a licensee obtains requisite property rights.

E. Increased Eagle and Bat Mortality from Wind Turbine Strikes

128. Washington DFW, FWS, EPA, Yakama Nation, and TID state that constructing the upper and lower reservoir will create open water habitat that could attract prey

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of the upper reservoir. Final EIS at 80 & G-24.

[151] *See, e.g.*, *Ohio Power Co.*, 71 FERC ¶ 61,092, at 61,312 (1995) (citing to *S.C. Pub. Service Auth. v. FERC*, 850 F.2d 788, 795 (D.C. Cir. 1988)).

[152] TID June 6, 2023, Draft EIS Comments at 1-2.

[153] *See, e.g.*, *Andrew Peklo III*, 149 FERC ¶ 61,037, at P 53 (2014).

[154] Section 21 of the FPA, 16 U.S.C. § 814, allows the licensee to acquire the necessary property interests by right of eminent domain, if negotiations fail.

for golden eagles and bats.[155] Commenters assert that the increased attraction to the reservoirs could, in turn, expose golden eagles and other raptors and birds to increased mortality from wind turbine strikes, and bats to increased mortality from strikes and barotrauma.[156]

129. As noted above, this license includes measures proposed by FFP and recommended by Washington DFW to minimize the attraction of the reservoirs to birds and bats and to monitor the effectiveness of those measures, including: (1) defining survey methods to document bird and bat use at the project; (2) conducting one year of pre-construction surveys and at least two years of surveys following the start of project operation; (3) installing deterrents to reduce the attraction of the project reservoirs to birds, bats, and other wildlife (e.g., shade balls); (4) developing metrics for evaluating the effectiveness of the deterrents; (5) developing criteria for determining if additional deterrents or modifications to the project are needed; and (6) developing a schedule for filing monitoring reports with FWS, Washington DFW, Yakama Nation, Umatilla Tribes, Confederated Tribes of the Warm Springs, Nez Perce Tribe, and the Commission (Article 407).

130. TID recommends an additional study be conducted to establish baseline pre-construction data regarding average golden eagle strikes over the past 25 years.[157] TID also recommends that FFP perform an annual study for the life of the surrounding wind turbines to determine whether the proposed project is causing an increase in golden eagle strikes as compared to the baseline data.

131. In the final EIS, Commission staff concluded that FFP's measures as modified by staff would be sufficient to determine whether the project is causing an increase in risk to eagles without requiring a baseline study and conducting annual monitoring for the life of the license as recommended by TID at an annualized cost of $21,087. However, Commission staff also noted that a potential outcome of the initial monitoring efforts could be a recommendation for further monitoring.[158] We agree that the proposed measures, as modified by staff, are sufficient.

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[155] Washington DFW May 18, 2022, Letter at 7 and 10; FWS October 15, 2020, Letter at 2; EPA May 31, 2022, Letter at 2; Yakama Nation June 7, 2023, Draft EIS Comments at 9; TID June 6, 2023, Draft EIS Comments at 28.

[156] *Id*.

[157] TID June 6, 2023, Draft EIS Comments at 28-29.

[158] Final EIS at G-14 - G-16.

F. Dalles Sideband Snail and Juniper Hairstreak Butterfly Surveys

132. As discussed above for the monarch butterfly and Suckley's cuckoo bumble bee, project construction could adversely affect habitats that could support Dalles sideband snail and juniper hairstreak butterfly, both of which are candidates for state listing in Washington. Washington DFW recommends that FFP conduct pre-construction surveys for these species.[159]

133. The final EIS explained that surveying for the snail and butterfly prior to construction would determine if they are present and inform the need for any additional protective measures, such as flagging to prevent disturbance, potentially relocating affected species, or revegetating disturbed areas with suitable plants.[160] Further, these surveys could be done at the same time as the rare plant surveys required by Article 406; therefore, there would be no additional cost to survey for these sensitive species. Accordingly, Article 407 requires FFP to modify the Wildlife Management Plan to include pre-construction surveys for Dalles sideband snail and juniper hairstreak butterfly and, if the species are found, develop appropriate protection measures.

G. Preconstruction Surveys for Ferruginous Hawks

134. FFP proposes in its Wildlife Management Plan to conduct two years of pre-construction surveys to document bald eagles, golden eagles, peregrine falcons, prairie falcons, and prairie falcon nesting and bald eagle roosting sites within one mile of the project. Based on the surveys, FFP would develop appropriate spatial and temporal restrictions on construction activities (e.g., avoiding on or near-surface blasting and helicopter use within 0.25 to 1 mile of an active nest, depending on the species), and monitor any documented nests to ensure construction activities avoid disturbing the nests. The Yakama Nation asserted that the ferruginous hawks may also be nesting in the area and could experience indirect displacement from their habitat by project construction or direct impacts via collision with nearby wind turbines.[161]

135. In the final EIS, Commission staff noted that ferruginous hawks are known to inhabit lands in and around the project site and concluded that including ferruginous hawks in the survey efforts would allow for mitigation and monitoring measures to be developed if they are found and would not increase survey costs. Article 407 requires that FFP survey for ferruginous hawks in addition to the other eagle and falcon species

[159] Washington DFW May 18, 2022, Letter at 8. Washington DFW did not specifically recommend these surveys pursuant to FPA section 10(j).

[160] Final EIS at G-12 - G-13.

[161] Yakama Nation June 7, 2023, Draft EIS Comments at 9.

and implement measures to minimize disturbance (such as timing and distance restrictions) if found.

H. Visual and Recreation Resources Management Plan

136. FFP proposes to develop a visual and recreation resources management plan that includes provisions for installing an interpretive sign describing the project at a location that provides views of the project and is accessible to people with disabilities, and implementing measures to reduce the contrast of the project with the landscape (e.g., selecting natural paint colors and dulling reflective surfaces that cannot be painted, planting native vegetation and/or trees to break up the lines of roads and facilities and soften the visual effect on the landscape). Interior recommends that the plan be developed in consultation with the Park Service to minimize negative impacts to the Lewis and Clark National Historic Trail and to take advantage of the Park Service's expertise with respect to location and content of interpretive signage and communications.[162] Rebecca Sue Sonniksen recommends that FFP consult with the Tribes on the content of its proposed interpretive facility to ensure it communicates the "cultural heritage and significance of the area."[163]

137. In the final EIS, Commission staff recommended that the plan include details on the design, location, and content of the interpretive facility and that the plan be developed in consultation with the Park Service and the Tribes to ensure that the interpretative display is built to appropriate standards and that effects on the Lewis and Clark National Historic Trail are minimized.[164] Article 409 requires that the plan include the above measures and consultation requirements.

I. Effects on Cultural and Tribal Resources

138. As discussed above, project construction would directly and indirectly adversely affect the five individual archaeological resources, the larger Columbia Hills Archaeological District, and the three TCPs (*Pushpum, Nch'ima*, and *T'at'ałíyapa*) that are significant and culturally important to the Yakama Nation, Umatilla Tribes, Nez Perce Tribe, and Warm Springs Tribes. The Yakama Nation and Umatilla Tribes have stated that no form of mitigation is acceptable because the adverse effects to the archaeological sites and TCPs are irreplaceable.[165] Columbia Riverkeeper, Sierra Club,

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[162] Interior June 6, 2023, Letter at 4.

[163] Rebecca Sue Sonniksen June 4, 2023, Draft EIS Comments.

[164] Final EIS at 76-77.

[165] *See, e.g.*, Yakama Nation March 23, 2022, Letter at Attach. A; Yakama Nation November 1, 2024, Letter at 2; Yakama Nation November 19, 2024, Letter at 3; Yakama

Washington Environmental Council, and Washington Conservation Action Education Fund are also opposed to project construction because of the direct and irreversible harm to the Tribes, arguing that the Commission has a trust responsibility to the Tribes to resolve adverse effects on cultural and historic resources before issuing any license. [166]

139. We acknowledge that there will be adverse effects to archeological sites and the TCPs. To mitigate those impacts, this license requires the development of an HPMP. Although the HPMP has not been finalized,[167] the PA requires that the Tribes, Washington SHPO, Oregon SHPO, and the Advisory Council be consulted during the development of the HPMP and that no ground-disturbing actions will occur prior to the Commission's approval of the HPMP. Further, the PA provides that the HPMP include access for gathering of traditional food onsite if practicable and on potential mitigation properties selected in consultation with the Tribes. Article 410 requires FFP to implement the PA for the project.

J. Traffic Management Plan

140. During construction, and to a lesser extent during project operation, traffic is expected to increase on local public roads and could cause delays or safety concerns. Klickitat County Public Works Department (Klickitat County) recommends that prior to the start of any construction hauling operations, FFP evaluate the adequacy of any county roads and bridges that would be used as haul routes, following Klickitat County guidelines, and develop mitigation if the results show that the roads or bridges on the haul routes are not adequate to support the loads during construction.[168] Klickitat County also

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Nation July 1, 2025, Letter at 4; Umatilla Tribes January 23, 2024, Draft EIS Comments at 7.

[166] Columbia Riverkeeper, Washington Chapter of the Sierra Club, and Washington Environmental Council May 24, 2022, Comments at 25. Columbia Riverkeeper and Washington Conservation Action Education Fund June 30, 2025, Comments at 1.

[167] Developing the details of the HPMP post-licensing is acceptable. *See* FERC and Advisory Council, Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects (May 20, 2002) at 5, https://www.ferc.gov/industries/hydropower/gen-info/guidelines/hpmp.pdf (accessed Dec. 8, 2025) ("If it is not possible to complete a HPMP before license issuance, the PA will typically require that a HPMP be developed within one year of the issuance of the FERC license."). The PA in the proceeding includes the requirement that an HPMP be developed within one year of the issuance of this license.

[168] Klickitat County June 6, 2023, Draft EIS Comments at 2.

states that a formal Haul Route Agreement with Klickitat County will be required prior to the start of construction and that all materials placed on county roads meet the requirements for Washington DOT Standard Specifications for Road, Bridge, and Municipal Construction.[169] Additionally, Klickitat County notes that any new driveways or intersections that access onto county roads will require an access permit through the County Public Works Department prior to construction and that financial security is required with a formal "Road Haul Agreement" prior to construction to address road maintenance issues and potential damages that arise during construction.[170] The Umatilla Tribes state that "the road(s) to traditional fishing areas [should] remain open and accessible without excessive disruption or delay, for the health and safety of Tribal Fishers and for the free exercise of their reserved Treaty Rights."[171]

141. FFP states that it will work with the county to obtain an agreement for haul routes and other road use actions as needed for construction.[172] FFP also proposes to develop a construction traffic management plan containing traffic control measures (e.g., signage, flaggers at key intersections, reduced speed limits or other speed control devices, and controlled or limited access routes) and protocols for coordinating construction schedules, any temporary road or lane closures, and any traffic control measures with Washington DOT and Klickitat County to minimize disruption of traffic on public roads.

142. Because John Day Dam Road, used to access the lower reservoir, is also used by the Corps and as access to the BIA Treaty Fishing Access Site next to Railroad Island boat launch, Commission staff recommended coordinating construction schedules and any associated road closures with the Corps, BIA, and Tribal governments through the Columbia River Inter Tribal Fish Commission, in addition to Klickitat County and Washington DOT, to minimize disruptions to the Corps' operations and ensure continued access to the Treaty Fishing Access.[173] We agree. Article 411 requires FFP to develop the traffic management plan in consultation with the Corps, BIA, Washington DOT, Klickitat County, and Columbia River Inter Tribal Fish Commission.[174] Notwithstanding

[169] *Id*.

[170] *Id*. at 2-3.

[171] Umatilla Tribes January 23, 2024, Draft EIS Comments at 2.

[172] FFP July 7, 2022, Reply Comments at 23.

[173] Final EIS at G-17 & G-18.

[174] The PA also includes a stipulation (C-11) to consult with the Tribes during construction planning to ensure that construction activity does not constrain Tribal members' access to traditional fishing areas that are located near the project.

the FPA's preemption of state law,[175] the Commission has explained that preemption does not mean that the Commission will not elect to require a licensee to comply with local requirements that do not conflict with a licensee's ability to carry out the Commission's orders.[176] We prefer for our licensees to be good citizens of the communities in which projects are located, and thus to comply with state and local requirements, where possible.[177] However, to the extent that state or local regulations make compliance with our orders impossible or unduly difficult, we will conclude that such regulations are preempted.[178]

K. Adaptive Management Plan

143. Columbia Riverkeeper, Sierra Club, and Washington Environmental Council recommend developing an adaptive management plan that "coordinates post-licensing monitoring and adaptive management measures to ensure license conditions are meeting previously established measurable objectives and otherwise performing as forecasted over the term of the new license" and that the plan include specific license reopener provisions in the event that the project is not meeting measurable objectives as intended.[179]

144. Should this situation arise, Standard Article 15, set forth in form L-6, of this license provides fish and wildlife agencies the opportunity to petition the Commission to reopen the license to consider additional mitigation measures, after notice and opportunity for hearing. Therefore, we have no basis for recommending a post-license monitoring and adaptive management plan.

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[175] The courts have found that, except for proprietary water rights, the FPA has "occupied the field," foreclosing state regulation. *Sayles Hydro Assocs. v. Maughan*, 985 F.2d 451, 456 (9th Cir. 1993); *see also Cal. v. FERC*, 495 U.S. 490 (1990).

[176] *PacifiCorp*, 115 FERC ¶ 61,194, at P 9 (2006) (explaining that "it is within the Commission's sole discretion to determine the extent to which [compliance with local regulation] will be required" and that a county "may be permitted to exert regulatory authority to the degree that the Commission allows.").

[177] *Id.*

[178] *Id.*

[179] Columbia Riverkeeper, Washington Chapter of the Sierra Club, and Washington Environmental Council May 24, 2022, Comments at 27.

L. Effluent Discharges

145. NMFS recommended prohibiting FFP from releasing any effluent discharge into the Columbia River at any point during project construction or operation and, if discharges are necessary, that NMFS be consulted.[180] FFP stated that it does not anticipate the need to release effluent discharge into the Columbia River, as the project has been designed to avoid the need for these types of discharges.[181]

146. As discussed previously, no discharges are anticipated during project operation because the project would be operated as a closed-loop pumped storage project. Therefore, it is not necessary to include a license condition expressly prohibiting effluent discharges.

Project Boundary

147. Commission regulations require that all lands and waters necessary for the operation and maintenance of the project be included in the project boundary. Specifically, project boundaries enclose the project works that are to be licensed and are to include "only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources."[182]

148. FFP includes within the project boundary BPA's existing 500-kV transmission line from BPA's pole where the project line would tie into to BPA's John Day Substation located across the Columbia River. Because BPA owns and maintains this line, it does not fall within the Commission's jurisdiction as a primary transmission line and therefore it does not need to be included in the project boundary.[183] Removing BPA's existing transmission facilities will result in the project boundary being reduced from 681.6 acres to 578.62 acres.[184] Furthermore, as discussed below, the licensee must file revised Exhibit G drawings that, *inter alia*, exclude BPA's 500-kV transmission line.

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[180] NMFS May 23, 2022, Letter at 15-16. NMFS did not specifically recommend the measure to avoid effluent discharges pursuant to FPA section 10(j).

[181] FFP July 7, 2022, Reply Comments at 22.

[182] 18 C.F.R. § 4.41(h)(2) (2025).

[183] *See, e.g.*, *Idaho Nat. Energy, Inc.*, 29 FERC ¶ 62,038 (1987) (including in the project boundary facilities up to the point of interconnection with BPA facilities); *City of Seattle, Wash.*, 142 FERC ¶ 62,231 (2013) (same).

[184] Removing BPA's existing transmission facilities would reduce federal lands

EPA's Comments on the Final EIS

A. Greenhouse Gases and Climate Change

149. The final EIS finds that because FFP proposes to pump water to the upper reservoir when there is surplus energy available from renewable energy sources and generate when the grid is experiencing shortfalls, there would be no production of greenhouse gases (GHG) during pumping operations.[185] EPA recommends that the Commission demonstrate how the project will be integrated into the regional electrical grid and explain the availability of surplus energy from renewable sources to validate the final EIS's assertion. EPA states that this assertion is critical to the assessment of the project's electricity consumption and whether the facility will have a net loss of electricity per year.[186] For example, EPA suggests that the Commission consider how and where FFP would obtain surplus renewable energy, whether there are local power companies with excess renewable power, any initial scoping reports on the feasibility of these intermittent purchases or other publicly available reports, and any "contingency plan" if surplus renewable energy for pumping is not available.[187]

150. FFP stated that it would use renewable power for pumping operations and nothing in the record undermines that assertion.[188] As discussed below, the Goldendale Project will be located in the Western Electricity Coordinating Council (WECC) Northwest region of the North American Electric Reliability Corporation (NERC). The project

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in the project boundary from 18.1 acres to 4.37 acres.

[185] Final EIS at 116. *See also* Washington DOE 97, *State Environmental Policy Act Final Environmental Impact Statement for the Proposed Goldendale Energy Storage Project* 234 (Dec. 2022), https://apps.ecology.wa.gov/publications/documents/2206015.pdf (accessed Dec. 4, 2025).

[186] EPA March 18, 2024, Comments at 7.

[187] *Id.*

[188] FFP has stated that one of the primary purposes of the project is to pump using renewable electricity generation. *See* FFP June 23, 2020, Application, Ex. D, attach. 1 at 7. Additionally, section 4.2.2 of Washington DOE's final EIS states that "[t]he Applicant's intent is to draw power during times of high-volume generation from renewable sources such as wind and solar." Washington DOE 97, *State Environmental Policy Act Final Environmental Impact Statement for the Proposed Goldendale Energy Storage Project* 234 (Dec. 2022), https://apps.ecology.wa.gov/publications/documents/2206015.pdf at 97 (accessed Dec. 4, 2025).

would interconnect to the grid through BPA's existing transmission facilities. In the WECC region, the planned retirement of coal-fired facilities, natural gas facilities, and other energy projects (i.e., petroleum, biomass, and conventional hydro) from 2025 through 2029 would be partially offset by planned increases in solar, geothermal, and other battery storage capacity. In any event, Commission staff already estimated project emissions based instead on the current energy resource mix available in the State of Washington.[189]

151. Next, EPA comments that while the final EIS includes estimates of GHG emissions from use of construction vehicles, the analysis omits other reasonably foreseeable estimates, such as for "embodied emissions based on volume of concrete and other significant building materials" and "offsite cement production." EPA contends that addressing these emissions would "provide a more complete assessment of the total [GHG] emissions due to construction." EPA also requests clarification as to why emissions in the final EIS are assumed to be at a constant rate for 30 years, yet the social cost of carbon estimates reported in the final EIS are for a 5-year period. EPA recommends including a discussion of the project's GHG emissions and climate impacts by "monetizing climate damages using the estimates of the [social cost of carbon for GHG emissions], placing emissions in the context of relevant climate action goals and commitments, and providing common equivalents.[190]

152. Subsequent to the issuance of the final EIS, changes in law resulting from Executive Orders and a Supreme Court opinion obviate the need to consider either the indirect effects over which the Commission does not exercise regulatory authority,[191] such as emissions from offsite cement production, or the social cost of GHGs.[192]

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[189] Draft EIS at 102 (estimating pumping operation emissions of 526,445 metric tons CO_2e per year and that generation operation emissions would displace 430,526 metric tons of CO_2e per year, resulting in a net increase in GHG emissions of 96,189 metric tons of CO_2e per year).

[190] EPA March 18, 2024, Comments at 7-8.

[191] *Seven Cnty. Infrastructure Coal. v. Eagle Cnty.,* Colo., 605 U.S. 168, 188-90 (2025) (*Seven Cnty*.) (explaining that "NEPA calls for the agency to focus on the environmental effects of the project itself;" and that agencies "are not required to analyze the effects of projects over which they do not exercise regulatory authority.").

[192] After Commission staff prepared the final EIS, Executive Order 14154 disbanded the Interagency Working Group on the Social Cost of Greenhouse Gases and withdrew its publications. Section 6(b), 90 Fed. Reg. 8353 (Jan. 29, 2025). The Executive Order directs the EPA to issue guidance within 60 days to address inadequacies of the social cost of carbon, including consideration of eliminating the

Operation of the project would not result in a net increase of GHG emissions because the project is designed to utilize excess renewable energy and store that energy for later use when power is needed. Commission staff could not determine whether the effects from GHG emissions attributable to the project would be significant or insignificant.[193]

B. Air Quality

153. The final EIS explains that the Clean Air Act's Prevention of Significant Deterioration (PSD) and Title V programs do not apply to temporary construction activities such as the project's construction.[194] Still, in order to compare the relative magnitude of impact on air quality, the final EIS compared the annual average emissions of each criteria pollutant[195] from project construction to the federal thresholds for the PSD and Title V programs.[196] The final EIS finds that "criteria pollutant average annual emission rates would be well below the thresholds for the [PSD and] Title V programs. This suggests that construction phase criteria pollutant impacts would not likely result in significant air quality impacts."[197]

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social cost of carbon calculation from any federal permitting or regulatory decision. *Id.* § 6(c); *see also Colo. Interstate Gas Co., L.L.C.*, 190 FERC ¶ 61,174, at P 46 n.103 (2025). We note, however, that in response to comments on the draft EIS, the final EIS calculated the estimated social cost of carbon dioxide, nitrous oxide, and methane emissions only for a 5-year project construction period. Final EIS at 119-120 and L-37 through L-38.

[193] We note that NEPA does not require that the Commission formally label project-related GHG emissions as significant or insignificant. *See Citizens Action Coal. of Indiana, Inc. v. FERC*, 125 F.4th 229, 241-242 (D.C. Cir. 2025) (holding that "the absence of a 'significance' label does not violate NEPA, CEQ guidance, or FERC regulations") (citing *Food & Water Watch v. FERC*, 104 F.4th 336, 346 (D.C. Cir. 2024) (*East 300*)); *see also Transcon. Gas Pipe Line Co.*, 187 FERC ¶ 61,200, at P 33 (2024) (applying *East 300* in the context of an EA).

[194] Final EIS at 115.

[195] As described in the final EIS, the average annual emissions of criteria pollutants from project construction were calculated by first estimating the total emissions of each criteria pollutant across the entire 5-year construction phase, and then dividing each total estimated emissions by 5. *Id.* at 114-115.

[196] *Id.* at 115.

[197] *Id.*

154. EPA states that "the [final EIS] wording has been changed to state that emissions would 'not likely' result in significant air quality impacts because project emissions are below the Significant Emissions Rates (SER)."[198] It comments that SERs are an "improper and misleading" measure of a project's impact on air quality. EPA explains that even if the emissions sources associated with the project will not need to go through major-source construction air permitting nor require Title V air permits, the sources may still require state minor-source construction air permits.[199] It recommends that the Commission "include additional discussion to disclose what state regulatory and permitting requirements may apply to the sources" and "conclu[de] that state permit and emission control requirements include measures to ensure the sources associated with the project would not cause adverse impacts."[200]

155. EPA misapprehends the analysis in the final EIS, which did not use either SERs or SILs, but rather compared the estimated annual emissions[201] of each criteria pollutant to the applicable emissions thresholds for the PSD and Title V permitting programs.[202] As the final EIS states, the PSD and Title V requirements do not apply to temporary construction activities, and even if they did, construction emissions are below the thresholds for the programs to apply. Agencies are afforded deference in their decisions[203] and their choice among reasonable analytical methodologies.[204] Having

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[198] EPA March 18, 2024, Comments at 9-10.

[199] *Id.* at 10.

[200] *Id.*

[201] The "average annual emission rates," as used in the final EIS, are average tons of emissions per year over the five-year construction period. Final EIS at B-44.

[202] As reflected in Table 3.3.11-3 in Appendix B of the final EIS, the applicable permitting threshold for all criteria pollutants under the PSD program is 250 tons per year, 42 U.S.C. § 7479(1), and the applicable threshold for all criteria pollutants under the Title V permitting program is 100 tons per year, 40 C.F.R. § 70.2 (2025).

[203] *Seven Cnty.*, 605 U.S. at 184 ("As this court has stressed, courts should and must defer to the informed discretion of the responsible federal agencies."); *Selkirk Conservation All. v. Forsgren*, 336 F.3d 944, 962 (9th Cir. 2003).

[204] *Cmtys. Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004) (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 201 (D.C. Cir. 1991)).

clarified this, we agree with the conclusion in the final EIS that project construction would not likely result in significant air quality impacts.[205]

156. EPA also states that while the final EIS provides a comprehensive review of the regulatory requirements for the Commission to reach a licensing decision, including a review of air permitting requirements, it does not disclose any state air permitting and emission control requirements for the concrete batch plants.[206] EPA states that while the concrete batch plant emissions are temporary and do not trigger federal air permit requirements, they could impact communities. EPA recommends that the Commission disclose the state air permitting and emissions requirements and summarize the protections under state requirements to demonstrate how public health and the environment will be protected from project emission impacts.

157. The final EIS describes the status of those statutory and federal regulatory requirements needed for the Commission to reach a licensing decision (e.g., FPA, Clean Water Act, ESA, NHPA, etc.)[207] and describes potential air quality impacts on communities.[208] Defining all the necessary construction permits and their requirements is beyond the scope of the EIS and is best determined by the state and local permitting agencies. Regardless, the licensee will need to obtain all necessary permits and authorizations in order to be able to commence construction within two years of license issuance (Article 301). The conditions of those permits would dictate mitigation, control, monitoring, and reporting requirements.

Administrative Provisions

A. Annual Charges

158. The Commission collects annual charges from licensees for administration of the FPA and to compensate for the use and occupancy of United States land.[209] Article 201

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[205] *Seven Cnty.*, 605 U.S. at 182 ("Black-letter administrative law instructs that when an agency makes those kinds of speculative assessments or predictive or scientific judgments, and decides what qualifies as significant or feasible or the like, a reviewing court must be at its 'most deferential.'").

[206] EPA March 18, 2024, Comments at 9.

[207] Final EIS at C-1- C-7.

[208] *Id.* at 110.

[209] Because this license is issued to a non-municipal licensee and authorizes an unconstructed project, assessment of administrative annual charges will commence on the date by which the licensee is required to commence construction, or as may be

provides for the collection of funds for the administration of the FPA and the use and occupancy of federal land.

B. Reservation of Authority to Require Financial Assurance Measures

159. To confirm the importance of licensees maintaining sufficient financial reserves, Article 202 reserves the Commission's authority to require future measures to ensure that the licensee maintains sufficient financial reserves to carry out the terms of the license and Commission orders pertaining thereto.

C. Exhibit F and G Drawings

160. The Commission requires licensees to file sets of approved project drawings in electronic file format. Ordering paragraph (C) approves the Exhibit F filed with the license application (except Exhibit No. F-2), and Article 203 requires the filing of the approved electronic drawings for Exhibit F. The licensee must add the Exhibit Number, FERC Drawing Number, and the Drawing Title on each corresponding drawing as approved and shown in the table in ordering paragraph (B) of this order. In addition, the licensee must remove the word "Draft" from the Exhibit F-5 Drawing.

161. The Exhibit G drawings filed with the license application do not conform to section 4.41(h)(2) of the Commission's regulations, which requires licensees to file an Exhibit G map showing a project boundary that encloses all project works and other features necessary for the operation and maintenance of the project, or for other project purposes, such as recreation, shoreline control, or protection of environmental resources. As discussed above, FFP included BPA's existing transmission line to the BPA's John Day Substation within the project boundary. Additionally, the drawings are shown in color, which does not meet the Commission's filing requirements. Article 204 requires that within 90 days of the issuance of this license, the licensee must file, for Commission approval, revised Exhibit G drawings that differentiate land ownership and project features in grayscale rather than color, enclose within the project boundary all principal project works necessary for operation and maintenance of the project, and exclude BPA's existing 3.13-mile-long, 500-kilovolt overhead transmission line to BPA's existing John Day Substation. The Exhibit G drawings must comply with sections 4.39 and 4.41(h) of the Commission's regulations.

D. Amortization Reserve

162. The Commission requires that for original licenses for major projects, non-municipal licensees must set up and maintain an amortization reserve account after

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extended. 18 C.F.R. § 11.1(c)(5) (2025).

the first 20 years of operation of the project under license. Article 205 requires the establishment of the account.

E. Project Land Rights Progress Report

163. The project as licensed herein will occupy 578.62 acres of land. Standard Article 5, set forth in Form L-6, requires the licensee to 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, within five years. In order to monitor compliance with Standard Article 5, Article 206 requires the licensee to file no later than four years after license issuance, a report detailing its progress in acquiring title in fee or the necessary rights to all lands within the project boundary. The report must include specific documentation on the status of the rights that have been acquired as of the filing date of the progress report, and a plan and schedule to acquire all remaining land prior to the five-year deadline. The agreement the licensee reaches with Klickitat PUD to install the valve inside the vault to supply water to the project should include an agreement to allow the licensee ongoing access for maintenance of the valve when necessary.

F. Project Financing

164. To ensure that there are sufficient funds available for project construction, operation, and maintenance, Article 207 requires the licensee to file for Commission approval documentation of project financing necessary for construction, operation, and maintenance of the project at least 90 days before starting any construction associated with the project.

G. As-Built Drawings

165. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as built. Article 208 provides for the filing of these drawings.

H. Start of Construction

166. Article 301 requires the licensee to commence construction of the project works within two years from the issuance date of the license and complete construction of the project within five years from the issuance date of the license.

I. Review of Final Plans and Specifications

167. Article 302 requires the licensee to provide the Commission's Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer with final contract drawings and specifications, a supporting design report consistent with the Commission's

engineering guidelines, a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan.

168. Article 303 requires the licensee to provide the Commission's D2SI – Portland Regional Engineer with cofferdam and deep excavation construction drawings.

169. Article 304 requires the licensee to retain a Board of Consultants to review the designs, specifications, and construction of the project for safety and adequacy.

170. Article 305 requires the licensee to provide the Commission's D2SI – Portland Regional Engineer with an independent consultant inspection report.

171. Article 306 requires the licensee to submit to the Commission's D2SI – Portland Regional Engineer a Project Owner's Dam Safety Program that demonstrates an acknowledgement of the project owner's responsibility for the safety of the project in accordance with the guidance information posted on the Commission's website.

172. Article 307 requires the licensee to submit to the Commission's D2SI – Portland Regional Engineer a Public Safety Plan that includes safety devices and signage needed to warn the public of project-related hazards or to otherwise protect the public in the use of project lands and waters. The plan must also include a map showing the location of all public safety measures.

173. Article 308 requires the licensee to consult with the Commission's D2SI – Portland Regional Engineer on any project modifications resulting from environmental requirements that may affect project works, dam safety, or operation.

J. Hazard Potential Classification and Inflow Design Flood Study

174. Article 309 requires the licensee to file a Hazard Potential Classification and Inflow Design Flood Study with the Commission's D2SI – Portland Regional Engineer prior to the start of any construction.

K. Commission Approval of Resource Plans, Filing of Reports, and Filing of Amendments

175. In Appendix A and Appendix B of this order, there are certain water quality certification conditions and terms and conditions of NMFS's BO that either do not require the licensee to file certain plans and reports with the Commission or that contemplate future changes to approved plans and/or project operations and facilities without prior Commission approval. Article 401 requires the licensee to file these plans and reports with the Commission for approval and file amendment applications, as appropriate.

L. Use and Occupancy of Project Lands and Waters

176. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land will be unduly burdensome. Therefore, Article 414 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of non-federal 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.

State and Federal Comprehensive Plans

177. Section 10(a)(2)(A) of the FPA[210] 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.[211] Under section 10(a)(2)(A), Commission staff reviewed 74 comprehensive plans for the states of Washington and Oregon that are relevant to the Goldendale Project.[212] No inconsistences were found.

Applicant's Plans and Capabilities

178. Pursuant to sections 10(a)(2)(C) and 15(a) of the FPA,[213] Commission staff evaluated FFP's proposal with respect to: (A) conservation efforts; (B) safe management, operation, and maintenance of the project; and (C) need for power. This order adopts staff's findings in each of the following areas.

[210] 16 U.S.C. § 803(a)(2)(A).

[211] Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2025).

[212] A list of 71 applicable plans can be found in Appendix I of the final EIS for the project. After the final EIS was issued, FWS filed the following comprehensive plans pursuant to section 10(a)(2)(A) of the FPA: Final Pacific Lamprey 2022/2023 Regional Implementation Plan for the Willamette Sub-Unit of the Lower Columbia/Willamette Regional Management Unit, dated June 2023; Recovery Plan for the Coterminous United States Population of Bull Trout (*Salvelinus confluentus*), dated September 28, 2015; and Coastal Recovery Unit Implementation Plan for Bull Trout ((*Salvelinus confluentus*), dated September 2015. Staff reviewed these plans and found no conflicts.

[213] 16 U.S.C. §§ 803(a)(2)(C), 808(a).

A. Conservation Efforts

179. Section 10(a)(2)(C) of the FPA[214] requires the Commission to consider FFP's electricity consumption improvement program, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity cost-effectively, taking into account the published policies, restrictions, and requirements of state regulatory authorities. FFP will deliver the energy produced to the wholesale market to be purchased by utilities in the Pacific Northwest and California to help satisfy periods of peak demand and provide grid flexibility. Given the limits of its ability to influence users of the electricity generated by the project, FFP will operate the project in a manner that is consistent with section 10(a)(2)(C) of the FPA.

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

180. Staff reviewed FFP's preliminary plans to build the project as described in the license application. The project will be safe when constructed, operated, and maintained in accordance with the Commission's standards and provisions of the license.

C. Need for Power

181. To assess the need for power, Commission staff looked at the needs in the operating region in which the project will be located. NERC annually forecasts electrical supply and demand nationally and regionally for a 10-year period.[215] NERC prepares seasonal and long-term assessments to examine the current and future reliability, adequacy, and security of the North American bulk power system.

182. The Goldendale Project will be located in the WECC Northwest region of NERC. NERC's most recent report[216] indicates total internal demand in the WECC Northwest region is projected to grow at an annual rate of 1.61% from 2025 through 2034. During the same period, the anticipated reserve capacity margin (generating capacity in excess of demand) in the region is forecasted to decrease from 38.7% in 2025 to 4.6% in 2034. The reserve is expected to be at or above the reserve margin from 2025 through 2030

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[214] *Id.* § 803(a)(2)(C).

[215] NERC is an international regulatory authority established to evaluate and improve reliability of the bulk power system in North America.

[216] In the final EIS, Commission staff assessed the need for power using NERC's 2021 Long-Term Reliability Assessment. After the final EIS was issued, NERC published its 2024 Long-term Reliability Assessment (available at: https://www.nerc.com/globalassets/our-work/assessments/2024-ltra_corrected_july_2025.pdf; accessed December 3, 2025). Commission staff reassessed the need for power using forecasts from NERC's 2024 assessment.

(range from 14.5% to 16.3%) but would drop below the reserve margin from 2031 through 2034 (range from 13.8% to 14.4%). Therefore, the region is expected to have enough capacity for the first five years of the 10-year forecast period.

183. The planned retirement of coal-fired facilities, natural gas facilities, and other energy projects (i.e., petroleum, biomass, and conventional hydro) from 2025 through 2029 would result in a loss of about 7,000 MW during that period. These losses would be only partially offset by planned increases in solar, geothermal, and other battery storage capacity of 2,200 MW over the same period, resulting in a net loss of about 4,800 MW. Further, the State of Washington's 2021 State Energy Strategy includes a goal of transitioning to 100% clean electricity by 2045 and identifies pumped storage hydropower as having a likely role in balancing the supply and demand for electricity during this transition.[217] Based on this, the project's power and contribution to the region's diversified generation mix will help meet a need for power in the region.

Project Economics

184. In determining whether to issue a license for a 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*,[218] the Commission uses current costs to compare the costs of the project with the costs of the likely alternative source of 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.

185. In applying this analysis to the Goldendale Project, Commission staff considered three options: a no-action alternative, FFP's proposal, and the project as licensed herein with mandatory conditions and Commission staff's measures.[219] Under the no-action

[217] On May 7, 2019, Governor Jay Inslee signed into law the Clean Energy Transformation Act (SB 5116, 2019), which commits the State of Washington to an electricity supply free of GHG emissions by 2045. 2019 Wash. Sess. Laws ch. 288.

[218] 72 FERC ¶ 61,027 (1995).

[219] Details of Commission staff's economic analysis for the project are included in section 4.0 and Appendix E of the final EIS. The costs in the final EIS have been revised here to include costs associated with NMFS's terms and conditions that were filed after issuance of the final EIS but are included in Appendix B and are made part of this license

alternative, the project would not be constructed. There are no costs associated with this alternative, other than the costs for preparing the license application.

186. As proposed by FFP, the project would have a total installed capacity of 1,200 MW, and an average annual generation of 3,561,000 MWh. The alternative source of power's current cost to produce the same amount of energy and provide the same capacity would be $666,191,880, or $187.08/MWh in 2025 dollars.[220] To determine whether the proposed project is currently economically beneficial, the project's cost is subtracted from the alternative source of power's cost. The levelized annual cost of operating the project is $589,958,996, or $165.67/MWh. Subtracting the total annual project cost from the alternative source of power's current cost, the project's cost to produce power and capacity would be $76,232,884, or $21.41/MWh, less than the alternative source of power's cost.

187. As licensed herein with mandatory conditions and Commission staff's measures, the levelized annual cost of operating the project at the same estimated average generation and capacity would be $590,029,263, or $165.69/MWh. Subtracting the total annual project cost from the alternative source of power's current cost, the project's cost to produce power and capacity would be $76,162,617, or $21.39/MWh, less than the alternative source of power's cost.

188. 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 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 putting them back online.

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in ordering paragraph (E). All costs have been escalated to 2025 dollars.

[220] Commission staff estimated the cost of constructing and operating a lithium-ion battery storage facility sized similar to the Goldendale Project (i.e., 1,200 MW), capable of providing up to 10 hours of peak energy daily, and generating an average of 3,561,000 MWh annually as the likely source of comparable alternative power. The cost is based on the levelized cost of storage (LCOS) for lithium-ion batteries as estimated by the U.S. Department of Energy's *2022 Grid Energy Storage Technology Cost and Performance Assessment* which was published in 2022. Staff combined the cost of 1,000 MW of battery storage and 100 MW of storage as reported in the report, to get a combined cost of $158/MWh for a 1,200 MW installation in 2021 dollars. This value was then adjusted to 2025 dollars, using the consumers price index, for a total cost of $187.08/MWh.

189. Commenters question the economic viability of the project.[221] Columbia Riverkeeper and WCAEF cite to a supplemental economic analysis prepared by Rocky Mountain Econometrics to assert that Commission staff's finding in the final EIS that the project would be economically beneficial and a dependable source of electrical energy is unsupported and that the record with respect to the project's economic benefits is incomplete.[222] They state that the supplemental economic analysis demonstrates that the project is unlikely to operate profitably.

190. As the organizations note,[223] Commission staff explained in the final EIS that the Commission's economic analysis is not intended to determine whether the project would be profitable to operate as conditioned in the license.[224] Such considerations are left to the licensee in determining whether to develop a project. Rather, as stated above, the basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of the project, and of reasonable alternatives to project power, to help support an informed decision concerning what is in the public interest with respect to a proposed license. Project economics is but one public interest factor of many which the Commission considers in its licensing decision.

Comprehensive Development

191. Sections 4(e) and 10(a)(1) of the FPA[225] require the Commission to give equal consideration to the 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 uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

192. The final EIS for the project contains background information, analysis of effects, and support for related license articles. The project will be safe if operated and maintained in accordance with the requirements of the license.

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[221] Columbia Riverkeeper and WCAEF February 21, 2025, Comments at 13-17; Mayor Paul Blackburn of the City of Hood River July 23, 2024, Comments.

[222] Columbia Riverkeeper and WCAEF February 21, 2025, Comments at 13-17.

[223] *Id.* at 15.

[224] Final EIS at L-40.

[225] 16 U.S.C. §§ 797(e) and 803(a)(1).

193. Based on staff's independent review and evaluation of the Goldendale Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the final EIS, the Goldendale Project, as licensed herein, is selected and found to be best adapted to a comprehensive plan for improving or developing the Columbia River. This alternative was selected because: (1) issuing the license will authorize a beneficial and dependable source of electric energy; (2) the required environmental measures will protect, enhance, or help minimize effects to soils, water quality, aquatic and terrestrial resources, threatened and endangered species, recreation, aesthetics, cultural resources, and air quality; and (3) the 1,200 MW of electric capacity will come from a renewable resource that does not contribute to atmospheric pollution.

License Term

194. Section 6 of the FPA provides that original licenses for hydropower projects shall be issued for a period not to exceed 50 years.[226] On October 19, 2017, the Commission established a 40-year default license term policy for original and new licenses.[227] 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 during the prior license term, or substantial new measures are expected to be implemented under the new license.[228]

195. Klickitat Valley Health commented that the Commission should issue a 50-year license for the project.[229] Because none of the above exceptions apply in this case, however, a 40-year license for the Goldendale Project is appropriate.

The Commission orders:

(A) The license is issued to FFP Project 101, LLC (FFP) (licensee) to construct, operate, and maintain the Goldendale Energy Storage Project for a period of 40 years, effective the first day of the month in which this order is issued. The license is subject to

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[226] 16 U.S.C. § 799.

[227] *Pol'y Statement on Establishing License Terms for Hydroelectric Projects*, 161 FERC ¶ 61,078 (2017) (License Term Policy Statement).

[228] *Id.* PP 15-16.

[229] Klickitat Valley Health August 5, 2024, Comments.

the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of the 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 these lands, described in the project description and the project boundary discussion of this order.

(2) Project works consisting of: (1) a 61-acre upper reservoir formed by a 175-foot-high, 8,000-foot-long concrete-faced rockfill embankment dam at an elevation of 2,940 feet National Geodetic Vertical Datum of 1929 (NGVD 29) with an ungated morning-glory or bellmouth-type vertical concrete intake-outlet structure; (2) an underground conveyance tunnel system connecting the upper reservoir to the underground powerhouse that consists of: a 2,200-foot-long, 29-foot-diameter concrete-lined vertical shaft; a 3,300-foot-long, 29-foot-diameter concrete-lined high-pressure tunnel; a 200-foot-long, 22-foot-diameter high-pressure manifold tunnel; and three 600-foot-long, 15-foot-diameter steel/concrete penstocks; (3) an underground powerhouse located between the upper and lower reservoir in a 450-foot-long, 80-foot-wide, 150-foot-high powerhouse cavern and containing three, 400-megawatt (MW) Francis-type pump-turbine units for a total installed capacity of 1,200 MW; (4) a 350-foot-long, 60-foot-wide, 55-foot-high underground transformer cavern (transformer gallery) adjacent to the powerhouse cavern containing intermediate step-up transformers that step up the generator voltage from 18 kilovolts (kV) to 115 kV; (5) an underground conveyance tunnel system connecting the underground powerhouse to the lower reservoir that consists of: three 200-foot-long, 20-foot-diameter steel-lined draft tube tunnels each with a bonneted slide gate; a 200-foot-long, 26-foot-diameter concrete-lined low-pressure tunnel; and a 3,200-foot-long, 30-foot-diameter concrete-lined tailrace tunnel with vertical slide gates; (6) a 63-acre lower reservoir formed by a 205-foot-high, 6,100-foot-long concrete-faced rockfill embankment at an elevation of 580 feet (NGVD 29) with a horizontal concrete intake-outlet structure and vertical steel slide gates; (7) one 30-foot-wide by 26-foot-high (minimum) main access tunnel for accessing the powerhouse and transformer caverns during construction and operation; (8) one 30-foot-wide by 26-foot-high (minimum) tunnel through which the high-voltage transmission line will pass from the transformer gallery to the tunnel portal and will be used for secondary and redundant access to the powerhouse and transformer cavern during construction and for emergency egress and access during normal operations; (9) a 0.84-mile-long, 115-kV underground transmission line extending from the transformer gallery through the combined access/transmission tunnel to where it emerges aboveground near the west side of the lower reservoir and extending an additional 0.27 miles to an outdoor 800-foot by 400-foot substation/switchyard where the voltage will be stepped up to 500 kV; (10) a 0.37-mile-long, 500-kV overhead transmission line extending from the outdoor substation/switchyard to an existing non-project power pole owned by the Bonneville Power Administration; (11) a buried 30-inch-diameter water fill line leading from a shut-

off and throttling valve within a non-project water supply vault to an outlet structure within the lower reservoir to convey water to fill the reservoirs; (12) a 0.7-mile-long existing road for accessing the lower reservoir and an 8.6-mile-long existing road for accessing the upper reservoir; and (13) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibit A and Exhibit F shown below:

Exhibit A. Exhibit A filed on August 10. 2020.[230]

Exhibit F. The following Exhibit F drawings filed on June 23, 2020, except F-2 Project Layout – General View Sheet 2 of 3.

Exhibit No.	FERC Drawing No.	Drawing Title
F-1	P-14861-5	Project Layout – General View Sheet 1 of 3
F-3	P-14861-7	Project Layout – General View Sheet 3 of 3
F-4	P-14861-8	Conveyance Profile
F-5	P-14861-9	Upper reservoir – Plan View and Section
F-6	P-14861-10	Upper reservoir – Intake/Outlet
F-7	P-14861-11	Lower reservoir – Plan View and Section
F-8	P-14861-12	Project water supply details
F-9	P-14861-13	Lower intake – Plan View and Section
F-10	P-14861-14	Penstock and draft tube plan
F-11	P-14861-15	Powerhouse general layout
F-12	P-14861-16	Powerhouse section

(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 for the operation or maintenance of the project.

(C) Exhibits A and F described above are approved and made part of the license. The Exhibit G drawings filed as part of the application for license do not conform to Commission regulations and are not approved.

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[230] *See* FFP August 10, 2020, Filing at attach. 1, Revised Exh. A.

(D) This license is subject to the conditions submitted by the Washington Department of Ecology under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), as those conditions are set forth in Appendix A to this order.

(E) This license is subject to the incidental take terms and conditions of the Biological Opinion submitted by the National Marine Fisheries Service under section 7 of the Endangered Species Act, as those conditions are set forth in Appendix B to this order.

(F) The license is also subject to the articles set forth in Form L-6 (October 1975), entitled "Terms and Conditions of License Order for Unconstructed Major Project Affecting Navigable Waters and 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 the following annual charges, as determined in accordance with the provisions of the Commission's regulations in effect from time to time:

a) effective as of the date by which the licensee is required to commence project construction, or as that date may be extended, to reimburse the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 1,200 megawatts;

b) to recompense the United States for the use, occupancy and enjoyment of 0.89-acre of its lands (other than for transmission line right-of-way); and

c) to recompense the United States for the use, occupancy and enjoyment of 3.48 acres of its lands for transmission line right-of-way.

Article 202. *Reservation of Authority to Require Financial Assurance Measures.* The Commission reserves the right to require future measures to ensure that the licensees maintain sufficient financial reserves to carry out the terms of the license and Commission orders pertaining thereto.

Article 203. *Exhibit F Drawings.* Within 45 days of the date of issuance of this license, as directed below, the licensee must file the approved exhibit drawings in electronic file format.

The licensee must prepare digital images of the approved exhibit drawings in electronic format. Prior to preparing each digital image, the FERC Project-Drawing Number (i.e., P-14861- 1 through P-14861-11) must be shown in the margin below the title block of the approved drawing. Exhibit F drawings must be renumbered and segregated from other project exhibits, and identified as **Critical Energy Infrastructure Information (CEII) material under 18 C.F.R. § 388.113(c).** The submission should consist of: 1) a public portion consisting of a cover letter, and 2) a CEII portion containing only the Exhibit F drawings). Each drawing must be a separate electronic file,

and the file name must include: FERC Project-Drawing Number, FERC Exhibit Number, Drawing Title, date of this order, and file extension in the following format [P-14861-1, F-1, Project Layout – General View Sheet 1 of 3, MM-DD-YYYY.TIF]. All digital images of the exhibit 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:	22” x 34” (minimum), 24” x 36” (maximum)
FILE SIZE:	less than 1 megabyte desired.

Article 204. *Exhibit G Drawings.* Within 90 days of the issuance of this license, the licensee must file, for Commission approval, revised Exhibit G drawings that differentiate land ownership and project features in grayscale rather than color. The revised drawings must exclude Bonneville Power Administration’s (BPA) 3.13-mile-long, 500-kilovolt overhead transmission line to BPA’s existing John Day Substation. The Exhibit G drawings must comply with sections 4.39 and 4.41(h) of the Commission’s regulations.

Article 205. *Amortization Reserve*. Pursuant to section 10(d) of the Federal Power Act, after the first 20 years of operation of the project under license, 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. One-half of the project surplus earnings, if any, accumulated after the first 20 years of operations under the license, in excess of the specified rate of return per annum on the net investment, must be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year after the first 20 years of operation under the license, the amount of that deficiency must be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, must be set aside in the project amortization reserve account. The amounts established in the project amortization reserved account must be maintained until further order of the Commission.

The annual specified reasonable rate of return must be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. The annual capital ratio for each component of the rate of return must be calculated based on an average of 13 monthly balances of amounts properly includable in the licensee’s long-term debt and proprietary capital

accounts as listed in the Commission's Uniform System of Accounts. The cost rates for long-term debt and preferred stock must be their respective weighted average costs 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 206. *Project Land Rights Progress Report*. No later than four years after license issuance, the licensee must file a report with the Commission describing the status of acquiring title in fee or the rights for all the lands within the project boundary. The report must provide an overview map of each parcel and summary table identifying the licensee's rights over each parcel within the project boundary. The report must also include specific supporting documentation showing the status of the land rights on all parcels of land within the project boundary that: (1) have been acquired up to the date of filing of the report, including pertinent deeds, lease agreements, and/or bill of sale information that specifically verify the licensee's rights; and (2) the licensee's plan and schedule for acquiring rights to all remaining project lands prior to the five-year deadline, including a history of actions taken, current owner information, the type of rights to be acquired whether in fee or by easement, and the timeline for completing property acquisition.

Article 207. *Documentation of Project Financing*. At least 90 days before starting construction, the licensee must file, for Commission approval, the licensee's documentation for the project financing. The documentation must show that the licensee has acquired the funds, or commitment for funds, necessary to construct the project in accordance with the license. The documentation must include, at a minimum, financial statements, including a balance sheet, income statement, and a statement of actual or estimated cash flows over the license term which provide evidence that the licensee has sufficient assets, credit, and projected revenues to cover project construction, operation, and maintenance expenses, and any other estimated project liabilities and expenses.

The financial statements must be prepared in accordance with generally accepted accounting principles and signed by an independent certified public accountant. The licensee must not commence project construction associated with the project before the filing is approved.

Article 208. *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 301. *Start of Construction*. The licensee must commence construction of the project works within two years from the issuance date of the license and must

complete construction of the project within five years from the issuance date of the license.

Article 302. *Final Design Documents*. At least 60 days prior to the start of any construction, the licensee must file final design documents with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – Portland Regional Office. The design documents must include: final plans and specifications, supporting design report, 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 Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer has reviewed and commented on the documents, 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 30 days before starting construction of any cofferdams or deep excavations, the licensee must file the approved cofferdam and deep excavation construction drawings and specifications, and the letters of approval with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – Portland Regional Office.

Article 304. *Board of Independent Engineering Consultants.* Before starting construction, the licensee must retain a Board of Consultants (BOC) of three or more qualified independent engineering consultants experienced in critical disciplines such as geotechnical, mechanical, and civil engineering to review the design, specifications, and construction of the project for safety and adequacy.

The licensee must file a letter with the Commission, that is addressed to the Commission's Director, Division of Dam Safety and Inspections (D2SI), with the names and qualifications of the proposed BOC members.

Among other things, the BOC must assess the following: (1) the geology of the project site and surroundings; (2) the design, specifications, and construction of the dike(s), dam(s), spillway(s), powerhouse(s), electrical and mechanical equipment, and emergency power supply; (3) instrumentation; (4) the filling schedule for the reservoir(s) and plans and surveillance during the initial filling; and (5) construction procedures and progress.

At least two weeks before each meeting, the licensee must furnish members of the BOC the following: (1) a statement of the specific level of review the BOC is expected to provide; (2) an agenda for the meeting; (3) a list of the items to be discussed; (4) a discussion of significant events in the design and construction that have occurred since

the last BOC meeting; (5) drawings of the design and construction features; and (6) documentation for the details and analyses of the design and construction features to be discussed.

At the same time as a copy of these items is provided to the BOC, the licensee must file these documents with the Commission by eFiling to the D2SI – Portland Regional Office.

Within 30 days after each BOC meeting, the licensee must file with the Commission by eFiling to the D2SI – Portland Regional Office, copies of the BOC's report, and a statement of intent to comply with the BOC's recommendations or a statement of a plan to resolve the issue(s). The licensee must provide detailed reasons for any recommendation of the BOC not implemented.

The BOC's review comments must be submitted prior to or simultaneously with the submission of the final contract drawings and specifications accompanied by a supporting design report required to be filed with the Commission.

Within one year after completion of construction, the licensee must file the BOC's final report with the Commission by eFiling to the D2SI – Portland Regional Office. The final report must contain a statement indicating the BOC's opinion with respect to the construction, safety, and adequacy of the project structures.

Article 305. *Inspection by Independent Consultant*. Within five years from the issuance date of the license, the initial independent consultant's inspection must be completed and the report on the inspection filed with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – Portland Regional Office. Information on specific inspection and report requirements can be found in Part 12D §12.30 - §12.42 of the Commission's Regulations.

Article 306. *Owner's Dam Safety Program*. Within 90 days of the issuance date of the license, the licensee must file an Owner's Dam Safety Program with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – Portland Regional Office. The Owner's Dam Safety Program at a minimum must demonstrate a clear acknowledgement of the dam owner's responsibility for the safety of the project, contain an outline of the roles and responsibilities of the licensee's dam safety staff, and describe access of the dam safety official to the Chief Executive Officer. Information on Owner's Dam Safety Programs can be found in Part 12F §12.60 - §12.65 of the Commission's Regulations.

Article 307. *Public Safety Plan*. At least 60 days before start of construction, the licensee must file a Public Safety Plan with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – Portland Regional Office. The plan must include a description of all safety devices and signage needed to warn the public of fluctuations in

flow from the project or otherwise protect the public in the use of project lands and waters. The plan must also include a map showing the location of all public safety measures. For guidance on preparing public safety plans the licensee can review the *Guidelines for Public Safety at Hydropower Projects* on the FERC website.

Article 308. *Project Modification Resulting from Environmental Requirements*. If environmental requirements under this license require modification that may affect the project works or operations, the licensee must consult with the 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 309. *Hazard Potential Classification and Inflow Design Flood Study*. Within six months of the issuance date of the license and at least 60 days prior to the start of any construction, the licensee must file a Hazard Potential Classification and Inflow Design Flood (IDF) Study with the Commission by eFiling to the Portland Regional Office. The study shall be performed according to Chapters 1 and 2 of the Commission's Engineering Guidelines. The study shall include: (1) an incremental hazard evaluation to determine the effects on downstream structures in the event of a dam failure; and (2) a determination of the project's IDF.

Article 401. *Commission Approval and Filing of Reports and Amendments*.

(a) Requirement to File Plans for Commission Approval

Certain conditions of the Washington Department of Ecology's (Washington DOE) Clean Water Act section 401 water quality certification (certification) (Appendix A) require the licensee to prepare plans in consultation with other entities for approval, and to implement specific measures without prior Commission approval. The following plans must be submitted, for Commission approval, by the deadline specified:

Washington DOE Certification Condition No.	Plan Name	Commission Due Date
B-4	Cleanup Action Plan	Within one year of license issuance
D-2	Mitigation and Planting Plan	Within one year of license issuance
D-2	Stormwater Pollution and Prevention Plan	Within one year of license issuance
D-2	Dewatering Plan	Within one year of license issuance
I-1	Spill Control Plan	Within one year of license issuance

With each plan filed with the Commission, the licensee must include documentation that it developed the plan in consultation with Washington DOE, provide copies of any comments received and its response to each comment, and has received Washington DOE's approval, as appropriate. The licensee must allow a minimum of 30 days for Washington DOE to comment and to make recommendations before filing the plans with the Commission. 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 above schedule or plan(s) require approval by the Commission before implementing the proposed change.

(b) Requirement to File Reports.

Certain conditions of Washington DOE's certification and the terms and conditions of the National Marine Fisheries Service's (NMFS) Biological Opinion (BO) (Appendix B) require the licensee to file reports with other entities related to compliance with the requirements of the license. Each such report must be filed with the Commission to ensure compliance with the license. This includes the reports listed in the following table:

Washington DOE Certification Condition No.	NMFS BO Terms and Conditions No.	Report Name	Commission Due Date
H-10	-	Wetland mitigation site as-built report	Within 90 days of completing construction and planting of the mitigation site(s)
H-13	-	Wetland mitigation monitoring reports documenting mitigation site conditions	Annually by March 1 following monitoring years 1, 2, 3, 4, and 5 after the completion of construction and planting of the mitigation site(s)
H-17	-	Wetland delineation reports	Annually by March 1 following each year of construction
-	1b	Initial fill completion report	June 1 after completion of initial fill
-	1b	Re-fill report	Annually by June 1 starting the year after initial fill is completed

With each report filed with the Commission, the licensee must include documentation of consultation with the agencies specified in the conditions noted above and provide copies of any comments received, as well as its response to each comment. The Commission reserves the right to require changes to project operation, facilities, or reporting requirements based on the information contained in the reports, agency comments, or any other available information.

(c) *Requirement to File Amendment Applications*

Certain conditions of the Washington DOE's certification contemplate unspecified long-term changes to project operation or facilities for the purpose of mitigating environmental effects (e.g., conditions A-4, C-6, , H-14, H-16, and I-4). 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. *Reservoir Filling*. In addition to planning for the initial fill to occur over two calendar years as required by the Washington Department of Ecology's (Washington DOE) water quality certification condition F2 (Appendix A), the licensee may only fill and annually refill the project reservoirs between September 1 and March 31 to minimize project-related flow reductions in the Columbia River that could delay salmon smolt migration.

Article 403. *Reservation of Authority to Prescribe Fishways*. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretary of the Interior pursuant to section 18 of the Federal Power Act.

Article 404. *Soil Erosion and Sediment Control Plan*. The Soil and Erosion Control Plan required by Article 302 must include the following:

(1) The measures specified in the Washington Department of Ecology's (Washington DOE) water quality certification conditions G1, G2, G3, G5, G6, G7, G8, G9, G10, G11, and G16 (Appendix A).

(2) The following measures to minimize fugitive dust emissions: (a) a surface/roadway watering plan; (b) a monitoring and response plan to identify and address periods of significant dust emission; (c) a provision to identify a threshold high windspeed to stop material movement and processing to prevent significant dust emission events; (d) roadway speed limits to limit dust entrainment; (e) haul truck cleaning and load covering requirements; (f) identification of responsible officials and training procedures; (g) record keeping and reporting schedules; and (h)

community/citizen reporting forms/phone-line and contact information to report dust impact events.

The licensee must prepare the plan after consultation with Washington DOE and the U.S. Environmental Protection Agency (collectively, agencies). The licensee must include with the plan: (1) documentation of consultation; (2) copies of recommendations on the completed plan after it has been prepared and provided to the agencies above; and (3) 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 for approval. 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. Implementation of the plan must not 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 405. *Vibration Monitoring Plan.* Within one year of license issuance, the licensee must file, for Commission approval, a construction vibration monitoring plan to monitor the effects on the foundations and underground utilities of nearby wind turbines of drilling the tunnels and powerhouse cavern during project construction. The plan must include the following: (1) a provision to conduct a construction baseline survey and assessment of existing utilities; (2) a detailed map of existing utilities; and (3) a construction vibration monitoring plan with contractor requirements and vibration criteria to be followed to ensure that construction vibrations do not affect turbine foundations or utilities.

The licensee must prepare the plan after consultation with the Turlock Irrigation District (TID). The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to TID, and specific descriptions of how TID's comments are accommodated by the plan. The licensee must allow a minimum of 30 days for TID to comment and to make recommendations before filing the plan with the Commission for approval. 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. Implementation of the plan must not 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 406. *Vegetation Management and Monitoring Plan*. Within one year of license issuance, the licensee must file, for Commission approval, a revised Vegetation

Management and Monitoring Plan. The revised plan must include the measures in the draft Vegetation Management and Monitoring Plan filed on June 23, 2020, and the following: (1) a provision to conduct pre-construction surveys for federal and state-listed threatened, endangered, and sensitive plants (California broomrape, smooth desert parsley, Douglas' draba, and hot-rock penstemon) during the spring and early summer to improve the chances of detecting and protecting rare species; (2) a provision to consult with the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe (collectively, Tribes) to identify shrubs and species of traditional cultural importance and incorporate available species in the revegetation seed mix to offset the loss of culturally important plants and better achieve the revegetation goals; (3) an integrated pest management approach to controlling noxious weeds; and (4) protocols for preventing and controlling wildfires during project construction and operation.

The licensee must prepare the plan after consultation with the U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and Washington Natural Heritage Program (collectively, agencies); and Tribes. The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the agencies and Tribes above, and specific descriptions of how the agencies' and Tribes' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies and Tribes to comment and to make recommendations before filing the plan with the Commission for approval. 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. Implementation of the plan must not 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 407. *Wildlife Management Plan*. Within one year of license issuance, the licensee must file, for Commission approval, a revised Wildlife Management Plan. The revised plan must include the measures in the draft Wildlife Management Plan filed on June 23, 2020, and the following: (1) provisions to conduct pre-construction surveys for bald eagle, golden eagle, prairie falcon, peregrine falcons, and ferruginous hawks and to implement measures during land-disturbing activities associated with project construction to minimize disturbance (such as timing and distance restrictions) if found; (2) provisions to conduct pre-construction surveys for Dalles sideband snail, northwestern pond turtle, monarch butterfly and its preferred milkweed host plants, juniper hairstreak butterfly, and Suckley's cuckoo bumble bee and, if a species is found, to develop appropriate protection measures as part of a species-specific management plan (such as flagging to prevent disturbance, potentially relocating affected species, or revegetating disturbed areas with suitable plants such as milkweed for the monarch butterfly and pollinator plants for the

Suckley's cuckoo bumble bee) that will be implemented prior to conducting any ground-disturbing activities; (3) provisions for wildlife deterrent measures for the project reservoirs, including monitoring methods, metrics for evaluating the effectiveness of the deterrents in reducing the attraction of the project reservoirs to birds, bats, and other wildlife, criteria for deciding whether additional deterrents or modifications to the project are needed, and a schedule for filing monitoring reports with the Commission; U.S. Fish and Wildlife Service and Washington Department of Fish and Wildlife (collectively, agencies); and the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe (collectively, Tribes); and (4) provisions and a schedule to acquire 277 acres of mitigation lands for the protection of golden eagles and provisions to manage the land, including controlling noxious weeds, managing public access to avoid disturbing raptors, and implementing wildfire mitigation measures (if needed, such as replanting of burned areas with native species, fencing to protect and improve the habitat, and development of a wildlife water guzzler if there is an identified need for a source of water).

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

Within six months of acquiring the 277 acres of mitigation land, the licensee shall file revised Exhibit G drawings showing the location of the mitigation land.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not 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 408. *Avian Protection Plan*. Within one year of license issuance, the licensee must file, for Commission approval, an avian protection plan for the project transmission line. At a minimum, the plan must include the following: (1) provisions to construct the project transmission line on existing poles and ensure there is 40 inches or more of vertical clearance and 60 inches or more of horizontal clearance between energized conductors or energized conductors and grounded hardware; and

(2) procedures for monitoring bird fatalities and addressing problem poles.

The license must prepare the plan after consultation with the U.S. Fish and Wildlife Service and Washington Department of Fish and Wildlife (collectively, agencies). The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the agencies above, 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 for approval. 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. Implementation of the plan must not 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 409. *Visual and Recreation Resources Management Plan*. Within one year of license issuance, the licensee must file, for Commission approval, a visual and recreation resources management plan. The plan must include the following: (1) a provision to install an interpretive sign at a location providing views of the project, includes a map of the project and information on pumped storage, and is accessible to persons with disabilities; (2) provisions to use engineering controls, where practicable, and to select natural paint colors and dulling reflective surfaces that cannot be painted to reduce the contrasts of the project structures with the landscape; (3) a provision to minimize the footprints of aboveground features to the furthest extent practicable; (4) provisions to ensure facilities are free of debris and to store unused or damaged equipment offsite so it is not visible; (5) a provision to plant native vegetation and/or trees to break up the lines of roads and facilities and soften the visual effect on the landscape; and (6) provisions to use directional, fully shielded, low pressure sodium lighting to prevent casting light in surrounding areas at night and use operational devices that allow surface night-lighting in the central project area to be turned on only as needed for safety.

The licensee must prepare the plan after consultation with the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Nez Perce Tribe (collectively, Tribes) and the National Park Service (Park Service). The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the Tribes above and the Park Service, and specific descriptions of how the Tribes' and Park Service's comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the Tribes and Park Service to comment and to make recommendations before filing the plan with the Commission for approval. 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. Implementation of the plan must not 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 410. *Programmatic Agreement and Historic Properties Management Plan*. The licensee must implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission, The Advisory Council on Historic Preservation, the Washington State Historic Preservation Office and the Oregon State Historic Preservation Office for Managing and Mitigating for Historic Properties that May be Affected by Issuing a License to FFP Project 101, LLC for the Construction and Operation of the Goldendale Energy Storage Project in Klickitat County, Washington and Sherman County, Oregon (FERC No. 14861-002)," executed on September 19, 2025, and including, but not limited to, the Historic Properties Management Plan (HPMP) for the project. Pursuant to the requirements of this Programmatic Agreement, the licensee must file, for Commission approval, an HPMP within one year of issuance of this order. The licensee may not start ground disturbing activities prior to the Commission's approval of the HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HPMP, the licensee must obtain approval from the Commission, the Washington State Historic Preservation Office (SHPO), the Oregon SHPO, and Advisory Council on Historic Preservation 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 effects.

Article 411. *Traffic Management Plan*. Within one year of license issuance, the licensee must file, for Commission approval, a traffic management plan. The plan must include the following to minimize disruption of traffic patterns on public roads and maintain access to the tribal fishing access site off John Day Dam road during project construction: (1) project-specific traffic control measures (e.g., signage, flaggers at key intersections, reduced speed limits or other speed control devices, controlled or limited access routes); and (2) protocols for coordinating construction schedules, and any temporary road or lane closures with U.S. Army Corps of Engineers personnel at John Day Dam, the U.S. Bureau of Indian Affairs, Washington Department of Transportation, and Klickitat County (collectively, agencies); and Tribal governments through the Columbia Inter Tribal Fish Commission (CITFC).

The plan must be prepared after consultation with the agencies and CITFC. The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the agencies and CITFC, and specific descriptions of how the agencies' and CITFC's comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies and CITFC to comment and to make recommendations before filing

the plan with the Commission for approval. 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. Implementation of the plan must not 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 412. *Columbia River Basin Fish and Wildlife Program*. The Commission reserves the authority to order, upon its own motion or upon the recommendation of federal and state fish and wildlife agencies, affected Indian Tribes, or the Northwest Power and Conservation Council, alterations of project structures and operations to take into account to the fullest extent practicable the regional fish and wildlife program developed and amended pursuant to the Pacific Northwest Electric Power Planning and Conservation Act.

Article 413. *Reservoir Water Quality Monitoring Plan*. Within one year of license issuance, the Licensee must file for Commission approval the Water Quality Monitoring Plan required by Certification Conditions C-3, C-4, and D-2 (Appendix A) that contains in addition to the water quality monitoring requirements of Certification Conditions C-3 and C-4 (Appendix A), procedures for monitoring dissolved solids, nutrients, and heavy metals during initial fill and each year thereafter during project operation to protect water quality and the wildlife that may use the reservoirs. The plan should identify the level at which each monitored parameter would result in an adverse effect that would require remedial measures. The annual monitoring reports required by Certification Condition C-5 (Appendix A) must include recommendations for remedial actions if water quality conditions are degrading and are a potential threat to wildlife. The monitoring reports should include recommendations on whether monitoring should be continued, modified, expanded, or eliminated based on the findings of the report.

The plan must be developed in consultation with Washington Department of Ecology, Washington Department of Fish and Wildlife, and U.S. Fish and Wildlife Service (collectively, agencies). The licensee must include with the plan documentation of consultation, copies of 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 for approval. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information. The licensee must provide the monitoring reports to the resource agencies for 30 days prior to filing it with the Commission. The monitoring report must address any requests to modify the reservoir water quality monitoring plan.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not 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 414. *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 their 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. No report filing is required if no conveyances were made under paragraph (c) during the previous calendar year.

(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 their 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 Idaho 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; (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 or 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*, and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2025). 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.

By the Commission.

(S E A L)

Carlos D. Clay,
Deputy Secretary.

Form L-6

(October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

TERMS AND CONDITIONS OF LICENSE FOR UNCONSTRUCTED MAJOR PROJECT AFFECTING NAVIGABLE WATERS AND 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 works shall be constructed 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.

Upon the completion of the project, or at such other time as the Commission may direct, the Licensee shall submit to the Commission for approval revised exhibits insofar as necessary to show any divergence from or variations in the project area and project

boundary as finally located or in the project works as actually constructed when compared with the area and boundary shown and the works described in the license or in the exhibits approved by the Commission, together with a statement in writing setting forth the reasons which in the opinion of the Licensee necessitated or justified variation in or divergence from the approved exhibits. Such revised exhibits shall, if and when approved by the Commission, be made a part of the license under the provisions of Article 2 hereof.

Article 4. The construction, operation, and maintenance of the project and any work incidental to additions or alterations 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 a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of the project and for any subsequent alterations to the project. Construction of the project works or any features or alteration thereof shall not be initiated until the program of inspection for the project works or any such feature thereof has been approved by said representative. The Licensee shall also furnish to said representative such further information as he may require concerning the construction, operation, and maintenance of the project, and of any alteration thereof, and shall notify him of the date upon which work 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 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 of 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 state 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 locations 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 be 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 United States specifically retains and safeguards the right to use water in such amount, to be determined by the Secretary of the Army, as may be necessary for the purposes of navigation on the navigable waterway affected; and 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 Secretary of the Army may prescribe in the interest of navigation, and 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 Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe for the other 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 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 consult with the appropriate State and Federal agencies and, within one year of the date of issuance of this license, shall submit for Commission approval a plan for clearing the reservoir area. Further, 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. Upon approval of the clearing plan 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 statues and regulations.

Article 21. Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under

the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.

Article 22. Whenever the United States shall desire to construct, complete, or improve navigation facilities in connection with the project, the Licensee shall convey to the United States, free of cost, such of its lands and rights-of-way and such rights of passage through its dams or other structures, and shall permit such control of its pools, as may be required to complete and maintain such navigation facilities.

Article 23. The operation of any navigation facilities which may be constructed as a part of, or in connection with, any dam or diversion structure constituting a part of the project works shall at all times be controlled by such reasonable rules and regulations in the interest of navigation, including control of the level of the pool caused by such dam or diversion structure, as may be made from time to time by the Secretary of the Army.

Article 24. The Licensee shall furnish power free of cost to the United States for the operation and maintenance of navigation facilities in the vicinity of the project at the voltage and frequency required by such facilities and at a point adjacent thereto, whether said facilities are constructed by the Licensee or by the United States.

Article 25. The Licensee shall construct, maintain, and operate at its own expense such lights and other signals for the protection of navigation as may be directed by the Secretary of the Department in which the Coast Guard is operating.

Article 26. Timber on lands of the United States 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 27. 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 28. 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 29. 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 30. 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 31. 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 32. 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 33. 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 34. 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 35. 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 36. 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 37. 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

Water Quality Certificate Conditions

Issued by the Washington Department of Ecology

Filed May 22, 2023

With this Water Quality Certification Order (WQC Order), Ecology is granting with conditions, Free Flow Power Project 101, LLC (c/o Rye Development) request for a Section 401 Water Quality Certification for the Goldendale Energy Storage Project located in Klickitat County. Ecology has determined that the proposed discharges will comply with all applicable state water quality standards and other appropriate requirements of State law, provided the project is conducted in accordance with the WQC request that Ecology received on 5/23/2022, supporting documents referenced in Table 1 below, and the conditions of this WQC Order.

Table 1 Supporting Documents:

Date Received	Document Type	Title and Date	Author
5/23/2022	Other	Draft Dam Safety Program, May 2022	ERM-West, Inc
2/24/2023	Wetland Delineation	Wetlands and Waters Delineation Report Rev 3, January 2023	ERM-West, Inc.
05/04/2023	Stormwater Pollution Prevention Plan	Draft Stormwater Pollution Prevention Plan Rev 2, May 4, 2023	ERM-West, Inc.
05/04/2023	Plan Other	Draft Dewatering Plan Rev 2, May 4, 2023	ERM-West, Inc.
05/04/2023	Water Quality Monitoring	Draft Water Quality Monitoring Plan Rev 2, May 4, 2023	ERM-West, Inc.

05/08/2023	Mitigation Plan	Draft Mitigation and Planting Plan Rev 2, May 2023	ERM-West, Inc.
05/08/2023	Other	Ecology Water Resources Program Application for a Surface Reservoir Permit Rev 1	Rye Development, Erik Steimle or ERM, Dylan Stankus
05/08/2023	Joint Aquatic Resource Permit Application	Revised JARPA Rev 2, May 8, 2023	Rye Development, Erik Steimle

Issuance of this Section 401 Water Quality Certification for this proposal does not authorize Free Flow Power Project 101, LLC (c/o Rye Development) to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC) or other appropriate requirements of State law. Furthermore, nothing in this Section 401 Water Quality Certification absolves the Free Flow Power Project 101, LLC (c/o Rye Development) from liability for contamination and any subsequent cleanup of surface waters, ground waters, or sediments resulting from project construction or operations.

Water Quality Certification Conditions

The following conditions will be incorporated into the FERC license and the Corps permit and strictly adhered to by the Free Flow Power Project 101, LLC (c/o Rye Development).

Specific condition justifications and citations are provided below each condition.

A. General Conditions

1. In this WQC Order, the term “Project Proponent” shall mean the Free Flow Power Project 101, LLC (c/o Rye Development) and its agents, assignees, and contractors.

2. All submittals required by this WQC Order shall be sent to Ecology’s Headquarters Office, Attn: Federal Permit Manager, via e-mail to fednotification@ecy.wa.gov and cc to loree.randall@ecy.wa.gov. The submittals shall be identified with WQC Order No. 21703 and include the Project Proponent’s name, FERC license number, Corps permit number, project name, project contact, and the contact phone number.

3. Work authorized by this WQC Order is limited to the work described in the WQC

request package received by Ecology on 5/23/2022, and the supporting documentation identified in Table 1.

4. The Project Proponent shall provide Ecology documentation for review before undertaking any major changes to the proposed project that could significantly and adversely affect water quality, other than those project changes required by this WQC Order.

5. The Project Proponent shall keep copies of this WQC Order on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.

6. The Project Proponent shall hire third party personnel, with a Certified Erosion and Sediment Control Lead (CESL) certification, to:

    a. Conduct site inspections and monitoring during construction.

    b. Provide notification required by this WQC Order and other water quality permits.

    c. Ensure that all plans and reports are submitted to Ecology as required by this WQC Order and other water quality permits.

    d. Submit (per A.2.) monthly written project status reports of the construction activities and changes that occurred on site. The frequency of these reports may be adjusted as the project evolves.

7. The Project Proponent shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, and/or necessary data collection, to ensure that conditions of this WQC Order are being met.

8. The Project Proponent shall ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand relevant conditions of this WQC Order and all permits, approvals, and documents referenced in this WQC Order. The Project Proponent shall provide Ecology a signed statement (see Attachment A for an example) before construction begins.

9. This WQC Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this WQC Order.

10. Failure of any person or entity to comply with the WQC Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the state’s water quality standards and the conditions of this WQC Order.

11. The Project Proponent shall send (per A.2.) a copy of the final Federal license and permit to Ecology's Federal Permit Manager within two weeks of receiving it.

12. This WQC Order will automatically transfer to a new owner or operator if:

    a. A Request for Transfer of Order form is completed between the Project Proponent and new owner or operator with the specific transfer date of the WQC Order's obligations, coverage, and liability and submitted to Ecology per condition A.2. Link to form: https://apps.ecology.wa.gov/publications/SummaryPages/ECY070695.html;

    b. A copy of this WQC Order is provided to the new owner or operator.

    c. Ecology does not notify the new Project Proponent that a new WQC Order is required to complete the transfer.

B. Permits or Authorizations

1. This Certification does not authorize any discharge of waters that cause or tend to cause pollution, as determined by Ecology, to waters of the state, including the Swale Creek drainage and discharges to groundwater. All applicable water quality permits required under the Water Pollution Control Act (RCW 90.48), or the federal Clean Water Act, must be obtained by the project proponent prior to discharge.

    a. The project proponent must submit a complete application to Ecology for a National Pollutant Discharge Elimination System (NPDES) discharge permit, per WAC 173-220, at least 180 days prior to any discharge of wastewater to the Swale Creek Drainage.

    b. If proposing to discharge wastewater to ground, the proponent must submit a complete application to Ecology for a State Waste Discharge permit, per WAC 173-216, at least 60 days prior to discharging to ground.

    c. The Project Proponent must provide all known, available, and reasonable methods of prevention, control, and treatment to any discharge of waters from the reservoir, per WAC 173-216, and as approved by Ecology prior to discharge, irrespective of any additional requirements to obtain applicable water quality permits.

2. The Project Proponent shall obtain and comply with the conditions of the following permits for this project**:**

    a. Construction Stormwater General Permit and a Companion Order to address known contamination in the vicinity of the lower reservoir.

b. Sand and Gravel General Permit, unless a portable concrete batch plant with a current permit will be used.

3. The Project Proponent shall obtain and comply with a Surface Reservoir Permit for this project prior to filling the reservoirs.

4. The Project Proponent shall implement an Ecology approved Cleanup Action Plan in accordance with the schedule as required under a Model Toxics Control Act order or decree prior to conducting any ground-disturbing construction activities within the Columbia Gorge Aluminum Site.

C. Water Quality Criteria and Monitoring

1. This WQC Order does not authorize the Project Proponent to exceed applicable water quality standards beyond the limits established in Chapter 173-201A WAC, except as authorized by this WQC Order.

2. Water Quality of the reservoir water to be discharged to Swale Creek shall meet the following limits, along with the specified water quality criteria within the NPDES permit for this discharge.

   a. Temperature - February 15 through June 1, the 7-day average daily maximum temperature value must not exceed 16ºC (60.8ºF).

   b. pH – pH shall be within the range of 6.5 to 8.6 with a human-caused variation within the above range of less than 0.2 units.

   c. DO – 10 mg/l or 95% saturation.

3. The Project Proponent shall conduct water quality monitoring as described in the WQMP Plan, identified in Table 1 (hereafter referred to as the WQMP), unless otherwise required in the WQC Order or NPDES permit(s) issued for this project.

4. The Project Proponent shall revise the Draft Water Quality Monitoring Plan (Plan), identified in Table 1, to be consistent with the conditions of this WQC Order and with any NPDES permit issued for this project. The revised Plan shall be submitted to Ecology's Federal Permit Manager (per Condition A.2 of this Order) for review at least 30 days prior to beginning any work covered by this WQC Order.

5. Monitoring results shall be submitted annually or as required by the NPDES permit(s) to Ecology's Federal Permit Manager, per condition A.2 and the requirements of the permit(s).

6. Ecology may ask or could use its discretionary authority to require the Project Proponent to provide mitigation and/or additional monitoring if the monitoring

results indicate that the water quality standards have not been met.

D. Plans to be Implemented by the Project Proponent

1. Revised or additional plans are required from the Project Proponent throughout this document. These plans shall be provided to Ecology for review (Per A.2.), either prior to commencing construction or as specified for each plan below. It is the Project Proponent's responsibility to provide the information in a timely manner.

2. The Project Proponent shall finalize the following plans and implement them once Ecology has provided written notification that our review has been completed:

    a. Goldendale Draft Mitigation and Planting Plan Rev 2

    b. Goldendale Draft SWPPP (CSGP) Rev 2

    c. Goldendale Draft Dewatering Plan Rev 2

    d. Goldendale Draft WQ Monitoring Plan Rev 2

3. The Project Proponent shall prepare plans describing the cleanup actions and West Surface Impoundment closure in accordance with the requirements and schedule put forth in the Model Toxics Control Act order or decree. These plans at a minimum shall meet the requirements of WAC 173-340-400 and Chapter 173-303 WAC, and include detailed engineering design documents and specific protocols for implementation of the Cleanup Action Plan.

E. Notification Requirements

1. The following notifications shall be made via phone or e-mail (e-mail is preferred) to Ecology's Federal Permit Manager via e-mail to fednotification@ecy.wa.gov and cc to loree.randall@ecy.wa.gov. Notifications shall be identified with WQC Order No. 21703, FERC No. 14861, Corps Reference No. NWS-202100572, and include the Project Proponent name, project name, project location, project contact and the phone number.

    a. Immediately following a violation of state water quality standards or when the project is out of compliance with any conditions of this WQC Order;

    b. At least ten (10) days prior to all pre-construction meetings;

    c. At least ten (10) days prior to starting construction; and,

    d. At least thirty (30) days prior to operation.

2. In addition to the phone or e-mail notification required under D.1.a. above, the

Project Proponent shall submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

3. If the project construction has not started within 13 months of issuance of this WQC Order, the Project Proponent shall submit per Condition A.2 a written construction status report and submit status reports every 12 months until construction begins.

F. Timing

1. This WQC Order is effective upon issuance of the FERC license for this project and will remain valid for the duration of the associated license for the project.

2. It is estimated that the initial fill quantity of 7,640 acre-feet at a rate of 21 cubic feet per second (cfs) will take approximately 6 months. The Project Proponent must plan for this to occur across a 2-calendar-year period (e.g., about 3 months at the end of one calendar year, and the first 3 months of the subsequent calendar year) to comply with the consumptive use quantity authorized by the KPUD [Klickitat County Public Utility District No. 1] water right.

G. Construction

General Conditions

1. Construction stormwater, sediment, and erosion control Best Management Practices (BMPs) suitable to prevent exceedances of state water quality standards shall be in place before starting construction and shall be maintained throughout the duration of the activity.

2. All clearing limits, stockpiles, staging areas, and trees to be preserved shall clearly be marked prior to commencing construction activities and maintained until all work is completed for each project.

3. Within the project limits[231] all environmentally sensitive areas including, but not limited to, wetlands, wetland buffers, riparian buffers and mitigation areas shall be fenced with high visibility construction fencing (HVF), prior to commencing construction activities. All field staff shall be trained to recognize HVF, understand its purpose and properly install it in the appropriate locations. HVF shall be maintained until all work is completed.

[231] Project limits include mitigation sites, staging areas, borrow sources, and other sites developed or used to support project construction.

4. No petroleum products, fresh concrete, lime or concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.

5. All construction debris, and other solid waste material shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.

6. Applicant shall ensure that fill (soil, gravel, or other material) placed for the proposed project does not contain toxic materials in toxic amounts.

7. If seeding is used for temporary erosion control, it must be a seed mix consisting of native, annual, non-invasive plant species.

Equipment and Maintenance

8. Stock piles and staging areas must be located a minimum of 25-feet, from waters of the state, including wetlands and their buffers, unless otherwise requested by the Project Proponent.

9. Equipment used for this project shall be free of external petroleum-based products while used around the waters of the state, including wetlands. Accumulation of soils or debris shall be removed from the drive mechanisms (wheels, tires, tracks, etc.) and the undercarriage of equipment prior to its use around waters of the state, including wetlands.

10. Trucks hauling soil or contaminated media off site shall implement protective measures to avoid dust escaping or leaching.

11. No equipment shall enter, operate, be stored, or parked within any sensitive area except as specifically provided for in this WQC Order.

12. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills.

13. Wash water containing oils, grease, or other hazardous materials resulting from washing of equipment or working areas shall not be discharged into state waters. The Project Proponent shall set up a designated area for washing down equipment.

14. A separate area shall be set aside, which does not have any possibility of draining to surface waters, for the wash-out of concrete delivery trucks, pumping equipment, and tools.

15. Concrete process water shall not enter waters of the state unless treated to meet the requirements of the Construction Stormwater General Permit or the Sand and Gravel

General Permit, whichever is most protective. Any concrete process/contact water discharged from a confined area with curing concrete shall be contained and treated to meet state water quality standards or applicable permit requirements prior to discharge.

16. All excavated sediment shall be disposed upland in an approved disposal site, unless otherwise authorized by this WQC Order.

Dewatering

17. Turbid de-watering water associated with construction shall not be discharged directly to waters of the state, including wetlands, unless it meets the limitations set in applicable discharge permits.

18. Clean de-watering water associated with construction activities that has been tested and confirmed to meet water quality standards may be discharged directly to waters of the state including wetlands. The discharge outfall method shall be designed and operated so as not to cause erosion or scour in the stream channel, banks, or vegetation.

19. Dewatering water may not be discharged to waters of the state unless it meets Water Quality Standards (Chapter 173-201A WAC and Chapter 173-200 WAC) or permit limits at the point of discharge, unless otherwise authorized by this WQC Order. Dewatering water from the Columbia Gorge Aluminum Site may not be discharged to waters of the state unless it meets Model Toxics Control Act cleanup levels including those for surface water and sediment (Chapter 173-340 and Chapter 173-204).

20. The dewatering outfall or method of discharge shall be designed and operated so as not to cause erosion or scour in state waters, banks, or vegetation.

21. All equipment associated with dewatering activities shall be properly operated and maintained.

Contaminated Material Management

22. Contaminated materials are known to be present within the project site. Contaminated materials shall be managed in accordance with the detailed cleanup plans specified in Condition D.3 of this WQC Order.

23. Remedial actions to address contaminated materials shall be implemented per the requirements of this WQC Order, water quality permits, Cleanup Action Plan and implementing MTCA order or decree, and the detailed cleanup plans specified in Condition D.3 of this WQC Order. Contaminated materials shall be managed and disposed of in accordance with state and local regulations.

24. Post-removal soil sampling shall be conducted per the Cleanup Action Plan, implementing MTCA order or decree, and detailed cleanup plans specified in Condition D.3 of this WQC Order.

25. If new information regarding contamination at the project site is discovered, including the nature, quantity, migration, pathway, or mobility of hazardous substances, it must be reported to Ecology (per A.2.). Ecology will direct additional remedial action under the MTCA order or decree.

H. Aquatic Resource Mitigation Conditions

1. The Project Proponent shall mitigate aquatic resource impacts as described in Draft Mitigation and Planting Plan Rev 2 (hereafter called the "Mitigation Plan") as identified in Table 1 or as required by this WQC Order.

2. The Project Proponent shall have a qualified professional at the Aquatic Resource mitigation site to supervise during construction and planting.

3. Unless otherwise authorized by this WQC Order, the Project Proponent shall begin the compensatory mitigation project concurrently with, impacting aquatic resources S7 and S8. Otherwise, Ecology may require the Project Proponent to provide additional compensation to account for additional temporal loss of aquatic resource functions.

4. To minimize sediment releases, re-introduction of water into the mitigation stream channel shall be done gradually, and at a rate not higher than the normal flow.

5. The Project Proponent shall not use hay or straw on exposed or disturbed soil at the mitigation site(s), unless otherwise provided for in the Mitigation Plan.

6. Aquatic herbicides can be used or applied only by certified applicators or persons under the direct supervision of a certified applicator, and only for those uses covered by the certified applicator's license category.

    a. Applicators are required to be permitted under Ecology's Noxious Weed Control Permit.

    b. Applicators shall comply with all conditions of the Noxious Weed Control Permit.

7. If weed-barrier fabric is used on the site, the Project Proponent shall use only water-permeable, fully biodegradable, non-toxic weed-barrier fabric for the entire-site and/or individual plant weed control. If use of non-biodegradable plastic weed-barrier fabric is proposed in the mitigation plan approved by Ecology, it shall be used only at the base of individual plants and shall be removed before it starts to break down,

before it interferes with plant growth, or before the end of the monitoring period, whichever comes first.

8. If solid or mesh plant protector tubes are used on the mitigation site(s), Ecology strongly recommends that the Project Proponent use fully biodegradable options. If non-biodegradable plant protection options are used, they shall be removed before they interfere with plant growth or before the end of the monitoring period, whichever comes first.

9. Treated water added to the mitigation stream alignment from the upper reservoir shall be discharged in a manner and at a rate not higher than the normal flow to prevent erosion or scour to the channel, banks, or vegetation.

Mitigation Site Monitoring and Maintenance

10. After completing construction and planting of the mitigation sites(s), the Project Proponent shall submit to Ecology (see A.2) an as-built report, including plan sheets, documenting site conditions at Year Zero. The as-built report must:

    a. Be submitted within 90 days of completing construction and planting.

    b. Include the information listed in Attachment B (Information Required for As-built Reports).

11. The Project Proponent shall water and maintain all mitigation site plantings so as to meet the Mitigation Plan's performance standards. If an irrigation system is installed, it shall be removed by the end of year three unless otherwise provided for in the Mitigation Plan.

12. The Project Proponent shall monitor the mitigation site for a minimum of five (5) years. The Project Proponent shall use the monitoring methods described on pages 14-26 of the Mitigation Plan.

13. The Project Proponent shall submit to Ecology (see A.2) monitoring reports documenting mitigation site conditions annually for years 1, 2, 3, and 5. The monitoring reports must:

    a. Be submitted by December 31 of each monitoring year.

    b. Include the information listed in Attachment C (Information Required for Monitoring Reports).

14. Prior to implementing contingency measures not specified in the Mitigation Plan, the Project Proponent shall consult with Ecology.

15. When necessary to meet the mitigation performance standards, the Project Proponent shall replace dead or dying plants with the same species, or an appropriate native plant alternative, during the current or upcoming planting season and note species, numbers, and approximate locations of all replacement plants in the subsequent monitoring report.

16. If the Project Proponent has not met all compensatory mitigation conditions by the end of the monitoring period, Ecology may require additional monitoring, additional mitigation, or both. Conditions include specifications in the approved Mitigation Plan, such as performance standards for the mitigation site.

17. While construction is occurring, the project proponent shall have a qualified wetland professional, use the currently approved federal wetland delineation manual and appropriate regional supplement to delineate wetlands W6, W1, and W2 every year during the wettest portion of the growing season and for five years after construction has been completed to ensure the wetlands' hydrology is not impacted by the project. Wetland delineation reports must be submitted to Ecology each year by December 31 for review.

I. Emergency/Contingency Measures

1. The Project Proponent shall provide a Spill Control Plan for review by Ecology 30 days prior to commencing construction. The Spill Control Plan shall include protocols for handling and containing hazardous material during project construction, operation, and maintenance. The Spill Control Plan shall address potential issues resulting from spills during construction operation, or maintenance. The plan shall include:

    a. a description of project operations;

    b. the general types of oil or hazardous materials in use and stored;

    c. a project plan map indicating hazardous substance storage areas;

    d. materials handling procedures and storage requirements;

    e. spill cleanup procedures for areas and processes in which spills may occur;

    f. training of key training of key personnel in the implementation of the plan;

    g. the posting of summaries of the plan around the project to facilitate implementation of response actions;

    h. revising the plan as conditions or operations change at the project (e.g., from construction to operations);

i. BMPs that would be implemented during operation include: (1) notification to regulatory agencies, including local authorities, in accordance with applicable federal and state regulations if a spill may reach surface water or groundwater; and, (2) placement of emergency spill containment and cleanup kits (appropriate to the hazardous substances in use) in areas where they are easily accessed and used, with locations modified or moved as operations and activities change/progress at the project.

2. The Project Proponent shall have adequate and appropriate spill response and cleanup materials available on site to respond to any release of petroleum products or any other material into waters of the state.

3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters.

4. Discharges of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters is prohibited. If such work, conditions, or discharges occur, the Project Proponent shall notify Ecology's Federal Permit Manager, per condition A.2, and immediately take the following actions:

   a. Cease operations at the location of the non-compliance.

   b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and prevent further environmental damage.

   c. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

   d. Immediately notify Ecology's Regional Spill Response Office and the Washington State Department of Fish and Wildlife with the nature and details of the problem, any actions taken to correct the problem, and any proposed changes in operation to prevent further problems.

   e. Immediately notify the National Response Center at 1-800-424-8802, for actual spills to water only.

5. Notify Ecology's Regional Spill Response Office immediately if chemical containers (e.g., drums) are discovered on-site or any conditions present indicating disposal or burial of chemicals on-site that may impact surface water or ground water.

Attachment A

Statement of Understanding

Water Quality Certification Conditions

As the Project Proponent for Goldendale Energy Storage project, I have read and understand the conditions of Washington State Department of Ecology WQC Order No. 21703, and any permits, plans, documents, and approvals referenced in the WQC Order. I have and will continue to ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand the conditions of this WQC Order and any permits, plans, documents, and approvals referenced in the WQC Order.

_____	_____
Signature	Date
_____	_____
Title	Phone

_____

Company

Aquatics Id: 139382

Attachment B

Information Required for As-built Reports

Goldendale Energy Storage Project Ecology Order # 21703

And

Corps Reference # 202100572

Ecology requires the following information for as-built reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

Background Information

1. Project name.

2. Ecology Order number and the Corps reference number.

3. Name and contact information of the person preparing the as-built report. Also, if different from the person preparing the report, include the names of:

    a) The applicant

    b) The landowner

    c) Qualified professional on site during construction of the mitigation site(s).

4. Date the report was produced.

Mitigation Project Information

5. Brief description of the **final** mitigation project with any changes from the approved plan made during construction. Include:

    a) **Actual** area of stream and buffer establishment.

    b) Important dates, including:

        i. Start of project construction.

        ii. When work on the mitigation site began and ended.

        iii. When different activities such as grading, removal of invasive plants, installing plants, and installing habitat features began and ended.

6. Description of any problems encountered and solutions implemented (with reasons for changes) during construction of the mitigation site(s).

7. List of any follow-up actions needed, with a schedule.

8. Vicinity map showing the geographic location of the site(s) with landmarks.

9. Mitigation site map(s), 8-1/2” x 11” or larger, showing the following:

    a) Boundary of the site(s).

    b) Topography (with a description of how elevations were determined).

    c) Installed planting scheme (quantities, densities, sizes, and approximate locations of plants, as well as the source(s) of plant material).

    d) Location of habitat features.

    e) Location of permanent photo stations and any other photos taken.

    Include the month and year when each map was produced or revised. The site map(s) should reflect on-the-ground conditions after the site work is completed.

10. Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction from which each photo was taken. Photo pans are recommended.

Attachment C

Information Required for Monitoring Reports

Goldendale Energy Storage Project

Ecology Order # 21703

And

Corps Reference # 202100572

Ecology requires the following information for monitoring reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

Background Information

1. Project name.

2. Ecology Order number and the Corps reference number.

3. Name and contact information of the person preparing the monitoring report. Also, if different from the person preparing the report, include the names of:

    a) The applicant

    b) The landowner

    c) The party responsible for the monitoring activities

4. Dates the monitoring data were collected.

5. Date the report was produced.

Mitigation Project Information

6. Brief description of the mitigation project, including area and mitigation type(s) (re-establishment, rehabilitation, creation, enhancement, preservation, upland, buffers).

7. Description of the monitoring approach and methods. For each performance standard being measured provide the following information:

    a) Description of the sampling technique (e.g., monitoring point for soil or hydrology, line or point intercept method, ocular estimates in individually placed plots). If you are using a standardized technique, provide a reference for

that method.

b) Size and shape of plots or transects.

c) Number of sampling locations and how you determined the number of sampling locations to use.

d) Percent of the mitigation area being sampled.

e) Locations of sampling (provide a map showing the locations), how you determined where to place the sampling locations (e.g., simple random sample), and whether they are permanent or temporary.

f) Schedule for sampling (how often and when).

g) Description of how the data was evaluated and analyzed.

8. Summary table(s) comparing performance standards with monitoring results and whether each standard has been met.

9. Discussion of how the monitoring data were used to determine whether the site(s) is meeting performance standards.

10. Goals and objectives and a discussion of whether the project is progressing toward achieving them.

11. Summary, including dates, of management actions implemented at the site(s), for example, maintenance and corrective actions.

12. Summary of any difficulties or significant events that occurred on the site that may affect the success of the project.

13. Specific recommendations for additional maintenance or corrective actions with a timetable.

14. Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction the camera is facing. Photo pans are recommended.

15. Vicinity map showing the geographic location of the site(s) with landmarks.

16. Mitigation site map(s), 8-1/2” x 11” or larger, showing the following:

a) Boundary of the site(s).

b) Location of permanent photo stations and any other photos taken.

c) Data sampling locations, such as points, plots, or transects.

d) Approximate locations of any replanted vegetation.

e) Changes to site conditions since the last report, such as areas of regrading, shift in habitat features, or a change in water regime.

Include the month and year when each map was produced or revised. The site map(s) should reflect on-the-ground conditions during the most recent monitoring year.

APPENDIX B

U.S. Department of Commerce, National Oceanic and Atmospheric Administration's September 6, 2024 Biological Opinion Reasonable and Prudent Measures and Terms and Conditions

Amount or Extent of Take

In the biological opinion, NMFS [National Marine Fisheries Service] determined that incidental take of juvenile SR fall Chinook salmon is reasonably certain to occur from entrainment and impingement.

NMFS expects that injury and/or death of a few juveniles will likely occur from entrainment through the railway berm into the intake pool and impingement on the culvert screen when water is being diverted from the Columbia River for project initial fill and annual refill. Flow from the Columbia River to the intake pool will increase when project water is being diverted out of the intake pool. With this directional flow, individuals in the Columbia River adjacent to the intake pool may enter or be drawn into the intake pool via the rock and gravel-filled railway berm's interstitial spaces or impinged on the screen from increased velocity, if not maintained. Quantification of take associated with impingement and entrainment is not possible because abundance estimates of SR fall Chinook salmon within the immediate project area are not available, the number of fish present at any time is highly variable, the range of responses that individual fish will have, and we anticipate substantial difficulties in the ability to observe and accurately document project-induced injuries and mortalities. Fish killed or fish that are injured to the degree that they are rendered morbid-bound are expected to either be swept downstream and unable to be directly attributed to the project or rapidly consumed by the known community of aggressive piscivorous predators in the intake pool.

When take cannot be adequately quantified, NMFS describes the extent of take and defines the limits of anticipated take through the use of surrogate measures. The pertinent surrogate for this action is described by the total quantity and rate of water diverted for project initial fill and annual refills and the timing that this water is withdrawn. Specifically, the take exempted by this ITS will be exceeded if:

(1) initial fill or any annual refill operations occur outside of the permitted September 1 to March 31 time period,

(2) water diverted for initial fill or any annual refill is greater than 7,640 acre-feet and 360 acre-feet, respectively, or

(3) initial fill or any annual refill diverts water at a rate greater than 35.3 cfs, the rate allowed under the Klickitat PUD water right.

These surrogates for take are appropriate because they are clear, measurable limits that can be monitored for exceedance; they are causally linked to the take pathways because the risk of injury and/or death is related to the amount of water flowing from the Columbia River to the intake pool; and because they represent an observable metric of the extent of take, which if exceeded, would trigger consultation.

Effect of the Take

In the biological opinion, NMFS determined that the amount or extent of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to SR fall Chinook salmon or destruction or adverse modification of their critical habitat.

Reasonable and Prudent Measures

"Reasonable and prudent measures" refer to those actions the Director considers necessary or appropriate to minimize the impact of the incidental take on the species (50 CFR 402.02). NMFS believes that full application of the conservation measures included as part of the proposed action, together with the use of the RPMs and terms and conditions described below, are necessary and appropriate to minimize the likelihood of incidental take of listed species due to implementation of the proposed action.

FERC and the Applicant shall:

1. Design and carryout a monitoring and reporting program to confirm that the project is implemented as proposed, the terms and conditions of this ITS are effective in avoiding and minimizing incidental take from permitted activities, and the amount and extent of take is not exceeded.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the federal action agency must comply (or must ensure that any applicant complies) with the following terms and conditions. FERC or any applicant has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this ITS (50 CFR 402.14). If the entity to whom a term and condition is directed does not comply with the following terms and conditions, protective coverage for the proposed action would likely lapse. The following terms and conditions implement reasonable and prudent measure 1:

a. Track and monitor the timing and quantity of project water diversion on a daily basis to ensure that the conservation measures are meeting the objective of minimizing take

b. Submit a one-time initial fill completion report and an annual refill report to NMFS by June 1 each year. The reports shall include, at a minimum, the following:

   i. Total volume (acre-feet) of water withdrawn during each fill period

   ii. Rate of diversion in cfs

   iii. Start and end dates of each fill period

   iv. Reference to NMFS' consultation number WCRO-2024-00249

c. All reports should be sent to: ritchie.graves@noaa.gov

d. If the amount or extent of take is exceeded, stop project activities (fill or annual refill) and notify NMFS immediately.

Document Content(s)