

127 FERC ¶ 61,265
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Suedeen G. Kelly, Marc Spitzer,
and Philip D. Moeller.

Avista Corporation

Project Nos. 2545-091
12606-000

ORDER ISSUING NEW LICENSE AND APPROVING ANNUAL CHARGES
FOR USE OF RESERVATION LANDS

(Issued June 18, 2009)

INTRODUCTION

1. On July 28, 2005, Avista Corporation (Avista) filed applications for new licenses, pursuant to sections 4(e) and 15 of the Federal Power Act (FPA),¹ for the continued operation and maintenance of five developments comprising the 137.67-megawatt (MW) Spokane River Hydroelectric Project (Spokane River Project). The project is located on the Spokane River in Spokane, Lincoln, and Stevens Counties, Washington, and in Kootenai and Benewah Counties, Idaho.² The Spokane River Project occupies about 6,460 acres of federal and tribal lands, including about 5,996 acres that are part of the Coeur d'Alene Reservation.³ On January 29, 2009, after a contested relicensing

¹ 16 U.S.C. §§ 797(e) and 808 (2006).

² The five developments comprising the Spokane River Project are operated in a coordinated manner as a single unit of development. Under FPA section 23(b)(1), 16 U.S.C. § 817(1) (2006), the Spokane River Project is required to be licensed because of its location on federal lands.

³ These reservation lands are owned by the United States and held in trust for the Coeur d'Alene Indian Tribe. The Coeur d'Alene Reservation includes the submerged lands of the Coeur d'Alene Lake that lie within the present-day boundaries of the reservation. *See Idaho v. United States*, 533 U.S. 262 (2001). In addition to the Coeur d'Alene Reservation lands, which are administered by the U.S. Department of the

(continued...)

proceeding, Avista filed an offer of settlement on behalf of itself, the Coeur d'Alene Tribe, and the U.S. Department of the Interior (Interior), requesting issuance of a single new license for the five developments and providing Interior's revised conditions under section 4(e) of the FPA. Avista also filed, on behalf of itself and the Tribe, two agreements pertaining to annual charges for the use of submerged lands within the Coeur d'Alene Indian Reservation under section 10(e) of the FPA. For the reasons discussed below, we issue a single new license for the project, consistent with the settlement, include Interior's revised section 4(e) conditions, and approve the section 10(e) agreements on annual charges.

BACKGROUND

2. An original license for the Spokane River Project was issued to the Washington Water Power Company, Avista's predecessor, on August 17, 1972.⁴ At the time, the project consisted of four developments⁵ on the Spokane River in Washington, and did not include the constructed Post Falls development in Idaho. In 1981, the Commission amended the license to include the Post Falls development.⁶ The original license for the Spokane River Project, which includes Post Falls, expired on August 1, 2007. Since then, Avista has operated the project under an annual license pending disposition of its new license applications.⁷

3. At relicensing, Avista filed one application for the four developments of the Spokane River Project located in the State of Washington and a separate license

Interior's (Interior) Bureau of Indian Affairs (BIA), Interior's Bureau of Land Management (BLM) administers about 373 acres, and the U.S. Department of Agriculture's Forest Service (Forest Service) administers about 91 acres. The project boundary also includes about 1,593 acres that the State of Idaho owns as part of Heyburn State Park.

⁴ *Washington Water Power Co.*, 48 FPC 339 (1972), *reh'g denied*, 48 FPC 847 (1972).

⁵ The four original developments are Upper Falls, Monroe Street, Nine Mile, and Long Lake. Throughout this order, we refer to these four developments as the Spokane River developments.

⁶ *Washington Water Power Co.*, 16 FERC ¶ 62,096 (1981). The Commission later amended the license to reflect the company's new name, Avista Corporation. *Washington Water Power Co. and Avista Corporation*, 86 FERC ¶ 62,084 (1999).

⁷ See section 15(a)(1) of the FPA, 16 U.S.C. § 808(a)(1) (2006).

application for the Post Falls Project located in the State of Idaho. Commission staff analyzed the license application for the four Spokane River developments together with that for the Post Falls Project in a consolidated environmental review. Several parties, including Interior and the Coeur d'Alene Tribe, opposed the separate licensing of the Post Falls and Spokane River Projects. After Commission staff completed its environmental review, Avista filed the settlement agreement (described below) and requested a single license for the five developments. This order grants that request.

4. The Commission published notice of the applications for the Spokane River Project and Post Falls Project in the *Federal Register* on January 20, 2006.⁸ In response, the following parties filed timely motions to intervene: American Whitewater; the Washington Department of Fish and Wildlife (Washington DFW); Sierra Club; Center for Environmental Law and Policy; Washington Department of Ecology (Washington Ecology); State of Idaho, including Idaho Department of Environmental Quality (Idaho DEQ), Idaho Department of Fish and Game (Idaho Fish and Game), Idaho Department of Parks and Recreation (Idaho DPR), Idaho Department of Water Resources, and Idaho Department of Lands; Spokane Canoe and Kayak Club; Northwest Whitewater Association; The Friends of the Centennial Trail; City of Post Falls, Idaho; Hagadone Hospitality Company; Interior, including BIA, BLM, Bureau of Reclamation, National Park Service, and U.S. Fish and Wildlife Service (Fish and Wildlife Service); The Lands Council; and the Coeur d'Alene Tribe.⁹ The Sierra Club, Coeur d'Alene Tribe, and The Lands Council each filed a protest with their motion to intervene, primarily to oppose separate licensing of the Post Falls and Spokane River Projects.¹⁰

⁸ 71 Fed. Reg. 3,286 (2006). The notice established March 14, 2006, as the deadline for filing motions to intervene.

⁹ The motions were timely and unopposed, and were therefore automatically granted pursuant to Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. *See* 18 C.F.R. § 385.214(c)(1) (2008).

¹⁰ The Center for Environmental Law and Policy withdrew its motion to intervene and protest on December 28, 2006, citing "a change in organizational priorities." The Coeur d'Alene Tribe based its protest on the bifurcated licensing issue. In addition to opposing separate licensing, the Sierra Club and The Lands Council raised concerns about the need for more information to support licensing the projects, and the adequacy of Avista's proposed mitigation measures. These matters were subsequently addressed by the information developed during the environmental review process and the measures required as a result of the agencies' mandatory conditions.

5. On March 15, 2006, the following entities filed late motions to intervene: Spokane Mountaineers, Inc.; Washington State Department of Natural Resources; Kootenai County; Washington State Parks and Recreation Commission; the State of Washington Interagency Committee for Outdoor Recreation; Idaho Rivers United; and Lake Spokane Protection Association. The City of Coeur d'Alene filed a late motion to intervene on March 20, 2006. On May 5, 2006, the Commission published a notice granting late intervention to each of these entities.
6. On May 18, 2006, the Commission issued a public notice soliciting comments, recommendations, terms and conditions, and prescriptions, and establishing a deadline of July 17, 2006. The following entities filed timely responses: Coeur d'Alene Tribe, State of Idaho, The Lands Council, Washington Ecology, City of Post Falls, Center for Environmental Law and Policy, and Sierra Club. On July 18, 2006, Interior, Washington DFW, and Washington Ecology filed late responses. On August 4, 2006, the Commission granted Interior's request to consider as timely all comments, recommendations, terms and conditions, and prescriptions filed by July 18, 2006.
7. Commission staff prepared a draft environmental impact statement (EIS) and issued it for public comment on December 28, 2006, with comments due by March 6, 2007. In response, the Commission received over 250 separate filings with comments from federal and state resource agencies, tribes, non-governmental organizations, and individuals. In addition, the City of Spokane and The Center for Environmental Law and Policy filed timely motions to intervene on January 30, 2007, and March 6, 2007, respectively.¹¹
8. Commission staff considered the comments received in preparing the final EIS, which staff issued on July 20, 2007. In response, the U.S. Environmental Protection Agency (EPA) filed comments, noting that changes in the final EIS addressed its concerns.
9. On December 16, 2008, Avista informed the Commission that it had entered into a settlement agreement with the Tribe and Interior addressing Interior's mandatory conditions under FPA section 4(e), as well as two other agreements between Avista and the Tribe on annual charges for the use of Reservation lands under FPA section 10(e), and requested that the Commission consider and act on the parties' settlement agreements at the same time as Avista's license applications. On January 27, 2009, Interior filed revised section 4(e) conditions pursuant to the settlement. On January 29, 2009, Avista

¹¹ Any person may file a motion to intervene on the basis of a draft EIS, and the motion will be deemed timely if it is filed within the comment period for the draft EIS. *See* 18 C.F.R. § 380.10(a)(1) (2008).

filed the parties' agreements concerning Interior's revised section 4(e) conditions and the payment of annual charges under FPA section 10(e).

10. The Commission has fully considered the motions to intervene, comments, and recommendations, as well as the settlement agreements, in determining whether, and under what conditions, to issue this license.

PRELIMINARY MATTERS

11. On April 6, 2007, the Northwest Power and Conservation Council (Council) filed a late motion to intervene for the sole purpose of objecting to Commission staff's March 7, 2007 letter to Washington DFW, denying its request to accept the Council's Intermountain Province Plan as a comprehensive plan pursuant to FPA section 10(a)(2)(A). In its motion, the Council did not show good cause for the late filing. We therefore deny late intervention. However, the Council clarified that the Intermountain Province Plan is an integral part of the Council's Columbia River Basin Fish and Wildlife Program, which the Commission recognizes as a comprehensive plan. We therefore accept the Intermountain Province Plan as a comprehensive plan. We discuss our review of comprehensive plans later in this order.

PROJECT DESCRIPTION AND OPERATION

A. Project Area

12. The five developments are all located along the Spokane River in the Columbia River basin. The Spokane River originates at the outlet of Coeur d'Alene Lake in Idaho and flows westerly approximately 111 miles to the Columbia River in eastern Washington.¹² The Spokane River watershed drains an area of 6,640-square-miles, extending from the Bitterroot Mountains in Idaho west to the Columbia River in Washington, which is about 2.6 percent of the total drainage area of the Columbia River basin.

13. The Spokane River in the project area flows from Coeur d'Alene Lake in Idaho through the city and suburbs of Spokane, Washington, and is an important resource for the surrounding community. Residents and visitors enjoy the Spokane River for its boating, tubing, swimming, and fishing opportunities, and they frequent areas adjacent to the river for such activities as jogging, walking, biking, and sight-seeing.

¹² The confluence of the Spokane and Columbia Rivers is inundated by Lake Roosevelt, which is the reservoir created by Grand Coulee Dam.

14. Important environmental issues identified in this relicensing proceeding include, among others, concerns with: (1) the river's water quality, with specific regard to erosion and sedimentation, low dissolved oxygen levels, elevated water temperatures, and elevated metals and total dissolved gas concentrations; (2) the health of recreationally important fishery resources, including wild and stocked rainbow trout, largemouth and smallmouth bass, and yellow perch; (3) the control of noxious and exotic weeds in the reservoirs and on the shorelands; (4) the protection of project-area wetlands and riparian wildlife habitats; and (5) the aesthetic appearance of the project's bypassed reach at the Upper Falls development.

B. Project Facilities

15. The Spokane River Project consists of five hydroelectric developments located on the Spokane River in northern Idaho (in Kootenai and Benewah Counties) and eastern Washington (in Spokane, Stevens, and Lincoln Counties). The five developments, from upstream to downstream, are Post Falls (river mile 102), Upper Falls (river mile 74.2), Monroe Street (river mile 74), Nine Mile (river mile 58), and Long Lake (river mile 34).¹³ These facilities were constructed at various times between 1889 and 1949, and are summarized as follows. A more detailed project description is contained in Ordering Paragraph (B)(2).

1. Post Falls Development

16. The Post Falls development includes three dams, constructed between 1906 and 1908 on the South Channel, North Channel, and Middle Channel of the Spokane River, with natural islands connecting the structures. Post Falls development includes generating facilities, nine impounded miles of the Spokane River (from the three dams to the natural outlet of Coeur d'Alene Lake), and Coeur d'Alene Lake.

17. The Middle Channel dam includes the following constructed facilities: (1) a 215-foot-long, 64-foot-high dam, with a crest elevation of 2,135 feet;¹⁴ (2) six 15-foot-wide, 14.8-foot-long vertical lift headgate intakes; (3) six 56-foot-long, 11.25-foot-diameter steel penstocks; (4) a six-turbine powerhouse, integral to the dam, with a total nameplate capacity of 14.75 MW; (5) a 500-foot-long, 115-kilovolt (kV) transmission line; (6) a substation; and (7) appurtenant facilities.

¹³ At river mile 79, just upstream of the Upper Falls development, is the City of Spokane's 17.7-MW Upriver Project No. 3074. The Upriver Project was licensed in 1981 for a 50-year term. *City of Spokane*, 15 FERC ¶ 62,273 (1981).

¹⁴ This order references all elevations to Avista's data, a variation of the National Geodetic Vertical Datum 1929.

18. The South Channel dam includes the following constructed facilities: (1) a 127-foot-long, 25-foot-high dam, with a crest elevation of 2,135 feet; (2) a 37-foot-long spillway on top of the dam, with a spillway crest elevation of 2,128.5 feet; and (3) six 6-foot-wide, 13-foot-high vertical sluice gates.

19. The North Channel dam includes the following constructed facilities: (1) a 431-foot-long, 31-foot-high dam, with a crest elevation of 2,133 feet; (2) a spillway at elevation 2,114 feet; (3) a 100-foot-wide, 14-foot-high rolling sector gate; (4) seven 21-foot-wide, 12-foot-high radial gates; and (5) a 12-foot-wide, 12-foot-high radial gate.

20. The operating reservoir for the development has a normal full-pool elevation of 2,128 feet and includes nine miles of the Spokane River between the development's dams and the natural outlet of Coeur d'Alene Lake, as well as Coeur d'Alene Lake and associated inundated portions of the St. Joe, St. Maries, and Coeur d'Alene Rivers. The operating reservoir has a surface area of approximately 40,580 acres, a maximum depth of more than 200 feet, and usable storage of approximately 275,581.5 acre-feet.¹⁵

21. Coeur d'Alene Lake is typically a single main channel with natural levees. Through time, the tributary streams have built deltas out into Coeur d'Alene Lake, forming extensive back lakes and marshes. These back lakes within the project boundary include Anderson Lake, Thompson Lake, Swan Lake, Cave Lake, Medicine Lake, and Killarney Lake, all located along the Coeur d'Alene River; and Hepton Lake, located along the St. Joe River.

22. Tributaries that flow into Coeur d'Alene Lake include portions of Lonesome Creek (located on the northeast side of the reservoir), the Coeur d'Alene River (which flows into the reservoir from the east), and the St. Maries River and the St. Joe River (which flow into the reservoir from the south). The water levels within these tributaries can vary, depending on the volume of tributary inflow and time of year. The inclusion of the lateral lakes and the inundated portions of the St. Joe, St. Maries, and the Coeur d'Alene Rivers yields a total of 40,580 inundated acres and 162.5 acres of land within the project boundary at the Post Falls development.

2. Upper Falls Development

23. The Upper Falls development includes two dams connected by Havermale Island located on the Spokane River, in Spokane, Washington. Upper Falls development consists of the following facilities: (1) a 366-foot-long, 35.5-foot-high concrete gravity

¹⁵ See "Additional Information Regarding Water Rights and Storage at the Post Falls Hydroelectric Development; Project Nos. 2545-091 and 12606-000, Avista Corporation," filed February 3, 2009.

dam across the North Channel of the Spokane River; (2) a 290-foot-long spillway across the top of the North Channel dam; (3) a 70-foot-long, 30-foot-high concrete gravity dam across the South Channel of the Spokane River; (4) three 11.8-foot-wide, 15-foot-high intake curtain headgates on the South Channel dam; (5) a 4-mile-long, 800-acre-foot reservoir with a surface area of 123 acres at a normal full pool elevation of 1,870.5 feet; (6) a 350-foot-long, 18-foot-diameter reinforced concrete penstock; (7) a single-unit powerhouse with a Francis-type vertical shaft turbine-generator unit with a nameplate capacity of 10 MW; and (8) appurtenant facilities. There is no primary transmission line associated with the Upper Falls development.¹⁶

24. At the Upper Falls development, the Spokane River flows in two channels (North and South Channel) around Havermale Island. The lower, or South Channel, carries flow to the development's South Channel dam and powerhouse, while the North Channel carries non-diverted Spokane River flow downstream over the North Channel dam.

25. The North Channel is the Upper Falls development's bypassed reach during project operations. The North Channel is about 2,200 feet long and flows around a small island (Canada Island) about halfway along the length of the channel. The portion of the North Channel flowing around the southern edge of this island is often referred to as the Middle Channel. Flow in the Middle Channel returns to the North Channel prior to reaching the powerhouse tailrace of the Upper Falls development.

3. Monroe Street Development

26. Monroe Street development consists of the following constructed facilities: (1) a 240-foot-long, 24-foot-high concrete gravity dam; (2) a 0.2-mile-long, 30-acre-foot reservoir with a surface area of 5 acres at a normal full pool elevation of 1,806.3 feet; (3) a 217-foot-long spillway; (4) a 332-foot-long, 14-foot-diameter penstock; (5) an underground, single-unit powerhouse with a vertical, Kaplan-style turbine-generator unit with a nameplate capacity of 14.82 MW; and (6) appurtenant facilities. There is no primary transmission line associated with the Monroe Street hydroelectric development.¹⁷

¹⁶ There is a line that transmits power from the Upper Falls development to the Post Street substation, but that line is part of the interconnected grid because it also delivers power to the project for use at the Upper Falls development.

¹⁷ As with the Upper Falls development, the line carrying power from the Monroe Street powerhouse also transmits power to the project for use at the Monroe Street development.

4. Nine Mile Development

27. Nine Mile development consists of the following constructed facilities: (1) a 364-foot-long, 58-foot-high concrete gravity dam; (2) an approximately 6-mile-long, 4,600-acre-foot reservoir with a surface area of 348 acres at the normal full pool elevation of 1,606.6 feet; (3) a 225-foot-long spillway at the crest of the dam, with two rows of 5-foot-high flashboards; (4) a 120-foot-long, 5-foot-diameter bypass diversion tunnel; (5) four intake chambers; (6) a powerhouse integral to the dam with four horizontal Francis turbine-generator units with a nameplate capacity of 26.4 MW; (7) two parallel 200-foot-long, 2.3-kV transmission lines; (8) one 200-foot-long, 13.8-kV transmission line; (9) a 150-foot-by-150-foot switchyard; (10) a 2.3-to-60/115-kV transformer and a 13.8/115-kV transformer;¹⁸ and (11) appurtenant facilities.

5. Long Lake Development

28. Long Lake development consists of the following constructed facilities: (1) a 593-foot-long, 213-foot-high main dam; (2) a crescent-shaped 247-foot-long, 108-foot-high cutoff dam located about 900 feet upstream of the main dam; (3) a 23.5-mile-long, 105,080-acre-foot reservoir with a surface area of 5,060 acres at a normal full-pool elevation of 1,536 feet (Lake Spokane);¹⁹ (4) four intake structures; (5) four 236-foot-long, 16-foot-diameter penstocks; (6) a powerhouse with four double-Francis-type, horizontal shaft turbine-generator units with a nameplate capacity of 71.7 MW; (7) a 207-foot-long, 56-foot-wide switch room inside the powerhouse; (8) two 115-kV transmission lines, one 0.81 miles long and the other 1.03 miles long, running approximately parallel to each other between the powerhouse and the Devil's Gap substation; and (9) appurtenant facilities.

C. Project Boundary

29. Under the existing license, the project boundary encompasses five distinct areas -- one for each of the five developments -- and generally follows the normal high-water line of the reservoirs, with some additional lands associated with the project's dams, powerhouses, tailraces, and recreation. At the Long Lake and Nine Mile developments, the project boundary also encloses additional, relatively small, parcels of Avista-owned, private, and state lands. The existing project boundary encompasses a total area of 44,556 acres; which includes the following areas at each of the developments: 38,391

¹⁸ Power flows from the powerhouse through the two step-up transformers into the interconnected grid.

¹⁹ Lake Spokane is also commonly referred to as Long Lake.

acres for the Post Falls development,²⁰ 138 acres for the Upper Falls and Monroe Street developments, 414 acres for the Nine Mile development, and 5,613 acres for the Long Lake development.²¹

D. Existing Project Operation

30. The Post Falls development is the project's upstream-most development on the Spokane River. Avista uses its Post Falls development to regulate flows in the Spokane River at certain times and in accordance with minimum flow requirements, other lake level and downstream flow considerations, energy demands, flood control, and upstream recreational, residential, and commercial interests.

31. The Post Falls development typically controls water levels in the Spokane River and Coeur d'Alene Lake approximately six months a year starting in late June or July, after the spring runoff flows have peaked and largely subsided. Throughout the summer recreation season, Coeur d'Alene Lake is maintained at or near elevation 2,128 feet. Generally during the week after Labor Day, Avista begins to release stored water at the Post Falls development, resulting in a gradual drawdown in lake levels of one to two feet per month to a maximum drawdown of 7.5 feet. The timing of the drawdown varies annually based on flow conditions, weather forecasts, and energy demands.

32. From the natural Coeur d'Alene Lake outlet, water flows downstream to the three Post Falls development dams. Avista uses the North and South Channel dams to divert flow into the Middle Channel. Water in the Middle Channel flows through steel penstocks into the six-turbine powerhouse, integral to the Middle Channel dam. After flowing through the turbines, water exits the powerhouse through the tailrace and re-enters the Spokane River. Water not diverted for generation at the Middle Channel dam spills into the bypassed reaches of the North and South Channel dams, which are 4,000 feet long and 2,800 feet long, respectively.

²⁰ The project boundary for the Post Falls development primarily follows the 2,128-foot-elevation contour (Avista Datum), which is the full pool elevation of Lake Coeur d'Alene. The original acreages for the Post Falls development were generated using simple planimetric techniques many years ago. With the advent of GIS technology and verification using field data, in the 1990s Commission staff recalculated the new project boundary based on the 2,128-foot-elevation contour, which resulted in changes to the project boundary, as verified by Avista field data. Among other things, this resulted in an increase of 64 acres of BLM lands and 37 acres of Forest Service lands within the project boundary.

²¹ See final EIS at 3-396 through 3-399.

33. Water exiting the Post Falls powerhouse joins with the bypass flow from the South Channel. Approximately 1,600 feet downstream along the Spokane River, the flow then joins with the bypass flow from the North Channel.

34. Under the existing license, there is a minimum flow at the development of 300 cubic feet per second (cfs), or an amount equal to the inflow of Coeur d'Alene Lake, whichever is less. This minimum flow is normally provided through the powerhouse discharge into the river immediately below the Middle Channel dam. Seepage flows also provide some water into the bypassed reaches. These flows are estimated as high as 30 cfs or more into the North Channel when the upstream pool is at 2,128 feet. Considerably less seepage (10 cfs or less) flows into the South Channel.

35. Along the Spokane River, 28 miles downstream of the Post Falls development is the Upper Falls development. The Upper Falls development is operated as a run-of-river facility.²² When operating the Upper Falls development, Avista utilizes the North Channel dam to divert Spokane River inflow into the South Channel. From there, the flow travels along the 2,000-foot-long South Channel to the South Channel dam. At the dam, the flow passes through a headgate structure and into the 350-foot-long penstock that carries the flow to the powerhouse, which is located on the south side of the river. After flowing through the turbine, the water exits the powerhouse through the tailrace and re-enters the Spokane River. Water not diverted for generation at the North Channel dam spills into the North Channel.²³ There are no operational or minimum flow requirements for this development under the existing license.

36. Water exiting the Upper Falls powerhouse joins the non-diverted flow in the Spokane River and the combined flows travel downstream approximately 1,000 feet to the Monroe Street development. The Monroe Street development is operated as a run-of-river facility. Water at the Monroe Street dam flows through the 332-foot-long penstock into the single-turbine powerhouse, and then exits through the tailrace back into the Spokane River about 400 feet downstream of the dam. The existing license requires Avista to release a minimum aesthetic flow of 200 cfs from the dam and into the 400-foot-long bypassed reach each day from 10:00 a.m. to one-half hour after sunset.

²² Run-of-river, as used here, means that the amount of water flowing into the reservoir is essentially equal to the amount of water flowing out of it, with little change in reservoir water levels except during unusual circumstances.

²³ At inflows less than the hydraulic capacity of the development, which is 2,500 cfs, the North Channel receives only a minimal leakage flow of about 30 cfs from the North Channel dam.

37. The Spokane River then flows downstream for 16 miles to the Nine Mile development. The Nine Mile development is operated as a run-of-river facility. At Nine Mile dam, Avista diverts operational flows through one of four intakes located at the top of the dam. From there, the flow passes through the bulkhead chambers that channel the flow to the four-turbine-unit powerhouse integral to the dam. Flow then exits back to the Spokane River through the tailrace. Flow not diverted for generation purposes passes through a low-level diversion tunnel through the Nine Mile dam along the left side of the powerhouse. The bypass tunnel is capable of passing a flow of up to 400 cfs. There are no operational or minimum flow requirements for this development under the existing license.

38. After passing through the Nine Mile development, the Spokane River flows a short distance downstream into Lake Spokane, the 23.5-mile long reservoir behind Long Lake dam.²⁴ Flow at the Long Lake dam passes through one of four intake structures, each of which leads to a 230-foot-long penstock that brings water to the four-turbine powerhouse. Water flows through the turbines and re-enters the Spokane River via the tailrace about 800 feet downstream of the dam.

39. Avista uses the storage capacity of Lake Spokane to respond to the energy demands of its customers during the winter months. Avista does this by drawing on the storage of Lake Spokane over a period of several weeks to several months, as needed to meet the energy demand. Although the existing license allows Avista to draw down Lake Spokane as much as 24 feet below the normal full-pool elevation of 1,536 feet, in recent years Avista has limited the drawdowns to an average of about 3 feet and an extreme of about 14 feet.²⁵ During the summer, Avista typically maintains the reservoir surface elevation within one foot of the full-pool elevation, in consideration of the recreation uses of the lake. Except for a maximum allowable drawdown of 24 feet, there are no other operational or minimum flow requirements for this development under the existing license.

40. Avista operates the Spokane River Project in coordination with its other power supply resources to meet the power needs of its customers, and, as a signatory to the Pacific Northwest Coordination Agreement,²⁶ as an element of the coordinated regional

²⁴ The distance between the headwaters of Lake Spokane and Nine Mile dam varies based on river flow conditions and seasonal operation of Lake Spokane. When Lake Spokane is at normal full-pool elevation, the distance is about 0.5 miles.

²⁵ See final EIS at 2-10.

²⁶ The Pacific Northwest Coordination Agreement, signed on September 15, 1964, and revised on June 18, 1997, by the U.S. Army Corps of Engineers, Bonneville Power (continued...)

system in accordance with the provisions of that agreement. Avista operates the Spokane River Project to maximize power generation to meet local and regional electricity demands, with consideration given to flood management, natural resource protection, recreation, and other river-water associated needs. A more detailed description of project operation appears in the final EIS.²⁷

E. Proposed Project Operation and Project Boundary Revisions

41. Avista proposes the following changes to Post Falls development operations: increasing the minimum discharge from the current 300 cfs to 600 cfs, implementing a downramping rate that corresponds to no more than a 4-inch drop per hour in downstream water levels, releasing seasonal aesthetic flows of 46 cfs in the North Channel, and releasing additional flows in the spring and fall to enhance fishery resources and meet recreational needs. A more detailed description of these proposed changes appears in the final EIS.²⁸

42. Avista proposes the following changes to Upper Falls development operations: releasing a minimum aesthetic flow of 200 cfs, along with a study of temporary channel modifications (using sandbags to redirect flows in the North Channel and South Channel) to determine whether such modifications could improve the visual characteristics of the 200-cfs minimum flow release. A more detailed description of this proposed change appears in the final EIS.²⁹

43. Avista proposes to release a year-round minimum aesthetic flow over the Monroe Street dam of 200 cfs between 10:00 a.m. and one-half hour after sunset. A more detailed description of this proposal appears in the final EIS.³⁰

44. Avista proposes to continue operating the project in coordination with its other power supply resources under the Pacific Northwest Coordination Agreement; however,

Administration, the Bureau of Reclamation, and the major generating utilities in the Pacific Northwest, was designed to make optimal use of the region's water via coordinated operation of their respective systems, and outlines water storage and power transfer rights and obligations to all the participants to the Agreement.

²⁷ See final EIS at pages 2-6 through 2-10.

²⁸ See final EIS at 2-6 through 2-16.

²⁹ See final EIS at 3-405 and 3-406.

³⁰ See final EIS at 3-406.

Avista would limit drawdowns of Lake Spokane to no more than 14 feet, except during emergencies. Avista proposes no increased capacity or new facilities, other than replacing the flashboards at the Nine Mile development with a pneumatically operated spillway gate (rubber dam). Replacing the flashboards with a rubber dam would not change the normal full-pool elevation of 1,606.6 feet.

45. Under this new license, additional lands would be brought within the project boundary for the Post Falls development, including: (1) small scattered tracts located throughout the project area and larger tracts in the Post Falls development in the Thompson, Benewah, and Chatcolet Lakes area³¹ that are now encompassed by the 2,128-foot-elevation contour based on the more current datum (Avista Datum); (2) lands now inundated by Hepton Lake due to a breach of a non-project agricultural levee in 1997; and (3) lands outside the 2,128-foot-elevation contour occupied by new recreational facilities required by this license. The new project boundary would no longer include a small (0.5 acre) parcel of land adjacent to Falls Park, east of the North Channel dam, because the parcel is now being developed for commercial and residential purposes and is not needed for project purposes.

46. As part of the new license, Avista proposes to remove 2.8 acres of lands along the shoreline at the Monroe Street and Upper Falls developments, because these lands have been redeveloped over the years and no longer serve a project purpose.³² Avista also proposes to remove a total of 66 acres of land from the project boundary adjacent to and downstream of Nine Mile dam, because this land consists of private and state-owned land separated from the development in scattered parcels that are not necessary for project purposes.³³

³¹ Thompson, Benewah, and Chatcolet Lakes are named coves within Coeur d'Alene Lake.

³² These lands were originally included in the project boundary based on a metes and bounds survey. At the time, the shoreline area was heavily industrialized, but was redeveloped shortly after issuance of the existing license. The proposed new project boundary through this area follows the shoreline at the development as the shoreline exists today. *See* license application, Volume II, at 5-262.

³³ These lands include 19.1 acres separated from the development by State Highway 291 and, in part, providing a non-project transmission line right-of-way; 5.4 acres that underlie a former overlook and Washington State Parks employee housing; 3.3 acres downstream of the development on the opposite side of a local road; and 38.2 acres of private lands and Riverside State Park lands located downstream of the development. *See* license application, Volume II, at 5-262 and 5-263.

47. At the Long Lake development, Avista proposes to add 350.1 acres of land that it owns. This land includes 319.9 acres of Avista-owned shoreline lands that would be managed and protected consistent with a proposed Land Use Management Plan, 15.4 acres for the “Nine Mile Resort” property,³⁴ 3.0 acres underlying a dredged boat area on Lake Spokane that would be occupied by proposed new recreational facilities, and 11.8 acres underlying portions of the development’s two transmission lines that are now primary lines due to transmission system changes.³⁵

48. In addition, as discussed below, the license requires Avista to acquire, at a minimum, about 43 acres of wetlands downstream of the Nine Mile development for environmental protection and enhancement purposes.

49. With the above changes, the project boundary as proposed by Avista would encompass a total area of at least 47,189 acres. As discussed below, the project boundary in the new license includes these changes.

F. Recreational Facilities

50. There are seven existing project recreation facilities: (1) Huntington Park at the Monroe development; (2) Nine Mile overlook; (3) Nine Mile development interpretive center (“Spokane House”); (4) Long Lake picnic area; (5) Long Lake overlook; (6) Long Lake North Shore campsites; and (7) Falls Park. These sites, which provide interpretation, boating, picnicking, hiking, scenic viewpoints, restrooms, and parking areas, are located within the project boundary.

51. Avista proposes to enhance existing project recreation, to develop additional recreation areas, and to provide funding to assist in the development or enhancement of other, non-project recreation facilities.

SETTLEMENT AGREEMENTS

52. On January 29, 2009, Avista filed a settlement agreement on behalf of itself, the Coeur d’Alene Tribe, and Interior acting on behalf of BIA. As discussed in the accompanying joint explanatory statement, the agreement resolves all disputes between Avista, the Coeur d’Alene Tribe, and Interior with respect to Interior’s mandatory conditions submitted pursuant to section 4(e) of the FPA (4(e) agreement). The 4(e) agreement includes as an appendix Interior’s final 4(e) conditions. The parties request

³⁴ The “Nine Mile Resort” is Avista-owned property that will be developed to provide the public with boating and day-use opportunities. *See* final EIS at 3-386.

³⁵ *See* final EIS at 3-399.

that the Commission include these final 4(e) conditions in the new license without modification. Avista and the parties state that they are not requesting that the Commission approve the 4(e) agreement and have filed it for informational purposes only. As part of the filing, the settling parties request that the Commission issue a single new license, for a term of 50 years, covering all five hydroelectric developments as the Spokane River Project.

53. As part of their comprehensive settlement, Avista and the Tribe also entered into two agreements pertaining to Avista's payment of annual charges for the use of Reservation lands, pursuant to section 10(e) of the FPA.³⁶ The first agreement concerns any obligation that Avista may have to pay annual charges for the period from July 1, 1981, when the Post Falls development was added to the existing license for the Spokane River Project, to the end of the current license. The second agreement establishes the amount of the section 10(e) payments that Avista will be obligated to make under any new license involving the use of submerged lands within the Reservation.

54. The parties state that these agreements under FPA sections 4(e) and 10(e) are key components of a package of agreements that were entered into by Avista and the Tribe. They explain that, "collectively, these agreements comprehensively resolve numerous issues that have divided Avista and the Tribe for a century, including those pertaining to land use, water use, trespass, resource usage, and Tribal sovereignty."³⁷ Avista and the Tribe also state that these agreements have "fostered a mutual spirit of cooperation and trust that will allow Avista and the Tribe to work together over the term of the new license and beyond to ensure the continued efficient operation of an important hydroelectric resource – the coordinated five [hydroelectric developments] of the [Spokane River Project] – while at the same time protecting and enhancing the Tribe's natural and cultural resources and providing the Tribe with appropriate compensation for the Project's use of its lands and waters."³⁸

55. As indicated above, we are issuing a single new 50-year license for the five developments that incorporates the final 4(e) conditions, consistent with the settlement. The final 4(e) conditions are described in more detail below. The license term is discussed later in this order. As discussed below in the section on annual charges, we also approve the section 10(e) agreements.

³⁶ 16 U.S.C. § 803(e) (2006).

³⁷ Avista's Offer of Settlement with Joint Explanatory Statement at 25 (filed January 29, 2009).

³⁸ *Id.*

SUMMARY OF LICENSE REQUIREMENTS

56. As summarized below, this license requires numerous measures to protect and enhance fish, wildlife, water quality, recreation, cultural, and aesthetic resources at the project.

A. Minimum Flows

57. To enhance aquatic habitat for the wild rainbow trout population downstream of Post Falls dam, the license requires Avista to maintain a minimum discharge of 600 cfs from the Post Falls dam from June 7 until the Tuesday following Labor Day each year, and reduce the minimum discharge to 500 cfs if the lake level falls below 2,127.75 feet during the summer full-pool period. The contingency for a 500-cfs minimum flow release will help ensure that sufficient water is stored in Coeur d'Alene Lake to maintain lake elevations for summer recreation, and provide for protection of aquatic habitat for rainbow trout in the Spokane River during low-water years.

58. Avista is required to release 46 cfs from the Post Falls development North Channel dam on weekends between the hours of 12:00 noon and 6 p.m. (daily) from Memorial Day weekend through Labor Day to enhance the aesthetic quality of the North Channel bypassed reach.³⁹

59. The license requires Avista to implement a down-ramping rate of no more than four inches per hour downstream of Post Falls dam, and prepare a ramping rate report that documents the effects of a four-inch-per-hour down-ramping rate on rainbow trout, and the anticipated benefits and costs of implementing a more-restrictive ramping rate.

60. The license requires Avista to operate the Monroe Street and Upper Falls dams to provide minimum flows of 850 cfs from June 16 to September 30 and 1,100 cfs from October 1 to March 31 each year. These minimum flow releases will enhance aquatic habitat for rainbow trout and mountain whitefish in the Spokane River. Avista also must conduct an analysis of spawning habitat, spawning success, and rainbow trout population response to flow alterations in the Spokane River below Monroe Street and Upper Falls dams. The analysis will assist in the development of rainbow trout spawning flow releases at Monroe Street dam from April 1 to June 15.

³⁹ The 46-cfs aesthetic flow does not constitute an increase in total releases from Post Falls dam, because compliance monitoring for the 600/500-cfs minimum flow would occur at a gage located downstream of the confluence of powerhouse (i.e., Middle Channel) and North Channel releases.

61. Avista is required to release a year-round minimum aesthetic flow over the Monroe Street dam of 200 cfs between 10:00 a.m. and one-half hour after sunset, and 100 cfs between one-half hour after sunset and 10:00 a.m.⁴⁰

62. Avista is required to release a year-round minimum aesthetic flow through the Upper Falls development's bypassed reach of approximately 500 cfs between 6:00 a.m. and one-half hour after sunset and 100 cfs between one-half hour after sunset and 6:00 a.m. In addition, Avista is required to develop and implement an Upper Falls aesthetics spill plan to evaluate the aesthetic flow release and determine whether modifying the North Channel and South Channel at the Upper Falls development will be necessary.

B. Water Quality

63. The license requires Avista to monitor total dissolved gases (TDG) and implement control and attainment measures at Post Falls and Long Lake dams. The license also includes a requirement for Avista to develop and implement a TDG attainment plan for Nine Mile dam if monitoring indicates that TDG exceeds 110 percent saturation at this dam. Reductions in TDG will improve water quality for aquatic organisms, specifically fish species, inhabiting the project area.

64. The license requires Avista to develop and implement a water temperature attainment plan for Lake Spokane. The plan will include a detailed strategy for maintaining water quality for the protection of aquatic resources in Lake Spokane.

65. The license requires Avista to develop and implement a plan to improve dissolved oxygen conditions at Long Lake dam. Any increases in oxygen levels that are achieved through implementation of this plan will improve conditions for aquatic organisms inhabiting the lake and areas downstream of the dam.

66. The license requires Avista to develop and implement a plan for annually monitoring water quality of Coeur d'Alene Lake within the Coeur d'Alene Indian Reservation. This monitoring will add to existing water quality data and give the Tribe the ability to track water quality parameters over the license term.

C. Aquatic Weeds, Erosion, and Sediment Control

67. Avista is required to develop and implement sediment management plans for Monroe Street dam, Nine Mile reservoir, and Lake Spokane. Implementation of the plans will reduce sedimentation and enhance fish and wildlife habitat in project waters.

⁴⁰ Aesthetic flow releases at Monroe Street dam would contribute to the 850/1,100-cfs minimum flow requirement.

68. Avista must develop and implement a Lake Spokane aquatic weed management program. The program will include monitoring for noxious aquatic weeds, implementing weed treatment actions, and implementing periodic lake drawdown during the winter to control the proliferation of aquatic weeds in Lake Spokane. Avista must also monitor Nine Mile reservoir for the presence of aquatic weeds. If aquatic weeds are detected within Nine Mile reservoir, Avista will develop monitoring and control actions within one year of aquatic weed detection.

69. Avista is required to implement aquatic weed management programs at Coeur d'Alene Lake, both within and outside of the boundary of the Coeur d'Alene Indian Reservation. The programs will provide for education, monitoring, and control of noxious aquatic weeds in project-affected waters of Coeur d'Alene Lake.

70. The license requires Avista to control erosion on sites within the St. Joe River or Coeur d'Alene Lake equivalent to 50 percent of the total linear feet of all erosion sites on the St. Joe River within the Coeur d'Alene Indian Reservation. The license also requires Avista to develop a water quality improvement and erosion control plan that identifies and prioritizes actions to protect and improve water quality and beneficial uses associated with the waters of the Post Falls development.

D. Fisheries and Recreation

71. The license requires Avista to enhance recreational fishing opportunities by annually stocking rainbow trout in Upper Falls reservoir, Nine Mile reservoir, and Lake Spokane. The Upper Falls and Nine Mile reservoir stocking programs will be a continuation of successful programs implemented under the previous license. The Lake Spokane stocking program will be a new requirement of this license. To ensure the effectiveness of the new stocking program at Lake Spokane, Avista will be required to develop and implement a fishery enhancement and creel survey plan. The creel surveys will determine whether the new stocking program at Lake Spokane is successful at creating a viable put-and-take recreational fishery for rainbow trout.

72. Avista is required to develop and implement a fisheries public education and outreach program at the Upper Falls, Monroe Street, Nine Mile, and Long Lake developments. The program will focus on educating the public about fisheries protection and enhancement measures implemented at the developments, and actions that can be taken by the public to minimize their impacts on native fish and sensitive aquatic habitats.

73. The license requires Avista to protect recreation resources at Coeur d'Alene Lake by maintaining the lake level at summer full-pool elevation of 2,128 feet from as early as practicable each year until the Tuesday after Labor Day, and release spring flows to protect spawning and emerging rainbow trout downstream of Post Falls dam.

74. To ensure protection of federally listed bull trout and its designated critical habitat, Avista is required to implement its proposed non-native predator fish removal program. The program will consist of a three-year study of bull trout predation by non-native fish in Coeur d'Alene Lake and the lower St. Joe River, and, if predation is documented, implement measures to reduce the potential for non-native fish predation on bull trout.

75. The license requires Avista to develop and implement a fishery protection and enhancement plan for native Westslope cutthroat trout and bull trout. The plan will include provisions for conducting fish population assessment and monitoring activities, and implementing enhancement actions and a fisheries public education and outreach program specific to Westslope cutthroat trout and bull trout in the Coeur d'Alene Lake basin.

76. The license requires Avista to conduct a three-year assessment of fish populations in an almost five-mile-long stretch of the Spokane River between Upper Falls dam and the City of Spokane's Upriver dam.⁴¹ The assessment will improve management of recreational fishing and provide information on the effects to the Spokane River fishery from operational changes under the new license.

77. Avista is required to develop and implement a recreation plan for the Spokane River developments that would enhance existing, and develop new, project recreation facilities.

78. Avista is required to develop and implement a recreation plan for the Post Falls development that would enhance existing, and develop new, project recreation facilities. The license also requires Avista as part of the recreation plan to conduct an assessment at the proposed Trailer Park Wave Access Site, located immediately downstream from Post Falls dam, to determine the feasibility of developing the site for public access; and, if the site is not feasible, identify an alternative public access site. Additionally, to the extent that flow releases do not cause the licensee to violate Condition No. I (Lake Levels and Discharge Flows) of the Idaho water quality certification, Avista is required to release flows for whitewater boating ranging from a minimum flow of 3,300 cubic feet per second (cfs) to a maximum flow of 5,500 cfs from Post Falls dam into the Spokane River.⁴² Because the recreation plan requires lands at Q'emiln Park and the Trailer Park Wave Access Site to be added to the project boundary, Avista is required to revise and refile its Exhibit G drawings, as discussed later in this order.

⁴¹ See n. 13, *supra*.

⁴² The timing of the flows will be determined by the Trailer Park Wave Access Site assessment required under Article 416.

E. Other Measures

79. To protect bald eagles at the project, the license requires Avista to prepare and implement a bald eagle management plan. The plan will include measures for surveying, monitoring, and protecting bald eagles. In addition, Avista must develop and implement a plan for the Spokane River Project that would provide for an education and interpretive program for bald eagles.

80. Avista will be required to develop and implement a transmission line management plan. The plan will help minimize raptor injuries and mortality, and will include provisions for non-chemical vegetation management in the transmission line corridor.

81. The license requires Avista to develop and implement a Coeur d'Alene Indian Reservation wetland and riparian habitat plan and to restore or replace at least 1,368 acres of wetlands within or adjacent to the Coeur d'Alene Indian Reservation. The license also requires Avista to acquire, restore, and/or enhance a minimum of about 43 acres of wetlands in the Spokane River downstream of Nine Mile dam.

82. The license also requires Avista to develop and implement a land use management plan for the Spokane River Project to protect the scenic quality of the Spokane River and Coeur d'Alene Lake and reflect modifications to the project boundary.

83. Through this license, and pursuant to the programmatic agreements executed by the Commission, Washington State Historic Preservation Officer (SHPO), Idaho SHPO, and the Coeur d'Alene Tribe, Avista will file for Commission approval separate historic properties management plans for the Spokane River (Upper Falls, Monroe Street, Nine Mile, and Long Lake) and Post Falls developments, respectively. In addition, Avista will file for Commission approval an Initial Cultural Resources Response Program and a Cultural Resources Management Plan pertaining to lands within the Coeur d'Alene Indian Reservation.

WATER QUALITY CERTIFICATION

84. Under section 401(a)(1) of the Clean Water Act (CWA),⁴³ the Commission may not issue a license for a hydroelectric project that authorizes any activity that may result in a discharge from the project unless the state certifying agency has either issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year.

⁴³ 33 U.S.C. § 1341(a)(1) (2006).

Under section 401(d) of the CWA, conditions of the certification become conditions of any license that the Commission issues for the project.⁴⁴

A. Spokane River Developments

85. On July 12, 2006, Avista applied to Washington Ecology for water quality certification for the Spokane River Project.⁴⁵ Washington Ecology received the request on the same day. On June 13, 2007, Avista withdrew and refiled its application to give Washington Ecology additional time to make its decision. Washington Ecology received the renewed request on June 19, 2007. On June 10, 2008, Washington Ecology issued its certification for the Spokane River developments. In July 2008, Avista, Sierra Club, Center for Environmental Law and Policy, and Inland Empire Paper Company (collectively Appellants)⁴⁶ filed appeals of certain conditions of the certification. On May 1, 2009, the Appellants and Washington Ecology executed a settlement agreement resolving the Appellant's concerns. On May 11, 2009, Washington Ecology filed an amended certification with the Commission that included modifications of the conditions resulting from the settlement agreement. The certification includes conditions for improving and protecting water quality and fish habitat at various locations at and near the developments and for enhancing aesthetic flows at the Upper Falls and Monroe Street developments. These conditions are set forth in Appendix B of this order and are incorporated into the license by Ordering Paragraph (E).

86. Specifically, the certification requires that Avista: (1) provide a year-round minimum aesthetic flow through the Upper Falls development's bypassed reach of 500 cfs between 6:00 a.m. and one-half hour after sunset and 100 cfs between one-half hour after sunset and 6:00 a.m. (Condition 5.2(A)(1)); (2) develop and implement an Upper Falls aesthetics spill plan (Condition 5.2(A)(2)); (3) provide a year-round minimum aesthetic flow over the Monroe Street dam of 200 cfs between 10:00 a.m. and one-half hour after sunset and 100 cfs between one-half hour after sunset and 10:00 a.m. (Condition 5.2(B)); (4) operate the project to achieve biological objectives established by

⁴⁴ 33 U.S.C. § 1341(d) (2006).

⁴⁵ At the time Avista applied for certification, it was seeking a separate license for the Upper Falls, Monroe Street, Nine Mile, and Long Lake developments as the Spokane River Project.

⁴⁶ Sierra Club and Center for Environmental Law and Policy (jointly) appealed the certification on July 2, 2008, and Avista and Inland Empire Paper Company filed their appeals on July 9, 2008, and July 10, 2008, respectively.

Washington Ecology and Washington DFW for native redband trout⁴⁷ (Condition 5.3(A) and (B)); (5) operate the Monroe Street and Upper Falls developments to provide minimum flows to the reach downstream of the Monroe Street development of 850 cfs from June 16 to September 30 and 1,100 cfs from October 1 to March 31 each year (Condition 5.3(C)); (6) conduct a quantitative analysis to determine native redband trout spawning flows for the period from April 1 to June 15 (Condition 5.3(C)(2)); (7) conduct a baseline assessment of the fish population between Upper Falls dam and the City of Spokane's Upriver dam (Condition 5.3(D)(1)); (8) assess spawning success of native redband trout between Monroe Street dam and Nine Mile reservoir (Condition 5.3(D)(2)); (9) develop and implement a Lake Spokane aquatic weed management program (Condition 5.3(E)); (10) develop and implement sediment management plans for Monroe Street dam and Nine Mile and Long Lake reservoirs (Condition 5.3(F)); (11) develop and implement a site-specific wetland creation, restoration, enhancement, and protection plan, including a provision to acquire, restore, and/or enhance a minimum of about 43 acres of wetlands (Condition 5.3(G)); (12) develop and implement a TDG monitoring plan (Condition 5.4 (A) and (B)); (13) develop and implement TDG attainment plans at Nine Mile dam (if TDG exceeds 110 percent saturation criteria) and Long Lake dam (Condition 5.4(C) and (D)); (14) develop a water temperature attainment plan for Lake Spokane (Condition 5.5); (15) develop and implement a plan to improve dissolved oxygen at Long Lake dam (Condition 5.6); (16) comply with State of Washington turbidity standards (Condition 5.7); (17) update the Spill Deterrent Control and Countermeasure Plan for each development (Condition 5.8); (18) apply to Washington Ecology for short-term modifications when construction-related water quality exceedances are expected (Condition 5.9(A)); (19) implement best management practices and prepare and follow a water quality protection plan for all over-water or near-water construction related to the developments (Condition 5.9(B) and (C)); and (20) prepare a water quality monitoring and assurance plan (Condition 5.10).

87. Although Washington Ecology granted certification after issuance of the final EIS, most of the measures that the certification conditions require were analyzed in the EIS, because Avista had proposed them or other entities had recommended them earlier in the proceeding. Other measures, included as requirements of Condition 5.3 of the certification, are exceptions, and were not analyzed in the EIS. These requirements stipulate that Avista: (1) meet certain biological and management goals for the attainment of certain biological objectives for redband trout in the Spokane River reach between Monroe Street dam and Nine Mile reservoir;⁴⁸ (2) conduct surveys of certain

⁴⁷ Redband trout are a subspecies of rainbow trout. The historic and current range of redband trout includes the Spokane River basin.

⁴⁸ The goals would be met through the following "biological objectives":
(1) mitigate or compensate for fish losses related to operation of the project dams;
(continued...)

redband rainbow trout habitats in the same reach annually for 10 years, and, based on the results, release flows from Monroe Street dam to improve the habitat if warranted by the survey results; and (3) operate the Monroe Street and Upper Falls developments to provide certain minimum flows, as measured at a point downstream of the Monroe Street development, for the enhancement of redband rainbow trout and mountain whitefish habitat. These additional measures are generally consistent with staff's recommendations in the final EIS to enhance fishery resources in the Spokane River, and would not have substantial costs.⁴⁹

88. Condition 5.2(A)(1) directs Avista to commence releasing, upon license issuance and as an interim measure prior to channel modifications, a year-round minimum aesthetic flow through the Upper Falls development's bypassed reach of 500 cfs between 6:00 a.m. and one-half hour after sunset and 100 cfs between one-half hour after sunset and 6:00 a.m. Condition 5.2(A)(2) requires Avista to develop and implement, within one year of license issuance, an Upper Falls aesthetics spill plan. The plan will include evaluating the aesthetic flow release and a determination whether modifying the North Channel and South Channel will be necessary to enhance aesthetics of these channels.⁵⁰

89. At the Upper Falls development, the existing average annual generation of 873,920 megawatt-hours (MWh) would decrease by approximately 4,500 MWh under a 500/100-cfs minimum aesthetic flow, resulting in a total annualized cost of \$276,000. The existing average annual generation would decrease by 748 MWh under a 200-cfs minimum aesthetic flow, resulting in a total annualized cost of \$79,000.

90. In the final EIS, Commission staff considered the range of flows that Avista studied (i.e., between existing leakage and 500 cfs, in 100-cfs increments), and concluded that 200 cfs provides the best balance between enhancing the aesthetic appearance of the reach and minimizing lost generation and operational costs.⁵¹ Although we agree with

(2) develop and meet "conservation plan goals" for sensitive native resident fish species; and (3) protect and restore fish and riparian habitat.

⁴⁹ The additional economic cost would largely be associated with the annual surveys of trout habitats between Nine Mile reservoir and Monroe Street dam. We estimate that the annualized cost for the surveys would be about \$29,000.

⁵⁰ If the channel modifications could not achieve the stated objective or Avista were unable to secure the necessary permits to perform them, then Avista would be required to revert back to the certification's minimum aesthetic flow requirement. Article 401(b) requires Avista to obtain prior Commission approval for these channel alternations.

⁵¹ See final EIS at 5-71.

staff's conclusion that a 200-cfs flow would provide the best balance of aesthetic flows and generation, the requirement to provide provide a year-round minimum aesthetic flow through the Upper Falls development's bypassed reach of 500 cfs between 6:00 a.m. and one-half hour after sunset and 100 cfs between one-half hour after sunset and 6:00 a.m. is a condition of the water quality certification. Therefore, the license requires the minimum aesthetic flow release. With regard to Avista's proposal to study the feasibility of altering the North Channel and South Channel to improve its aesthetic appearance and magnify the benefits of aesthetic flow release to the reach, staff concluded in the final EIS that the benefits of the study would justify the cost.⁵² We agree. As noted above, the water quality certification provides for such an evaluation through implementation of an Upper Falls aesthetics spill plan. Article 401(a) requires Avista to obtain prior Commission approval for the Upper Falls aesthetics spill plan.

B. Post Falls Development

91. On July 12, 2006, Avista applied to the Idaho DEQ for water quality certification for the Post Falls Project.⁵³ On June 5, 2007, Avista withdrew and refiled its application. Idaho DEQ received the renewed request that same day. On June 5, 2008, Idaho DEQ issued its certification for the Post Falls development with the conditions that are set forth in Appendix A of this order and incorporated into the license by Ordering Paragraph (D).

92. The certification requires that Avista: (1) maintain the level of Coeur d'Alene Lake at summer full-pool elevation of 2,128 feet from as early as practicable to the Tuesday after Labor Day and maintain lake levels consistent with the Upper Spokane River Rainbow Trout Spawning and Fry Emergence Monitoring and Protection Plan (Condition I(A)(1) & (2) and V); (2) draw down Coeur d'Alene Lake to a surface elevation of no lower than 2,120.5 feet (Condition I(A)(1)); (3) operate Post Falls dam to meet the flows required by the water quality certification, except as provided for during operating emergencies (Condition I(A)(5) and VI(B)); (4) maintain a minimum discharge of 600 cfs from Post Falls development as measured at a United States Geological Survey (USGS) gage located about 1 mile downstream of the powerhouse from June 7 until the Tuesday following Labor Day each year and reduce the minimum discharge to 500 cfs if the lake level falls below 2,127.75 feet during the summer full-pool period (Condition I(A)(3) & (4)); (5) develop and implement a discharge flow monitoring plan and report the results to Idaho DEQ (Condition I(B) & (C)); (6) develop and implement a plan for monitoring water quality in the impounded section of the Spokane River upstream of Post

⁵² *Id.*

⁵³ At the time Avista applied for certification, it was seeking a separate license for the Post Falls development as the Post Falls Project.

Falls dam, Coeur d'Alene Lake, and tributaries of Coeur d'Alene Lake (Condition II); (7) develop and implement a water quality improvement and erosion control plan (Condition III); (8) develop and implement a wetland and riparian habitat protection and enhancement plan (Condition IV); (9) maintain a maximum discharge down-ramping rate of 4 inches per hour downstream of Post Falls dam (Condition VI(A)); and (10) develop and implement a fishery protection and enhancement plan (Condition VII).

93. The certification describes how Avista will fund the measures included in the certification, including potential reimbursement of Idaho DEQ or Idaho Fish and Game for conducting measures or activities required by or related to the certification (Condition VIII). The certification also reserves to Idaho DEQ the right to amend the certification if it discovers information identifying new effects on water quality (Condition IX).

94. In the final EIS, Commission staff recommended not adopting two of Avista's proposals that are also conditions of the water quality certification. These conditions require that Avista: (1) develop and implement a plan for monitoring the water quality of the impounded section of the Spokane River upstream of Post Falls dam, including Coeur d'Alene Lake and its tributaries (Condition II); and (2) develop and implement a fishery protection and enhancement plan (Condition VII). Staff concluded that both of these plans are too broad and open-ended to assess their potential benefits and relationship to project effects.⁵⁴ However, these measures are conditions of the water quality certification, and thus are included in the license.

95. Condition I(A)(1) of the certification requires Avista to continue the current annual practice of initiating the fall drawdown of Coeur d'Alene Lake on the Tuesday following Labor Day. In the final EIS, staff recommended delaying the drawdown until September 15, as Avista had proposed in response to the recommendation of a property owners' association to benefit recreational resources at the lake.⁵⁵ However, the earlier drawdown is a condition of the water quality certification, and thus is included in the license.

C. Commission Approval of Changes to Plans, Facilities, and Operations

96. Certain conditions specified by Idaho DEQ and Washington Ecology require that Avista prepare plans for implementing various environmental measures. Article 401(a) requires Avista to file its plans with the Commission for approval before implementing them. Other conditions contemplate unspecified long-term changes to Commission-

⁵⁴ See final EIS at 5-15 and 5-21.

⁵⁵ See final EIS at 5-6.

approved plans, project facilities, or project operations, as directed by Idaho DEQ or Washington Ecology. Article 401(b) requires Avista to obtain Commission approval for such changes before implementing them.⁵⁶

D. Procedures for Downstream Water Quality Issues

97. Under section 401(a)(2) of the CWA,⁵⁷ a federal licensing agency must follow certain procedures that are designed to protect the water quality of a state other than that in which the project discharge occurs. Section 401(a)(2) states that, upon receipt of a license application and water quality certification, a licensing agency must immediately notify the Administrator of EPA. The Administrator then has 30 days to determine whether a discharge from the project will affect the water quality of any state other than the state in which the discharge will originate and, if so, to notify the second state. The second state then has 60 days to determine whether the discharge will violate its water quality requirements, in which case it may object to issuance of the license or request a hearing. After the hearing, if held, the licensing agency must either condition the license in a manner to insure compliance with applicable water quality requirements, or decline to issue the license.

98. On July 14, 2008, the Commission provided notice of Idaho DEQ's and Washington Ecology's certifications to EPA.⁵⁸ EPA subsequently notified the Spokane Tribe that the discharge addressed in Idaho DEQ's and Washington Ecology's certifications may affect downstream water quality.⁵⁹ EPA also notified Washington that

⁵⁶ In general, we do not include license conditions pre-approving as yet unidentified environmental measures. Doing so hinders our ability to meet our FPA responsibilities for ensuring that measures implemented under a license are supported by substantial evidence and are in the public interest. We typically include such conditions in our licenses only when required to do so pursuant to applicable law, as is the case here. Article 401(b) allows us to consider whether any future measures required by the certification conditions would affect project or public safety or our ability to continue to administer the terms of the license, or would require additional license conditions to ensure that the project would continue to meet the comprehensive development/public interest standard of FPA section 10(a)(1).

⁵⁷ 33 U.S.C. § 1341(a)(2) (2006).

⁵⁸ See letter from Ann Miles, FERC, to Elin Miller, EPA (dated July 14, 2008).

⁵⁹ See letter from Michael Gearheard, EPA, to Gregory Abrahamson, Spokane Tribe (dated August 15, 2008). As noted in its letter, EPA has determined that the Spokane Tribe qualifies for treatment as a state under section 518(e) of the CWA for purposes of section 401 of the CWA. As a result, EPA notified the Spokane Tribe of its
(continued...)

the discharge addressed in the Idaho certification may affect downstream water quality.⁶⁰ Neither the Spokane Tribe nor the state filed comments or requested a hearing in response to the notice. We therefore conclude that the Commission has complied with the requirements of CWA section 401(a)(2), and nothing further is required concerning this issue.

SECTION 4(e) FINDINGS AND CONDITIONS

A. Consistency Findings

99. Section 4(e) of the FPA⁶¹ provides that the Commission may issue a license for a project located on a federal reservation⁶² only if it finds that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired.

1. Coeur d'Alene National Forest

100. The Spokane River Project occupies about 91 acres of submerged lands within the Coeur d'Alene National Forest. The National Forest lands are under Forest Service supervision.

101. The Coeur d'Alene National Forest was established in 1906 by presidential proclamation.⁶³ At that time, the Organic Administration Act of 1897⁶⁴ stated that all

determination under section 401(a)(2) in the same manner as it would notify a state. The Spokane Tribe filed comments raising concerns about the possible effects of Washington Ecology's draft certification (issued April 7, 2008), but did not respond to EPA's notice regarding either Idaho DEQ's certification or Washington Ecology's final certification (issued June 10, 2008). *See* letter from Shannon Work, Counsel for Spokane Tribe, to Cynthia Marlette, FERC, dated May 19, 2008 (filed June 4, 2008 in the docket for P-2545).

⁶⁰ *See* letter from Michael Gearheard, EPA, to Jay Manning, Washington Ecology (dated August 15, 2008).

⁶¹ 16 U.S.C. § 797(e) (2006).

⁶² Reservations are defined in section 3(2) of the FPA, 16 U.S.C. § 794(2) (2006).

⁶³ *See* November 6, 1606 Proclamation of President Theodore Roosevelt, 34 Stat. 3256.

⁶⁴ 16 U.S.C. § 475 (2006).

national forest lands were administered only for watershed protection and timber production.⁶⁵ There is no evidence or allegation in this proceeding that relicensing the Spokane River Project would interfere with the purposes of the Coeur d'Alene National Forest. Therefore, we find that this license, as conditioned, will not interfere or be inconsistent with those purposes.

2. Coeur d'Alene Reservation

102. The Spokane River Project occupies 5,996 acres of submerged lands within the Coeur d'Alene Reservation, which is under the supervision of Interior's BIA. The Coeur d'Alene Reservation was established by Executive Order of President Ulysses S. Grant on November 8, 1873.⁶⁶ The order is very brief, and does not discuss the purposes of the reservation other than to state that the lands are "withdrawn from sale and set apart as a reservation for the Coeur d'Alene Indians."⁶⁷ However, the specific purposes of an Indian reservation often were not articulated in executive orders of this type, and the general purpose of providing a homeland for the Indians is a broad one that must be liberally construed.⁶⁸ Thus, in establishing an Indian reservation, the United States is presumed to intend to provide a suitable homeland for the Indians and to allow them to continue their traditional way of life.⁶⁹

⁶⁵ These are the only purposes that the Commission may consider in determining whether a project will interfere or be inconsistent with the purposes for which the reservation was created or acquired. *See Rainsong Company v. FERC*, 106 F.3d 269, 274-75 (9th Cir. 1997).

⁶⁶ *See* 1 C. Kappler, *Indian Affairs: Laws and Treaties* 837 (1904), *available at*: http://digital.library.okstate.edu/kappler/vol1/HTML_files/p801_936img.html. The Tribe later agreed to changes in the reservation boundaries in 1887 and 1889, and Congress ratified the agreements on March 3, 1891 (26 Stat. 989). *See Idaho v. United States*, 533 U.S. 262, 266-71 (2001).

⁶⁷ *Id.*

⁶⁸ *See Colville Confederated Tribes v. Walton*, 647 F.2d 42, 47-48 (9th Cir.), *cert. denied*, 454 U.S. 1092 (1981). The language used in the executive order creating the Colville reservation, which states that the land is "set apart as a reservation for said Indians," is nearly identical to that used in creating the Coeur d'Alene Reservation. *Id.* at 47.

⁶⁹ *Id.*

103. The Coeur d'Alene Reservation covers about 345,000 acres in northern Idaho.⁷⁰ Of those acres, about 5,996 are submerged lands occupied by Coeur d'Alene Lake, the Post Falls development reservoir. As the Supreme Court has recognized, "[a] right to control the lakebed and adjacent waters was traditionally important to the Tribe" in light of its dependence on fishing.⁷¹ Accordingly, the executive order establishing the reservation, as well as Congressional ratification of subsequent agreements amending it, contemplated that the submerged lands were part of the reservation.⁷²

104. The Tribe has raised no objection to the fact that the project reservoir, Coeur d'Alene Lake, occupies part of the reservation. Nor is there any evidence in this proceeding to suggest that relicensing the Post Falls development as part of the Spokane River Project would adversely affect the reservation. As discussed below, the new license includes Interior's final section 4(e) conditions for the protection and utilization of the reservation, consistent with the settlement agreement. We therefore find that issuing a new license, as conditioned, for the Spokane River Project will not interfere or be inconsistent with the purposes for which the Coeur d'Alene reservation was created.

B. Mandatory Conditions

105. FPA section 4(e) also requires that the Commission include in licenses for projects located within a federal reservation any conditions that the Secretary of the department under whose supervision the reservation falls deems necessary for the adequate protection and utilization of the reservation.⁷³

1. Coeur d'Alene National Forest

106. The Forest Service filed its final section 4(e) conditions for the Coeur d'Alene National Forest on May 4, 2007. These conditions are set forth in Appendix C of this order and are incorporated into the license by Ordering Paragraph (F). The Forest Service section 4(e) conditions require that Avista: (1) obtain written approval from the Forest Service for all final design plans for certain recreational improvements (discussed later in this order), before implementing them on National Forest System lands;

⁷⁰ See Reservation section of The Official Website of the Coeur d'Alene Tribe, available at: <http://www.cdatribe-nsn.gov/reservation.shtml> .

⁷¹ *Idaho v. United States*, 533 U.S. 262, 274 (2001).

⁷² *Id.*

⁷³ See *Escondido Mutual Water Co. v. LaJolla Band of Mission Indians*, 466 U.S. 765 (1984); *City of Tacoma, Washington v. FERC*, 460 F.3d 53, 67 (D.C. Cir. 2006).

(2) indemnify, defend, and hold the United States harmless for any damages or losses sustained by the United States during construction of certain recreational improvements, and for any judgments, claims, or demands assessed against the United States in connection with the construction of such improvements; (3) determine its liability for fire and other damages to National Forest System lands in accordance with standard L-Form articles of the license; and (4) during construction, identify and report to the Forest Service all known or observed hazardous conditions affecting such lands, recreational improvements, or resources, or any conditions that pose a risk of injury to individuals.

2. Coeur d'Alene Reservation

107. Interior filed its section 4(e) conditions for the Coeur d'Alene Reservation on May 7, 2007. On January 29, 2009, Interior filed revised section 4(e) conditions, consistent with the settlement agreement. These conditions are set forth in Appendix D of this order and are included in this license by Ordering Paragraph (G). The revised conditions are based on Interior's May 2007 section 4(e) conditions, but with a number of changes to help accomplish the goals of the settlement.

108. The revised conditions require that Avista: (1) implement the conditions consistent with the terms of the settlement agreement, and develop implementation plans in collaboration with the Coeur d'Alene Tribe; (2) establish and maintain a Coeur d'Alene Reservation Trust Resources Restoration Fund and an Inflation Protection Account to be used to develop and implement the resource protection plans required by Conditions 4 through 8, described below; (3) develop an annual implementation plan in collaboration with the Tribe; (4) prepare and implement an Erosion Inventory and Assessment and an Erosion Control Implementation Plan for lake and tributary erosion control on the Reservation; (5) prepare and implement a Coeur d'Alene Indian Reservation Water Quality Monitoring Plan; (6) prepare and implement an Initial Cultural Resources Response Program and Coeur d'Alene Indian Cultural Resources Management Program; (7) prepare and implement a Coeur d'Alene Indian Reservation Aquatic Weed Management Plan;⁷⁴ (8) prepare a Coeur d'Alene Indian Reservation Wetland and Riparian Habitat Plan; (9) allow representatives of the Coeur d'Alene Tribe and Interior to have access to project lands and works for inspection after showing proper

⁷⁴ To provide for aquatic weed management over the rest of the lake, as recommended in the final EIS, Article 410 adopts Avista's proposed program for non-reservation waters. While Avista may work cooperatively with the stakeholders on and may share the costs of implementing the aquatic weed management plan required by Article 410, the Commission has no jurisdiction over any party other than the licensee. Therefore, we will look to Avista as the party ultimately responsible for developing the plan and ensuring its full implementation.

credentials, giving advance notice, and following safety measures; (10) upon Interior's rejection of a filing required by the section 4(e) conditions to be submitted to the Secretary for approval, make a good faith effort to revise and resubmit it to address the Secretary's concerns; and (11) implement, upon order of the Commission, such additional measures as may be identified by the Secretary pursuant to Interior's reservation of authority under FPA section 4(e).⁷⁵

109. Interior's revised Condition 1 is administrative and replaces its Condition 1 filed on May 7, 2007. It dispenses with the requirement to develop a section 4(e) implementation and monitoring plan, but specifies what the implementation plans required by Conditions 4 through 8 must contain, including provisions for "adaptive management to achieve stated goals by redirecting effort as necessary." Condition 1 also requires Avista to obtain the Secretary's approval of any amendments to plans required by Conditions 4 through 8 before seeking Commission approval of them.

110. Interior's revised Conditions 2 and 3 are new and thus were not evaluated in the final EIS. Condition 2 requires Avista to make annual deposits totaling \$100 million over 50 years to two interest-bearing accounts: the Coeur d'Alene Reservation Trust Resources Fund (Resources Fund) and an Inflation Protection Account. Avista will deposit \$98 million to the Resources Fund according to the following schedule: \$10 million in year 1 of the license, \$2 million in each year for years 2 through 33 of the license, \$1.5 million each year for years 34 through 49 of the license, and \$0 for year 50.⁷⁶ In addition, Avista will deposit \$2 million to the Inflation Protection Account in year 1 and will guarantee that funds in the account will yield a gain of 5.5 percent per year. Funds will remain in the account for at least 20 years, and if the Tribe approves, accrued interest can be transferred to the Resources Fund beginning in year 20 of the license. The payments that Avista makes to these two funds are to be used to implement the resource protection plans required by the section 4(e) conditions and are intended to represent the limit of Avista's obligation to provide funding or expend funds to implement Conditions 3 through 8. Condition 3 requires Avista, in collaboration with the Tribe, to prepare an Annual Implementation Report for the resource protection plans required by Conditions 4 through 8 and to submit it to the Commission for approval.

⁷⁵ Interior also reserves the authority to review Avista's compliance with any of Interior's conditions and to seek permissible remedies under the FPA or other laws, if Avista is found to be noncompliant.

⁷⁶ Interior's 4(e) conditions are written for a 50-year license term. However, Condition 2(A)(1) states that if the license is terminated, surrendered, or extended by annual licenses, the licensee shall transfer the money remaining in the Resources Funds to the Coeur d'Alene Tribe and will have no further payment obligation to the fund.

111. The Commission has previously indicated that a licensee's obligation to perform certain tasks cannot be limited by a particular dollar figure.⁷⁷ Therefore, the Commission will not view itself as being limited by the amounts to be deposited in these two funds. In their joint explanatory statement, the parties recognize this policy, and note that the Commission will likely reserve to itself the right to require Avista to implement measures to address natural and cultural resources within the Reservation that are consistent with the comprehensive development standard of FPA section 10(a)(1).⁷⁸ However, they state that they are confident that the funding will be sufficient to carry out the section 4(e) conditions.

112. The required contributions to the Resources Fund are higher than Commission staff previously estimated would be required to implement Interior's May 2007 section 4(e) conditions. However, the information and level of detail available to the parties was greater than that available to Commission staff for the EIS and allows for a more accurate estimate, which we accept. In addition, they have provided for possible future increases in costs through the Inflation Protection Account. Implementing the 4(e) conditions, including the contributions to the two funds, reduces the 30-year levelized net annual benefit of the project by more than \$2.2 million per year when compared to staff's previous cost estimates for implementing the section 4(e) conditions submitted in May 2007.

113. Interior's Water Quality Monitoring Plan (Condition 5) calls for annual sampling of various water quality parameters, phytoplankton, and benthos throughout Coeur d'Alene Lake. In the final EIS, Commission staff found that operation of the Post Falls Project affects only water temperature and dissolved oxygen, and recommended against monitoring the other parameters specified in the plan.⁷⁹ However, because this is a section 4(e) condition, we include it in the license.

114. Interior's Condition 7 requires an aquatic weed management plan for the submerged lands of the Coeur d'Alene Reservation. Consistent with the settlement agreement, the parties request that Interior's Condition 7 be included in the license as the only plan pertaining to the portion of Coeur d'Alene Lake that occupies the submerged

⁷⁷ See *Settlements in Hydropower Licensing Proceedings Under Part I of the Federal Power Act, Policy Statement on Hydropower Licensing Settlements (Settlement Policy)*, 116 FERC ¶ 61,270, at P 21 (2006) and cases there cited.

⁷⁸ See Avista's Offer of Settlement with Joint Explanatory Statement at 34 n. 13.

⁷⁹ See final EIS at 5-22. These other water quality parameters include pH, specific conductance, chlorophyll-*a* and chlorophyll fluorescence, solar radiation, various nitrogen compounds, and various phosphorous compounds.

Reservation lands. To provide for aquatic weed management over the rest of the lake, as recommended in the final EIS, Article 410 requires Avista's proposed program for non-Reservation waters.

115. Interior's Condition 8 requires a plan and funds to mitigate project effects on wetlands. In the final EIS, Commission staff found that this plan appears to base mitigation on the number of acres of wetlands that would exist on the Coeur d'Alene Reservation if the project had never been built.⁸⁰ In relicensing hydroelectric projects, we use existing conditions as a starting point, or environmental baseline. While past environmental effects are relevant in determining what conditions may be appropriate for the new license term, we do not seek to establish pre-project conditions,⁸¹ and we require that environmental measures have a nexus to project effects. The new license does not authorize any changes to the operational levels of Coeur d'Alene Lake that have existed since 1941. Accordingly, there would be no new effects on wetlands and riparian resources relative to existing conditions.⁸² For this reason, we would not adopt the wetland and riparian habitat mitigation that Interior's plan requires. However, because this is a section 4(e) condition, we include it in the license.

116. As noted, Interior's Condition 11 includes a reservation of authority to require additional conditions, if necessary to ensure the adequate protection and utilization of the Coeur d'Alene Indian Reservation, consistent with the section 4(e) agreement. In addition, we reserve our authority in Article 423 to require Avista to implement any additional measures that may be required to address natural and cultural resources located on lands affected by the project within the Reservation that may be required under FPA section 10(a)(1).

ANNUAL CHARGES FOR THE USE OF RESERVATION LANDS

117. The Commission collects annual charges for the purpose of reimbursing Indian tribes for the use and occupancy of their reservation lands. Under FPA section 10(e), when the Commission issues a license involving the use of tribal lands embraced within Indian reservations, the Commission must fix a reasonable annual charge for the use of such lands, subject to the approval of the tribe having jurisdiction of the lands.

⁸⁰ See final EIS at 5-26.

⁸¹ See *American Rivers v. FERC*, 201 F.3d 1186, 1195-99 (9th Cir. 1999).

⁸² See final EIS at 5-26.

Commission regulations provide that such annual charges will be determined on a case-by-case basis.⁸³

118. The Commission has used a variety of procedures to satisfy its section 10(e) obligation to determine annual land use charges for the few projects that occupy tribal reservation lands.⁸⁴ Our current practice is that annual charges for Indian reservation lands should rest on agreements between the parties, the terms of which we will then incorporate in the license unless they are patently unreasonable.⁸⁵

119. As part of their settlement agreement, Avista and the Tribe have entered into two agreements concerning the payment of annual charges under section 10(e) for the project's use of submerged lands within the Coeur d'Alene Indian Reservation. The two agreements are: (1) an agreement concerning section 10(e) payments from July 1, 1981, to the end of the current license (Current 10(e) Agreement); and (2) an agreement concerning section 10(e) payments for the term of the new license (Forward 10(e) Agreement).⁸⁶ We address these in turn.

A. The Current 10(e) Agreement

120. When the Commission amended the existing license for the Spokane Project in 1981 to add the Post Falls development, the ownership status of the submerged Reservation lands had not been resolved, and the Commission reserved for later the issue of whether it could assess annual charges for the use of those lands. In 1983, the Commission determined that the submerged lands were owned by the United States in

⁸³ See 18 C.F.R. § 11.4(a) (2008). Annual charges for other federal lands used by the project are calculated under 18 C.F.R. § 11.2(b) (2008).

⁸⁴ See generally, *Montana Power Co. v. FPC*, 298 F.2d 335 (D.C. Cir. 1962) (affirming charges for third generating unit based on sharing of net benefits method); *Montana Power Co. v. FPC*, 445 F.2d 739, 743 (D.C. Cir. 1970) (affirming Commission's jurisdiction to readjust annual charges after 20 years), *cert. denied*, 400 U.S. 1013 (1971); *Montana Power Co. v. FPC*, 459 F.2d 863 (D.C. Cir.) (affirming readjusted annual charges of \$950,000), *cert. denied*, 408 U.S. 930 (1972).

⁸⁵ See, e.g., *Public Utility Dist. No. 1 of Pend Oreille County, Washington*, 77 FERC ¶ 61,146, at 61,553 (1996); *Wisconsin Power & Light Co.*, 79 FERC ¶ 61,181, at 61,855 (1997); *Minnesota Power & Light Co.*, 75 FERC ¶ 61,131 (1996).

⁸⁶ See Avista's FPA Section 10(e) Agreements for Use of Submerged Lands within the Coeur d'Alene Indian Reservation, Attachments A and B (filed January 29, 2009).

trust for the Tribe.⁸⁷ The Commission later determined that it lacked authority to determine title to the submerged lands.⁸⁸ The U.S. Supreme Court ultimately resolved the issue in 2001.⁸⁹ However, the Commission has not determined or assessed Avista any annual charges under the current license for Avista's use of the submerged Reservation lands.

121. The Current 10(e) Agreement is intended to satisfy any obligation that Avista may have to pay annual charges pursuant to section 10(e) for the period from July 1, 1981, when the Commission added the Post Falls development to the Spokane Project license, through the day before the effective date of any new license that the Commission issues involving Avista's use of the submerged Reservation lands. It is also intended to satisfy any claims the Tribe may have for the same period to any portion of any headwater benefits payments that Avista received or may be entitled to receive pursuant to section 10(f) of the FPA during that period related to its use of the submerged lands. Avista agrees to pay the Tribe \$34 million in three payments as follows: \$20 million within 30 days of the effective date of the Master Agreement (December 16, 2008), \$10 million on the anniversary date of the initial payment, and \$4 million on the anniversary date of the second payment.⁹⁰ In addition, Avista agrees to pay \$400,000 annually beginning on the 30th day after the effective date of the Master Agreement, and annually thereafter on the anniversary date of the first \$400,000 payment until the new license is issued.⁹¹

122. Avista and the Tribe do not seek an amendment of the existing license or the assessment of annual charges under that license. Rather, they request that the Commission find that these payments satisfy any obligation Avista may have to pay annual charges under the existing license for the use of submerged Reservation lands for the period from July 1, 1981, through the day before the effective date of any new license involving Avista's use of the submerged lands, and that, in light of these payments, there

⁸⁷ See *Washington Water Power Co.*, 25 FERC ¶ 61,228 (1983), *reh'g denied*, 26 FERC ¶ 61,026 (1984).

⁸⁸ See *Washington Water Power Co.*, 43 FERC ¶ 61,254 (1988).

⁸⁹ See *Idaho v. United States*, 533 U.S. 262 (2001).

⁹⁰ The parties note that Avista made the initial \$20 million payment to the Tribe on December 17, 2008. See Avista's FPA Section 10(e) Agreements, background section at 4 n. 2 (filed January 29, 2009).

⁹¹ The parties note that Avista made the initial \$400,000 annual payment to the Tribe on December 30, 2008. *Id.* at 4 n. 3.

is no need for the Commission to determine or assess Avista any section 10(e) charges for the use of the submerged lands for that period.

123. As noted, our current practice is that annual charges for Indian reservation lands should rest on agreements between the parties. Given that the existing license has expired and the project is operating under an annual license, no purpose would be served by reopening the license to assess annual charges. We therefore find, as requested by the parties, that the payments specified in the Current 10(e) agreement satisfy any obligation Avista may have to pay section 10(e) annual charges for the period from July 1, 1981, through the day before the effective date of any new license involving Avista's use of the submerged Reservation lands.⁹² We further find that, in light of these payments (which we recognize are intended in part to address headwater benefits issues as well as annual charges for the use of submerged Reservation lands), there is no need for the Commission to determine and assess Avista a specific amount of section 10(e) charges for the use of the submerged lands for such period. As noted, Avista has already made some of the required payments. To ensure that these payments to the Tribe are an enforceable license requirement, we include them in Article 201, which also specifies the annual charges that are required under the new license.

B. The Forward 10(e) Agreement

124. The Forward 10(e) Agreement is intended to establish the annual charges that the parties agree Avista should be required to pay to the Tribe for the use of submerged Reservation lands during the term of the new license. Avista agrees to pay the Tribe \$400,000 a year for the first 20 years of any new license involving the use of the submerged lands, and \$700,000 a year for the remaining years of any such new license beginning in year 21 of the new license, including during any annual licenses issued upon expiration of any such new license. The Forward 10(e) Agreement includes a proposed license article to require the payment of these charges and to reflect certain aspects of the parties' agreement regarding these payments.

125. The parties request that the Commission include their proposed license article for the use of submerged Reservation lands in the new license and find that these annual charges are reasonable and the exclusive means for Avista to satisfy its section 10(e) annual charge obligation during the term of the new license. They also request the Commission to find that the parties have expressly waived any rights they may have to readjustment or modification of the charges during the new license term. They state that they recognize that the Commission cannot itself waive its right to readjust annual charges, but request that, consistent with the Commission's past practice in other cases,

⁹² Because these payments relate to the existing license, we do not include them as costs for the new license.

the Commission indicate that there should be no reason for it to revisit these annual charge amounts in the future.

126. We agree that these charges, which are the outcome of a negotiated settlement between Avista and the Tribe, are reasonable and there should be no need for us to revisit them. We include the parties' proposed license article for the use of the submerged Reservation lands as part of Article 201. Because these charges pertain to the new license and were negotiated in advance of its issuance, we include them as costs for the new license.

COASTAL ZONE MANAGEMENT ACT

127. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),⁹³ the Commission may not issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification that the project is consistent with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within 180 days of receipt of the applicant's certification.

128. Washington Ecology manages the approved Coastal Zone Management Program for Washington State. Washington's coastal zone encompasses all of the state's marine waters and their associated wetlands, including, at a minimum, all upland areas 200 feet landward from the ordinary high water mark⁹⁴ and the area within the 15 coastal counties.

129. Under the Washington State CZMA program, the Spokane River Project is neither within the coastal zone nor within a geographic area in which Washington Ecology would review licenses for consistency with the CZMA. Therefore, no consistency certification is required from Washington Ecology.

130. The State of Idaho does not have a Coastal Zone Management Program; therefore, no consistency certification is required for the portion of the project located in Idaho.

⁹³ 16 U.S.C. § 1456(3)(A) (2006).

⁹⁴ The ordinary high water mark is defined by Washington legislation in RCW 90.58.030(2)(b) as "that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exist[ed] on June 1, 1971 or as it may naturally change thereafter"

SECTION 18 FISHWAY PRESCRIPTION

131. Section 18 of the FPA⁹⁵ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate. By letter filed on July 18, 2006, Interior requested a reservation of authority to prescribe fishways under section 18 of the FPA. Consistent with Commission policy, Article 411 of this license reserves the Commission's authority to require fishways that Interior may prescribe for the Spokane River Project.

THREATENED AND ENDANGERED SPECIES

132. Under section 7(a)(2) of the Endangered Species Act of 1973,⁹⁶ the Commission must ensure, in consultation with the National Marine Fisheries Service or Fish and Wildlife Service, as appropriate, that its licensing 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.

133. There are five federally listed species that occur in the project area: bull trout, water howellia, Ute ladies' tresses, Spalding's catch fly, and gray wolf. In a biological assessment issued on January 31, 2007, Commission staff concluded that relicensing the project with staff's recommended measures and the agencies' mandatory conditions would have no effect on the water howellia, Ute ladies' tresses, Spalding's catch fly, and gray wolf, and would "not be likely to adversely affect" bull trout and its designated critical habitat.⁹⁷ On January 31, 2007, Commission staff requested the Fish and Wildlife Service's concurrence on its findings on bull trout and bull trout critical habitat.⁹⁸ On July 31, 2008, the Fish and Wildlife Service concurred with staff's determination that relicensing the project would "not be likely to adversely affect" bull trout or its designated critical habitat, provided that Avista implement a fishery protection and

⁹⁵ 16 U.S.C. § 811 (2006).

⁹⁶ 16 U.S.C. § 1536(a) (2006).

⁹⁷ *See* Commission staff's biological assessment at 47-48.

⁹⁸ Commission staff also analyzed the project's effects on the bald eagle, which at the time was federally listed as threatened; however, the bald eagle was delisted effective August 8, 2007.

enhancement plan and a targeted non-native predator fish removal program for the Post Falls development.

134. In the final EIS, staff evaluated, but did not recommend adopting, a plan similar to the Fish and Wildlife Service's proposed fishery protection and enhancement plan.⁹⁹ However, as discussed above, the fishery protection and enhancement plan is a condition of Idaho DEQ's water quality certification and is therefore a requirement of the license (Appendix A, Condition (VII)(A)).

135. On July 17, 2008, after issuance of the final EIS, Avista proposed a targeted non-native predator fish removal program. The program would require a 2- to 3-year study of the potential for non-native predatory fish to prey on bull trout. Following the study period, Avista and the Fish and Wildlife Service would develop potential actions to provide the most efficient and cost-effective means to minimize any adverse impacts on bull trout, by reducing the number of non-native predators within the project boundary. Avista notes in its filing that competition, predation, and potential hybridization with non-native species are considered significant factors in the decline and continued suppressed numbers of bull trout and other native salmonids in the Coeur d'Alene Lake basin, and that reducing selected non-native fish species from certain target areas within the project boundary may enhance bull trout populations by reducing competition and predation.

136. Because predation and competition from non-native fish are considered to have substantial effects on native salmonids, including bull trout, in Coeur d'Alene Lake,¹⁰⁰ implementing Avista's program to monitor and reduce non-native fish species from selected areas within the project boundary could protect bull trout at the project. Therefore, Article 407 requires Avista to implement its proposed program.

NATIONAL HISTORIC PRESERVATION ACT

137. Under section 106 of the National Historic Preservation Act (NHPA)¹⁰¹ and its implementing regulations,¹⁰² 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

⁹⁹ See final EIS at 5-16.

¹⁰⁰ See final EIS at 3-165.

¹⁰¹ 16 U.S.C. § 470 *et seq.* (2006).

¹⁰² 36 C.F.R. Part 800 (2008).

a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

138. To satisfy these responsibilities, Commission staff executed two Programmatic Agreements (PAs) related to the developments associated with the Idaho (Post Falls) and Washington State (Spokane River) aspects of the project. For the Post Falls development in the State of Idaho, staff executed a PA with the Idaho SHPO and the Coeur d'Alene Tribal Historic Preservation Officer, and invited Avista, BLM, Forest Service, and the BIA to sign as concurring parties. Avista and the Forest Service concurred. For the Spokane River developments in the State of Washington, staff executed a PA with the Washington SHPO and invited Avista, BIA, Confederated Tribes of the Colville Reservation, Spokane Tribe of Indians, and the Coeur d'Alene Tribe to sign as concurring parties. Avista and the Coeur d'Alene Tribe concurred.

139. Both PAs require Avista to file, for Commission approval, Historic Properties Management Plans (HPMPs) within one year of license issuance. Execution and implementation of the PAs demonstrates the Commission's compliance with section 106 of the NHPA. Article 421 requires Avista to implement the PAs, and to file its HPMPs with the Commission within one year of license issuance.

140. Interior's revised section 4(e) Condition 6 requires Avista, in collaboration with the Coeur d'Alene Tribe and within 18 months of license issuance, to develop and file for Commission approval a Cultural Resources Management Plan (CRMP) for cultural and historic resources located on the Coeur d'Alene Indian Reservation within the area of potential effects. As noted above, the parties to the settlement agreement request that Interior's section 4(e) conditions be included in the license without modification and that the Commission not include any additional conditions or requirements with respect to the natural and cultural resources within the Reservation. To accommodate this request, we clarify that, notwithstanding any provisions to the contrary in the Idaho PA, the CRMP for the Reservation required by Interior's Condition 6 will be the sole plan for cultural and historic resources on the Reservation, and the HPMP required under Article 421 will be limited to historic resources other than those on Reservation lands.

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

A. Recommendations Within the Scope of Section 10(j) of the FPA

141. Section 10(j)(1) of the FPA¹⁰³ requires the Commission, when issuing a license, to include conditions based on recommendations by federal and state fish and wildlife agencies, submitted pursuant to the Fish and Wildlife Coordination Act,¹⁰⁴ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.

142. In response to the May 18, 2006 public notice that the project was ready for environmental analysis, Washington DFW, the Fish and Wildlife Service, and Idaho Fish and Game filed a total of 38 different recommendations under section 10(j). Washington DFW, the Fish and Wildlife Service, and Idaho Fish and Game later modified or eliminated some of their recommendations during the comment period for the draft EIS, resulting in a final total of 32 recommendations.¹⁰⁵

143. Out of Washington DFW's final total of fifteen recommendations, we determine that twelve are within the scope of section 10(j).¹⁰⁶ Out of the Fish and Wildlife Service's final total of eleven recommendations, we determine that eight are within the scope of section 10(j). Out of the Idaho Fish and Game's final total of six recommendations, we determine that three are within the scope of section 10(j). We

¹⁰³ 16 U.S.C. § 803(j)(1) (2006).

¹⁰⁴ 16 U.S.C. §§ 661 *et seq.* (2006).

¹⁰⁵ The Fish and Wildlife Service filed modified recommendations on March 5, 2007, and Washington DFW and Idaho Fish and Game filed modified recommendations on March 6, 2007.

¹⁰⁶ In the final EIS, staff found that six of Washington DFW's recommendations were outside the scope of section 10(j). At that time, staff evaluated recommendations for the Post Falls development and Spokane River developments as though they were separate projects that would be issued separate licenses. Since the Post Falls Project would have been located entirely in Idaho, staff determined in the final EIS that three of Washington DFW's recommendations that would have applied solely to the Post Falls Project were outside of the scope of section 10(j) because Washington DFW would not be in charge of administrative management of fish and wildlife resources for a project located solely in Idaho. Since Avista is now seeking one license for the Post Falls and Spokane River developments that spans the States of Washington and Idaho, we now consider these three recommendations to be within the scope of section 10(j). In any event, Commission staff evaluated these three recommendations as though they were within the scope of 10(j). The remaining three are addressed in the next section and considered under FPA section 10(a)(1).

discuss recommendations found to be outside of the scope of section 10(j) in the next section.

144. This license includes conditions consistent with six of twelve of Washington DFW's recommendations that are within the scope of section 10(j), all eight of the Fish and Wildlife Service's recommendations that are within the scope of 10(j), and all three of Idaho Fish and Game's recommendations that are within the scope of 10(j). These include recommendations to: (1) maintain a 600-cfs minimum flow release from the Post Falls development as measured at a USGS gage located about 1 mile downstream of the powerhouse, with allowances for a 500-cfs release during low-flow conditions (Appendix A, Conditions (I)(A)(3) and (I)(A)(4)); (2) monitor discharge and water temperature downstream of Post Falls dam for five years and assess the need to modify the minimum flow requirement (Appendix A, Conditions (I)(B) and (I)(C)); (3) operate the Post Falls development to ensure protection of rainbow trout spawning and fry emergence (Appendix A, Conditions (I)(A)(2) and (V)); (4) restrict down-ramping at the Post Falls development to no more than a 4-inch-per-hour drop in downstream water levels, as measured at a point about 1 mile downstream of the powerhouse (Appendix A, Condition (VI)(A)); (5) develop and implement sediment management plans for Nine Mile reservoir and Lake Spokane (Appendix B, Condition 5.3(F)); (6) develop and implement a rainbow trout public education and outreach program (Article 408); (7) develop and implement a Lake Spokane aquatic weed management plan (Appendix B, Condition 5.3(E)); (8) monitor Nine Mile reservoir for early detection of noxious aquatic weeds (Appendix B, Condition 5.3(E)); (9) implement measures to control non-aquatic noxious weeds (Article 419); (10) implement a transmission line management plan (Article 415); (11) implement erosion control and wetland and riparian habitat enhancement measures (Appendix A, Conditions (III) and (IV), and Appendix D, Conditions 4 and 8); (12) include information on bald eagles as part of an interpretation and education plan for the project (Article 414); (13) annually monitor bald eagle nests for occupancy and productivity (Article 414); (14) annually survey for new bald eagle nests on project lands (Article 414); and (15) develop and implement bald eagle nest management plans (Article 414).¹⁰⁷

145. If the Commission believes that any fish and wildlife agency's recommendation may be inconsistent with the purposes and requirements of Part I of the FPA or other

¹⁰⁷ Although we state above that the license is consistent with a combined total of 17 recommendations that are within the scope of section 10(j), we only list 15 here because the recommendation for ramping rates was made by both the Fish and Wildlife Service and Idaho Fish and Game, and the recommendation for the transmission line management plan was made by both the Fish and Wildlife Service and Washington DFW, resulting in a final total of 15 unique measures.

applicable law, section 10(j)(2) requires the Commission and the agencies to attempt to resolve the inconsistency, giving due weight to the agency's recommendations, expertise, and statutory responsibilities.¹⁰⁸ If the Commission nevertheless decides not to adopt a recommendation, it must explain how the recommendation is inconsistent with Part I of the FPA or other applicable law and how the conditions that the Commission imposes will adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources.

146. Commission staff made a preliminary determination that the following recommendations of Washington DFW may be inconsistent with the public interest and comprehensive planning standards of sections 4(e) and 10(a) of the FPA: (1) that Avista purchase 300 acres of private shoreline lands at Lake Spokane for the protection of wetland and riparian wildlife habitat in the project area; (2) that Avista manage all lands that it owns (about 1,976 acres) in the vicinity of Lake Spokane for wildlife; (3) that Avista develop a spawning gravel enhancement program for the free-flowing reach of the Spokane River downstream of the Monroe Street development; (4) that Avista provide spring flow releases for trout incubation downstream of the Post Falls development; and (5) that Avista restrict down-ramping at the Post Falls development to no more than a 2-inch-per-hour drop in downstream water levels. Commission staff also made a preliminary determination that Washington DFW's recommendation that Avista prepare an aquatic weed management plan for Nine Mile reservoir may be inconsistent with the substantial evidence standard of section 313(b) of the FPA.

147. By letter dated January 9, 2007, Commission staff advised Washington DFW of these determinations, and on March 10, 2007, representatives of the Commission, Washington DFW, Idaho Fish and Game, Fish and Wildlife Service, and Avista participated in a conference call to attempt to resolve the inconsistencies.¹⁰⁹

148. On April 3, 2007, Washington DFW filed additional information to support its recommendations and to further attempt to resolve the inconsistencies. However, as explained below, the inconsistencies remain unresolved.

1. Acquisition and Management of Lands for Wetland and Wildlife Protection and Enhancement (Recommendations 1 and 2)

149. The existing project boundary around Lake Spokane generally follows the shoreline. Much of the shoreline at the upper end of the lake is residentially developed and under private ownership, while the shoreline at the lower end of the lake is

¹⁰⁸ 16 U.S.C. § 803(j)(2) (2006).

¹⁰⁹ See Summary of 10(j) teleconference issued on March 29, 2007 at 1, 2.

undeveloped, in part because Avista and the State of Washington own a combined total of 18 miles of shoreline.¹¹⁰ In order to address concerns regarding the preservation or enhancement of shoreline lands around Lake Spokane that were raised in the proceeding, the final EIS analyzed: (1) Avista's proposal to bring 320 acres of undeveloped lands that it owns into the project boundary and manage those lands for wetland and wildlife protection and enhancement; and (2) Washington DFW's recommendation that Avista also acquire, protect, and enhance an additional 300 acres of private shoreline lands for the benefit of wildlife at the project.

150. In the final EIS, Commission staff concluded that there is a need to protect and enhance undeveloped shoreline lands and include those lands within the project boundary for the benefit of wildlife resources. The final EIS weighed the benefits and costs of both Avista's proposal and Washington DFW's recommendation, and concluded that Avista's proposal to protect and enhance 320 acres of shoreline lands would provide an adequate amount of resource protection and enhancement at the development. The final EIS did not recommend including Washington DFW's additional 300 acres of shoreline lands, because the costs of acquiring and managing these lands for wildlife (\$158,400 annualized) were too high to justify the benefits; the licensee had proposed including 320 acres of licensee-owned shoreline lands in the project boundary, as discussed above; and the licensee did not propose changing project operations at Lake Spokane in a manner that would have project-related effects to wildlife when compared to existing conditions.¹¹¹ We agree with staff's conclusions, and therefore, this license does not adopt Washington DFW's recommended measure.

151. As noted, Washington DFW also recommends that Avista bring under license to protect from future development and manage for wildlife 1,976 acres of Avista-owned, non-project, non-shoreline lands in the vicinity of the Lake Spokane development. As discussed in the final EIS, staff found that protecting these lands from future development and managing the lands for wildlife enhancement purposes would benefit wildlife resources located near the development; however, the benefit would come at substantial annual maintenance costs (\$197,600 annualized) that do not justify the benefit to wildlife resources.¹¹² As noted, staff found that the licensee's proposal to include 320 acres of licensee-owned shoreline lands in the project boundary would provide some of the recommended benefits at a reasonable cost (\$21,000 annualized) and would enhance habitat when compared to existing conditions. We agree with staff's conclusions.

¹¹⁰ See final EIS at 3-394 and 3-395.

¹¹¹ See final EIS at 5-61 to 5-63.

¹¹² See final EIS at 5-62 and 5-63.

2. Spawning Gravel Enhancement Program

152. As discussed in the final EIS,¹¹³ placing gravel in the Spokane River downstream of Monroe Street dam is likely to have minimal benefits, because the gravel is not likely to stay in place long enough in most of the reach to be effectively used by spawning redband trout. The relatively high-gradient channel characteristics downstream of Monroe Street dam and the high volumes of water during spring runoff would likely flush the gravels from most areas in the downstream reach and deposit them in Nine Mile reservoir, where no spawning of redband trout occurs. The annualized cost of the gravel augmentation program that Washington DFW recommended would be \$152,600. In addition to the economic cost, depositing gravel in Nine Mile reservoir would exacerbate an existing sedimentation problem. For these reasons, the minimal biological benefits associated with the recommended gravel program would not justify the costs.

3. Spring Flow Releases

153. As discussed in the final EIS,¹¹⁴ releasing higher flows according to Washington DFW's recommendation could improve conditions for incubating rainbow trout. However, the flow releases could also potentially adversely affect power generation and the ability of Avista to fill and maintain the Coeur d'Alene Lake elevation for summer recreation needs, especially during low-water years. For these reasons, the potential benefits to incubating rainbow trout would not justify the costs of lost power generation and the potential adverse effects on Coeur d'Alene Lake recreation.

154. Instead, the license includes a provision requiring Avista to continue implementing its existing spring flow release plan for protecting spawning and emerging rainbow trout (Appendix A, Condition V) as recommended by staff in the final EIS.¹¹⁵

4. Ramping Rates

¹¹³ See final EIS at 5-84.

¹¹⁴ See final EIS at 5-9.

¹¹⁵ *Id.*

155. In the final EIS, Commission staff concluded that there is a benefit to implementing ramping rate restrictions at the Post Falls development. The final EIS weighed the benefits and costs of Avista's proposal and Idaho Fish and Game's and the Fish and Wildlife Service's recommendation for a 4-inch-per-hour downramping rate, and Washington DFW's recommendation for a more restrictive 2-inch-per-hour downramping rate. Staff found that a ramping rate more restrictive than 4 inches per hour may require substantial costly modifications to the Post Falls development, and that a 4-inch-per-hour ramping rate would sufficiently enhance conditions for rainbow trout fry, juveniles, and adults.¹¹⁶ Therefore, staff concluded that the benefits to rainbow trout of a more restrictive ramping rate than 4 inches per hour would not justify the costs needed to modify the facility. We agree.

156. However, as staff recommended in the final EIS,¹¹⁷ the new license requires Avista to prepare and file a ramping rate evaluation report that: (1) confirms the effectiveness of a 4-inch-per-hour ramping rate at preventing widespread stranding of rainbow trout fry, based on the results of a stranding study; (2) provides any recommendations for alternative ramping rates, based on the outcome of the evaluation; and (3) includes the costs to upgrade project facilities to provide any recommended changes in ramping rates (Article 404).

157. Avista, Idaho DEQ, and Idaho Fish and Game contend that, because Idaho DEQ's water quality certification requires a maximum allowable ramping rate of 4 inches per hour for the term of the license, no purpose would be served by requiring Avista to study the biological effects of this ramping rate and make recommendations for more restrictive ramping rates.¹¹⁸ However, the fact that the certification establishes a maximum allowable ramping rate does not bar the Commission from requiring a study of the rate's effectiveness or determining that a lower, more restrictive rate should be imposed, as long as the Commission's more restrictive requirements do not conflict with the provisions of the state's certification.¹¹⁹

5. Nine Mile Reservoir Aquatic Weed Management

¹¹⁶ See final EIS at 3-184 through 3-187 and 5-11.

¹¹⁷ See final EIS at 5-11.

¹¹⁸ See letter to Kimberly Bose, FERC, from Curt Fransen, Idaho DEQ; Charles Corsi, Idaho Fish and Game; and Bruce Howard, Avista; at 10-11 (filed October 6, 2008).

¹¹⁹ See *Snoqualmie Indian Tribe v. FERC*, 545 F.3d 1207, 1219 (9th Cir. 2008).

158. As discussed in the final EIS,¹²⁰ there is currently no evidence of invasive aquatic weeds in Nine Mile reservoir. Therefore, there is no justification for requiring Avista to develop and implement an aquatic weed management program for Nine Mile reservoir.

159. Nevertheless, if in the future invasive aquatic weeds are discovered in Nine Mile reservoir during the license term, Washington Ecology's water quality certification Condition 5.3(E) (Appendix B) will require Avista to provide for their control.

6. Conclusion and Section 10(j)(2)(B) Finding

160. For the above reasons, we conclude that Washington DFW's recommendations for wetland and riparian enhancement programs, spawning gravel enhancement, spring flow releases, ramping rate restrictions, aquatic weed management, are inconsistent with the public interest and comprehensive planning standards of sections 4(e) and 10(a) of the FPA, because their benefits do not outweigh their substantial costs. Washington DFW's recommendation for an aquatic weed management plan is inconsistent with the substantial evidence standard of section 313(b) of the FPA.

161. As discussed above, however, the license includes numerous measures to protect and enhance trout populations and wildlife within the project area, including measures to: (1) release minimum flows for trout; (2) conduct a spawning analysis and release spring spawning flows for trout; (3) monitor the spawning success of trout; (4) stock rainbow trout in the project reservoirs; (5) implement ramping rates at the Post Falls development; (6) develop and implement fisheries public education and outreach programs; (7) implement a fishery protection and enhancement plan; (8) develop and implement aquatic weed management programs in Coeur d'Alene Lake; (9) monitor Nine Mile reservoir for early detection of noxious aquatic weeds; (10) acquire wetlands and add about 320 acres of Avista-owned shoreline to the project at Lake Spokane; and (11) develop and implement a sediment management plan for the Nine Mile and Long Lake developments. In accordance with FPA section 10(j)(2)(B), we find that the measures required by this license will adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources affected by the project.

B. Recommendations Not Within the Scope of Section 10(j) as Considered Under Section 10(a)(1) of the FPA

162. Section 10(a)(1) of the FPA¹²¹ requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or

¹²⁰ See final EIS at 5-85.

¹²¹ 16 U.S.C. § 803(a)(1) (2006).

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.

163. Washington DFW, the Fish and Wildlife Service, and Idaho Fish and Game made a total of eight recommendations under section 10(j) that either are not specific measures to protect, mitigate damages to, or enhance fish and wildlife, or are designed to protect and enhance fish and wildlife resources not affected by the project.¹²² Consequently, these recommendations are not within the scope of section 10(j) of the FPA. Instead, we consider these recommendations under the broad public-interest standard of FPA section 10(a)(1).

164. In Articles 405 and 406, the license adopts Washington DFW's recommendation to enhance recreational trout fishing opportunities at the project by annually stocking 155,000 rainbow trout in Lake Spokane, 9,000 rainbow trout in the Nine Mile reservoir, and 6,000 rainbow trout in the Upper Falls reservoir. However, the license does not adopt that additional portion of Washington DFW's recommendation stipulating that, if Washington DFW's recreational fishing goals are not met, rainbow trout be stocked at non-project lakes within a 35-mile radius of the project.¹²³ A requirement for stocking rainbow trout in non-project lakes far from the project, while it would enhance recreational fisheries in Washington, is not project-related.

165. Washington DFW recommended that Avista develop and implement a monitoring program downstream of Post Falls dam to assess the trout population's response to the protection and enhancement measures required in the license. However, there are many factors in addition to project operations that determine the status of the trout population,

¹²² Washington DFW made three such recommendations, Fish and Wildlife Service made two, and Idaho Fish and Game made four. One recommendation made by Washington DFW and Fish and Wildlife Service was a duplicate, for a total of eight different recommendations.

¹²³ Washington DFW's recommended recreational fishery goals are to achieve 40,000 angler trips per year and a catch rate of 2.5 trout per angler per visit at Lake Spokane. Commission staff concluded that, although annually stocking rainbow trout in the project's reservoirs would enhance recreational fishing opportunities at the project, the likelihood of meeting the recommended goals would be low, due to predicted competition with game and non-game fish species that already occupy habitats that would be the target of the trout stocking program. *See* final EIS at 3-233 through 3-236.

including angler harvest, disease, and floods. These factors would likely make interpretation of the monitoring results extremely difficult, because it would be difficult to attribute implementation of the environmental measures required by the license to effects on the trout population.¹²⁴ For this reason, the license does not adopt this recommendation.

166. Washington DFW and the Fish and Wildlife Service recommended that Avista implement shoreline erosion control measures at Lake Spokane and Nine Mile reservoir. However, as explained in the EIS, shoreline erosion at both reservoirs is not widespread, because vegetative growth has stabilized much of the shorelines over the last 50 to 60 years.¹²⁵ The shoreline erosion that does occur at the reservoirs is not due to project operations, but rather is due to the natural steepness of the surrounding topography and wave action induced by wind and recreational boating at the reservoirs.¹²⁶ For these reasons, the license does not require shoreline erosion control measures at these reservoirs.

167. Consistent with staff's recommendation in the final EIS,¹²⁷ the new license includes Idaho Fish and Game's recommended Post Falls Fisheries Public Education and Outreach Program, with one exception. We are requiring Avista to implement all public education measures included in a Commission-approved plan, rather than providing funds to a third party to carry out the program, as Idaho Fish and Game recommended (Article 409).

168. Fish and Wildlife Service recommended that Avista develop and implement a plan to restore a cumulative distance of 6.6 miles of tributary habitat to mitigate for riverine habitat inundated by the project. Idaho Fish and Game recommended that Avista develop and implement a Post Falls Fish Protection, Mitigation, and Enhancement Program, with provisions to monitor fish populations on the Spokane River downstream of the project and to protect or enhance fish habitat in the Spokane River, Coeur d'Alene Lake, or the lower portions of tributaries to Coeur d'Alene Lake. The final EIS concluded that adopting these two recommendations would result in only minimally improved habitat conditions for fish, primarily because other factors, such as competitive interactions with non-native fish in the lake and poor water quality conditions in the tributaries, would

¹²⁴ See final EIS at 5-18.

¹²⁵ See final EIS at 3-38 and 3-39.

¹²⁶ See final EIS at 3-40.

¹²⁷ See final EIS at 5-17.

continue to limit fish populations in the project area despite any habitat improvements.¹²⁸ Therefore, the license does not include these measures.

169. Idaho Fish and Game recommended that Avista provide funding to Idaho Fish and Game to perform erosion control and wetland and riparian enhancement measures. In the final EIS, Commission staff did not recommend funding, but instead recommended that the licensee implement specific erosion control and wetland enhancement measures to be identified through the licensee's proposed erosion control and wetland enhancement plan for Coeur d'Alene Lake. For measures that are deemed necessary, the Commission must hold the licensee responsible for ensuring the measure's implementation. A licensee cannot satisfy this obligation merely by paying money to another party over whom the Commission has no authority.¹²⁹ Rather, the Commission would look to the licensee to ensure that the measures would be implemented, regardless of any agreed-upon cost- or labor-sharing agreement between the licensee and a third party. Interior's section 4(e) Conditions 4 and 8 provide for erosion control and wetland enhancement at Coeur d'Alene Lake on the Coeur d'Alene Indian Reservation, and Idaho DEQ's water quality certification Conditions 3 and 4 will provide for these measures for the entire Coeur d'Alene Lake. For these reasons, the license does not adopt Idaho Fish and Game's recommendation.

170. Idaho Fish and Game recommended modifying the licensee's proposed erosion control and wetland enhancement plan for Coeur d'Alene Lake to change how erosion and wetland projects are selected for implementation. Idaho Fish and Game recommended that projects be selected, in part, on the need to protect cultural resources along project shorelines, but that this should not be the only factor considered in prioritizing wetland and erosion control projects. In the final EIS, Commission staff agreed with this approach, but saw no need to change the licensee's proposed plan because it would identify and prioritize erosion control and wetland enhancement projects in consultation with the resource agencies, including Idaho Fish and Game.¹³⁰ We agree with staff's analysis. Therefore, the license does not include this recommendation.

OTHER MEASURES CONSIDERED UNDER FPA SECTION 10(A)(1)

A. Lake Spokane Drawdown

¹²⁸ See final EIS at 5-13 and 5-15 through 5-17.

¹²⁹ Nor can such an obligation be limited by a particular dollar figure. See *Settlement Policy*, 116 FERC ¶ 61,270, at P 21 (2006) and cases there cited.

¹³⁰ See final EIS at 5-28.

171. Avista proposes to limit the drawdown of the Lake Spokane surface elevation to no more than 14 feet below the normal full-pool elevation of 1,536 feet during non-emergency situations for the purpose of protecting the local domestic water supply.¹³¹ Limiting the drawdown to 14 feet is a change from the existing license requirement that the drawdown be limited to 24 feet, but is consistent with the way Avista has been operating Lake Spokane in recent years. Article 402 requires Avista to limit drawdowns at Lake Spokane to no more than 14 feet to protect the local domestic water supply.

B. Real-Time Streamflow Monitoring

172. As discussed in the final EIS,¹³² staff recommends adopting Avista's proposal to cooperate with the USGS to equip the Post Falls gage (gage no. 12419000) with the necessary equipment to provide real-time streamflow information downstream of the Post Falls dam. In their joint filing of October 6, 2008, Avista, Idaho DEQ, and Idaho Fish and Game state that there is no need to include this measure in the license, because Avista has already equipped the gage to provide real-time streamflow monitoring. Although this may be the case, staff's recommendation in the final EIS also contemplated that Avista would ensure the continued operation and maintenance of the flow monitoring equipment for the term of the license.¹³³ Article 403 requires Avista to do so for the purpose of operational compliance monitoring.¹³⁴

C. Total Dissolved Gas Monitoring

173. Total dissolved gas concentrations in the Spokane River at a USGS gage located about one mile downstream of the Post Falls powerhouse occasionally exceed Idaho's and Washington's 110-percent standard.¹³⁵ Avista's studies suggest that by re-routing flow in excess of the powerhouse capacity from the North Channel to the South Channel, Avista can enhance downstream water quality by lowering the occasional high total

¹³¹ See final EIS at 2-13.

¹³² See final EIS at 5-2.

¹³³ See final EIS at 3-187.

¹³⁴ See letter to Kimberly Bose, FERC, from Curt Fransen, Idaho DEQ; Charles Corsi, Idaho Fish and Game; and Bruce Howard, Avista; at 5 (filed October 6, 2008). The Commission only has authority over the licensee; therefore, we must look to Avista to ensure that the gage continues to fulfill the project purpose of monitoring operational compliance throughout the term of the license.

¹³⁵ See final EIS at 3-122.

dissolved gas concentrations.¹³⁶ With its license application, Avista filed its proposed Total Dissolved Gas Control and Mitigation Program, containing procedures for re-routing excess flow from the North to the South Channel and monitoring their effectiveness at lowering downstream total dissolved gas concentrations. The program also contains Avista's statement that it will spend \$15,000 annually to implement the program's measures. In the final EIS, staff recommended adopting Avista's proposed program.¹³⁷ We agree. Ordering Paragraph (H) approves Avista's program, with the exception of the funding statement.¹³⁸

D. Acquiring, Protecting, and Enhancing Wetlands

174. Avista proposes to replace the flashboards at Nine Mile dam with an inflatable rubber dam. Although the maximum reservoir surface elevation would remain unchanged, operation of the rubber dam would stabilize the reservoir surface elevation, eliminating the variable elevations that occur with use of the flashboards. As a result, there could be adverse effects on project wetlands during the spring and summer growing seasons.¹³⁹ Article 413 requires Avista to include, as part of its wetlands enhancement plan required by Appendix B, Condition 5.3(G), a provision to monitor wetlands at the Nine Mile development so that the plan can address any unanticipated wetland losses.

E. Recreation

175. As noted, there are seven existing project recreation facilities: (1) Huntington Park at the Monroe development; (2) Nine Mile overlook; (3) Nine Mile development interpretive center ("Spokane House"); (4) Long Lake picnic area; (5) Long Lake overlook; (6) Long Lake North Shore campsites; and (7) Falls Park. These sites, all of which are within the project boundary, provide interpretation, boating, picnicking, hiking, scenic viewpoints, restrooms, and parking areas.

1. Proposed Measures for Long Lake and Nine Mile Developments

¹³⁶ *Id.*

¹³⁷ *See* final EIS at 5-2.

¹³⁸ Our concern is downstream water quality enhancement through implementation of the program's operational and monitoring measures, rather than Avista's expenditure of a specific dollar amount.

¹³⁹ *See* final EIS at 5-63 and 5-64.

176. At the Long Lake development, Avista proposes to: (1) reconstruct the Long Lake overlook and reconfigure the parking area; (2) improve the interpretive center at Spokane House; and (3) develop a carry-in boat launch immediately downstream of Long Lake dam. At the Nine Mile development, Avista proposes to: (1) relocate the Nine Mile overlook; (2) develop a boat take-out at Nine Mile dam, including parking and signs; and (3) develop a 15.4-acre site owned by Avista (called Nine Mile Resort) as a day use area with boating access to the reservoir.

177. In the EIS, staff recommended adopting Avista's proposals to enhance existing, and to develop new, project recreation facilities. We agree with staff's conclusions, and this license therefore includes these measures (Article 416). Washington State's Comprehensive Outdoor Recreation Plan indicates that expanded recreation opportunities are needed in the area. These measures will substantially expand recreational opportunities at Long Lake dam¹⁴⁰ and the upstream end of Lake Spokane, provide additional public access for boaters, enhance the recreational experience at the Nine Mile development, and provide information about the project-related recreation opportunities and environmental resources at the project.

178. In addition, Avista proposes to provide funds to assist other entities in the development or enhancement of state or local recreation facilities, including: (1) funds for the City of Spokane's Water Avenue site access, located downstream of the Monroe Street development and outside the project boundary; (2) funds to extend the Centennial Trail from Sontag Park to Nine Mile Resort;¹⁴¹ (3) funds to expand the state's Lake Spokane Campground; (4) funds to develop up to 10 boat-in-only semi-primitive campsites on Lake Spokane; and (5) funds to the state to enhance recreation at the Devil's Gap Trailhead, located about one mile from the project boundary at Long Lake dam.¹⁴²

179. With respect to Avista's proposals to partially fund certain recreation enhancements to be undertaken by state and local governmental entities, the Commission

¹⁴⁰ The reconstruction of the Long Lake Dam overlook will also enhance aesthetics by blending the facility with the natural surroundings.

¹⁴¹ The Spokane River Centennial Trail in Washington is a public trail managed under an inter-agency agreement of the Washington State Parks and Recreation Commission; the City of Spokane Parks and Recreation Department; the Spokane County Parks, Recreation, and Fair Department; and the Friends of the Centennial Trail. In Idaho the trail is managed cooperatively by the Cities of Coeur d'Alene and Post Falls, Kootenai County, and Idaho State Parks.

¹⁴² See final EIS 2-29 through 2-39.

has explained that, while a licensee and other entities are free to enter into cost-sharing agreements, including such provisions in a license is problematic because the Commission has no ability to enforce them.¹⁴³ Instead, under the FPA's comprehensive development standard, we examine the specific measure that is proposed (and the total cost to implement it) to decide whether it should be included in the license.

180. The EIS recommended not adopting the funding proposals for the Water Avenue site access, Lake Spokane Campground, and Devil's Gap Trailhead, explaining that they are non-project facilities, and there is no demonstrated need for measures at these facilities.¹⁴⁴ We agree.

181. The EIS recommended that the license require Avista to develop up to 10 boat-in-only semi-primitive campsites on Lake Spokane, finding that this measure would enhance recreation at the project by providing additional public access for boaters and campers. We agree that this measure is needed for project purposes, and we will include it in the license (Article 416). Although the EIS recommended that the license include a requirement that Avista be responsible for the construction, operation, and maintenance of the one-mile-long segment of the Centennial Trail, we do not adopt that recommendation, because the substantial cost of the measure outweighs the benefit, and the other recreation measures required by this license meet the project's recreation needs.¹⁴⁵ We note, however, that with respect to these proposed measures that we are not including in the license, there is no reason why Avista cannot voluntarily undertake them.

2. Proposed Measures for Post Falls Development

182. At the Post Falls development, Falls Park is the only existing project recreation facility, which provides a trail system, scenic overlook, boating access to the reservoir, and an interpretive display. There are, however, numerous federal, state, and local government-owned recreation facilities that provide public access to Coeur d'Alene Lake and its tributaries, Coeur d'Alene River, and St. Joe River. In addition, a stretch of the Spokane River, located immediately downstream from Post Falls dam, provides Class II

¹⁴³ See *Settlement Policy*, 116 FERC ¶ 61,270, at P 22, 25, and 26 (2006).

¹⁴⁴ See final EIS at 5-69.

¹⁴⁵ See final EIS at 4-25. The Licensed Hydropower Development Recreation Report (Form 80) filing required by the regulations (18 C.F.R. § 8.11 (2008)) every six years will document any additional recreation needs, and provide a venue for implementing measures to address those needs, if necessary.

(novice) whitewater boating.¹⁴⁶ This area is the preferred location for the proposed Trailer Park Wave Access Site, as discussed below.

183. As discussed in the final EIS,¹⁴⁷ Avista proposes to contribute funds to and cooperate with federal and state agencies, the Tribe, and local governments in order to improve existing recreation facilities or develop new recreational facilities on Coeur d'Alene Lake and its tributaries, Coeur d'Alene River, and St. Joe River. The most significant measures include funds for: (1) improving the trail system, scenic overlook, and interpretive display at the 22-acre Falls Park and the City of Post Falls' 78.5-acre Q'emiln Park; (2) constructing a breakwater, stabilizing the shoreline that is eroding, and improving the docks at Idaho DPR's Higgins Point boat launch; (3) extending six boat launches to accommodate "off-season" recreational use (generally from December to mid-June) on Coeur d'Alene Lake, Coeur d'Alene River, and St. Joe River; (4) improving the Forest Service's three recreation facilities (Bell Bay Campground, Medimont Recreation Area boat access site, and Rainey Hill Recreation Area boat access site); and (5) developing the proposed Trailer Park Wave Access Site to include parking, a carry-in-only boat launch, a toilet, and signs. The Trailer Park Wave Access Site would provide access to the whitewater boating opportunities below the Post Falls development's North Channel dam. Avista proposes to release flows for whitewater boating ranging from a minimum flow of 3,300 cfs to a maximum flow of 5,500 cfs from North Channel dam into the Spokane River.

184. In the final EIS,¹⁴⁸ staff recommended that Avista develop and implement a Recreation Plan, with provisions for enhancing recreation at Falls Park, Q'emiln Park, Idaho DPR's Higgins Point boat launch, six non-Avista-owned boat launches, and three Forest Service recreation facilities (Bell Bay Campground, Medimont Recreation Area boat access site, and Rainey Hill Recreation Area boat access site). Improving recreation facilities at Falls Park and Q'emiln Park will provide recreational opportunities and public access to project lands and waters.

185. Staff also concluded that six boat launches should be extended to mitigate for reservoir water-level fluctuations and to accommodate off season recreational use.¹⁴⁹ In

¹⁴⁶ The International Scale of River Difficulty defines six classes of whitewater: Class I – easy; Class II – novice; Class III – intermediate; Class IV – advanced; Class V – expert; and Class VI – extreme.

¹⁴⁷ See final EIS at 3-380 through 3-382.

¹⁴⁸ See final EIS at 5-39.

¹⁴⁹ See final EIS at 5-34.

addition, staff concluded that Idaho DPR's Higgins Point boat launch area experiences shoreline erosion due to reservoir water-level fluctuations. Article 417 requires provisions for extending the six boat launches and improving Higgins Point boat launch. However, this license does not require these recreation facilities to be made project facilities, because the improvements are one-time measures to other entities' facilities and are not needed for project purposes.

186. In addition, staff recommended adopting Avista's proposal to determine the feasibility of developing the Trailer Park Wave Access Site for public access, concluding that there is a documented need for public recreation access for whitewater boaters in this area. To access the river, boaters either paddle upstream from another access point or park at Falls Park, carry their boats approximately 0.25 mile to the North Channel bypassed reach then paddle approximately 0.5 mile to the site. Avista is required to provide scheduled flow releases below the North Channel dam for whitewater boating (Article 417).¹⁵⁰

187. Under this license, in addition to operating and maintaining Falls Park, Avista will be responsible for the operation and maintenance of Q'emiln Park and the Trailer Park Wave Access Site (Article 417). As discussed below, in the section of this order on administrative provisions, Article 417 requires Avista to revise certain of its Exhibit G maps to include Q'emiln Park and the Trailer Park Wave Access Site in the project boundary.

188. Upon further review, we find that the three recreation facilities currently owned by the Forest Service are not needed to serve project recreation needs, and we therefore do not require Avista to assume responsibility for the operation and maintenance of these facilities.

189. Avista proposes to provide funds to BLM and the Coeur d'Alene Tribe for developing recreation facilities on Coeur d'Alene Lake and its tributaries. Further, Avista proposes to provide funds for site development at Mowry State Park, Heyburn State Park, Hawleys Landing, and two swimming beaches at Plummer and Rocky Point, all of which are not project recreation facilities and are located outside the project boundary. In the final EIS, staff noted that Avista and the parties did not clearly demonstrate why the proposed measures are necessary at these sites, and concluded that the measures are not linked to the purposes or effects of the Post Falls development and are not needed to serve project recreation needs. Staff reached a similar finding for

¹⁵⁰ See final EIS at 5-38 and 5-39.

Corbin Park boat ramp.¹⁵¹ We agree. Therefore, we do not include these measures in the license.

190. Avista proposes to establish a recreation enhancement fund for the Post Falls development. The fund would be used if an agency with principal ownership or management responsibilities for a recreation area located adjacent to the project could not complete a proposed recreation enhancement measure due to insufficient funds. Avista would provide about 25 percent of the cost of the proposed measure, and the agency would contribute the remaining portion.¹⁵² As discussed in the final EIS, the recreation enhancement fund does not relate to the purposes or effects of the project, because the funds would be used to enhance non-project recreation areas.¹⁵³ Therefore, we do not include this measure in the license. As discussed above, for any of these measures that we do not adopt, Avista may undertake them voluntarily outside the scope of the license.

F. Interpretation and Education Plan

191. Avista proposes to develop and implement an Interpretation and Education Plan for the Spokane River Project. As discussed in the final EIS, providing information about the five project developments and associated environmental resources would benefit residents and visitors by enhancing the public's use of project lands and features.¹⁵⁴ Therefore, Article 418 requires the licensee to develop and implement an Interpretation and Education Plan.

G. Land Use Management Plan

192. Avista proposes to develop and implement a Land Use Management Plan for the Spokane River Project to protect the scenic quality and environmental resources of the Spokane River and Coeur d'Alene Lake. Article 419 requires Avista to develop and implement this plan, as recommended by Commission staff.¹⁵⁵ Because the geographic scope for the plan should include lands added to the project boundary, the Land Use Management Plan must reflect these modifications. Article 419 requires the licensee to file this information.

¹⁵¹ See final EIS at 5-42.

¹⁵² See final EIS at 5-42.

¹⁵³ See final EIS at 5-43.

¹⁵⁴ See final EIS at 3-378.

¹⁵⁵ See final EIS at 5-41 and 5-70.

193. As part of its Land Use Management Plan, Avista proposes providing financial support for enforcement of land- and water-based laws and regulations administered by federal, state, and local governmental entities. Although Avista proposes to provide funds for agency personnel to perform certain law enforcement duties, this is not the licensee's responsibility in the context of a Commission license.¹⁵⁶ In general, the Commission's concern is protecting resources through specific, enforceable provisions rather than requiring a licensee to provide funding for agency personnel.¹⁵⁷ Therefore, we do not include these provisions in the license. Nevertheless, we do not object to a licensee's entering into these funding arrangements outside of the license.

H. Aesthetics Flows

194. Between mid-July and Labor Day, there are currently only minimal flows in the Post Falls development's North Channel bypassed reach, resulting in a view of mostly exposed streambed and rocks rather than flowing water.¹⁵⁸ Avista proposes to release 46 cfs from the North Channel dam on Saturdays and Sundays between the hours of 12 noon and 6 p.m. (daily) from Memorial Day weekend through Labor Day to enhance the aesthetic quality of the North Channel bypassed reach during the peak recreation season (i.e., the summer months). In the final EIS, staff recommended adopting Avista's proposal.¹⁵⁹ We agree. Article 420 requires Avista to release its proposed aesthetic flows.

I. Public Safety

195. For the Post Falls development, Avista proposes to provide funds to various entities for boater restraining cables, signs, and other measures to protect the public on Coeur d'Alene Lake and along the Coeur d'Alene River and St. Joe River as the rivers enter the lake.

196. As stated in the Commission's Settlement Policy, a licensee cannot satisfy the obligation to perform tasks by a simple payment to another party, nor can the obligation be limited by a particular dollar figure.¹⁶⁰ Thus, a license condition must place

¹⁵⁶ See *Settlement Policy*, 116 FERC ¶ 61,270, at P 24 (2006).

¹⁵⁷ See *Portland General Elec. Co.*, 117 FERC ¶ 61,112, at P 83 (2006).

¹⁵⁸ See final EIS at 3-402 through 3-404. The origin of the minimal flow in the reach is leakage from the North Channel dam.

¹⁵⁹ See final EIS at 5-3.

¹⁶⁰ See *Settlement Policy*, 116 FERC ¶ 61,270, at P 24 (2006).

responsibility for completion of a measure on the licensee. Any cost-sharing agreement would be a matter of contract between the licensee and the third party, but would not be something that the Commission would include in a license; therefore, we are not including this provision.

197. Part 12 of the Commission's regulations requires a licensee to ensure the safety of the public at a licensed project.¹⁶¹ Therefore, to ensure public safety and in accordance with the requirements of Part 12, Avista should notify the Commission's Regional Engineer of any safety concerns that it becomes aware of during the Spokane River Project license term.

PACIFIC NORTHWEST ELECTRIC POWER PLANNING AND CONSERVATION ACT

198. Under section 4(h) of the Pacific Northwest Electric Power Planning and Conservation Act,¹⁶² the Northwest Power Planning Council developed the Columbia River Basin Fish and Wildlife Program (Program) to protect, mitigate, and enhance fish and wildlife resources associated with the development and operation of hydroelectric projects within the Columbia River Basin.¹⁶³ Section 4(h) states that responsible federal and state agencies should provide equitable treatment for fish and wildlife resources, in addition to other purposes for which hydropower is developed, and that these agencies should take the Program into account "to the fullest extent practicable." Specific provisions affecting non-federal hydropower projects are outlined in Appendix B of the Program.

199. The following conditions of this license are consistent with applicable provisions of the Program: (1) minimum flows (Appendix A, Condition I), (2) ramping rates (Article 404 and Appendix A, Condition VI), (3) sediment management (Appendix B, Condition 5.3(F)), (4) aquatic weed management (Article 410; Appendix B, Condition 5.3(E); and Appendix C, Condition 5), (5) water quality (Appendix A, Conditions II and III; Appendix B, Conditions 5.4 - 5.6; and Appendix D, Condition 5), (6) fisheries stocking and enhancement (Articles 405, 406, 407, and Appendix A, Condition VII),

¹⁶¹ See 18 C.F.R. § 12.42 (2008), which provides that "to the satisfaction of, and within a time specified by, the Regional Engineer, an applicant or licensee must install, operate, and maintain any signs, lights, sirens, barriers, or other safety devices that may reasonably be necessary or desirable to warn the public of fluctuations in flow from the project or otherwise to protect the public in the use of project lands and waters."

¹⁶² 16 U.S.C. §§ 839(b) *et seq.* (2006).

¹⁶³ 16 U.S.C. § 839(b)(h) (2006).

(7) fisheries public education and outreach (Articles 408, 409), and (8) wetland and riparian habitat protection and enhancement (Article 413; Appendix A, Condition IV; and Appendix D, Condition 8). As part of the Program, the Council has designated over 40,000 miles of river in the Pacific Northwest region as not being suitable for hydroelectric development (protected area). The project is not located within a protected area designated under Appendix B of the Program. Further, Article 412 reserves the Commission's authority to require future alterations in project structures and operations to take into account, to the fullest extent practicable, the applicable provisions of the Program.

ADMINISTRATIVE PROVISIONS

A. Annual Charges

200. The Commission collects annual charges from licensees for the purpose of reimbursing the United States for the costs of administration of Part I of the FPA. Article 201 requires that Avista pay these charges.

201. The Commission collects annual charges for the purpose of recompensing the United States for the use and occupancy of U.S. lands. Article 201 requires that Avista pay these charges.

202. As discussed below, certain of the Exhibit G drawings must be revised and refiled to show all project lands that are federal lands enclosed within the project boundary. The amount of federal lands and associated annual charges will be determined once the drawings have been revised and refiled.

203. The Commission collects annual charges for the purpose of reimbursing Indian tribes for the use and occupancy of their reservation lands. Article 201 requires that Avista pay these charges.

B. Exhibit F and G Drawings

204. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. The content of all approved Exhibit F drawings¹⁶⁴ is accepted; however, since the applicant has requested that the Post Falls

¹⁶⁴ Avista included single-line drawings of the project's electrical facilities as part of its proposed Exhibit F drawings in the license applications (Sheets 2545 F-10, 2545 F-19, 2545 F-25, 2545 F-31, and 12606 F-7). Because single-line drawings are considered part of Exhibit H rather than Exhibit F, the license does not incorporate single-line drawings as part of the approved Exhibit F drawings. Therefore, Article 202 does not require that these drawings be filed in microfilm and electronic file format.

Development continue to operate under the Spokane River Project and not receive a separate license, Avista is required to file the aperture cards for all approved Exhibit F drawings with the Commission-dedicated exhibit and drawing numbers, as shown in Ordering Paragraph (B). Article 202 requires the filing of these drawings.

205. A discrepancy exists in the amount of BLM lands proposed by Avista to be included in the Post Falls Development project boundary (total of 372 acres),¹⁶⁵ and the amount of BLM land shown at the Post Falls Development, filed on November 7, 2005, as Project No. 12606, Exhibit G, Sheets 2, 6, 8, 10, 11 and 12 (386 acres). Article 203 requires Avista to revise and refile the drawings to correct the discrepancy.

206. This license order requires Avista to acquire a minimum of 43 acres of wetlands in the Spokane River downstream of the Nine Mile dam. If the acquisition of the wetlands changes the project boundary, all affected Exhibit G maps will need to be refiled for Commission approval, showing the revised project boundary. Article 304 requires Avista to revise and refile the drawing(s) to show the revised project boundary.

207. Project No. 2545, Exhibit G, Sheet 1A and Project No. 12606, Exhibit G, Sheet 1A do not show all five developments on a single sheet. Article 203 requires Avista to revise and refile Project No. 2545, Exhibit G, Sheet 1A and Project No. 12606, Exhibit G, Sheet 1A into a single map showing all five developments.

208. This order incorporates certain recreation measures into the new license that require lands at Q'emiln Park and the Trailer Park Wave Access Site to be added to the Post Falls development project boundary. Article 417 requires Avista to include a provision in its recreation plan for revising and refile its Exhibit G drawings to enclose the project recreation lands at Q'emiln Park and the Trailer Park Wave Access Site within the project boundary.

209. The Exhibit G maps include both existing and proposed project boundaries. The applicant should include only the project boundary as approved by the license on the Exhibit G drawings and eliminate all references to previous project boundary information. The applicant has requested that the Post Falls Development continue to operate under the Spokane River Project and not receive a separate license; therefore, Avista is required to refile all Exhibit G drawings with the Commission-dedicated exhibit and drawing numbers. Article 203 requires this filing.

C. Amortization Reserve

¹⁶⁵ See Avista's Response to Commission Staff's December 21, 2005 Additional Information Request, filed March 21, 2006.

210. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 204 requires establishment of the account.

D. Headwater Benefits

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

E. Use and Occupancy of Project Lands and Waters

212. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 422 allows Avista to grant permission, without prior Commission approval, for the use and occupancy of project lands and waters for such minor activities as landscape planting and some boat dock construction. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

F. Review of Final Plans and Specifications

213. Articles 301 through 304 are standard construction-related articles addressing the replacement of the flashboards with a rubber dam at the Nine Mile development.

214. Avista did not provide a start date for construction; however, Article 301 specifies the construction timeframe.

215. Article 302 requires Avista to provide the Commission's Division of Dam Safety and Inspection's Portland Regional Office (D2SI-PRO) with cofferdam construction drawings.

216. Article 303 requires that, at least 60 days prior to the start of any construction, Avista provide the Commission's D2SI-PRO with the plans and specifications and a supporting design document, together with a plan for the quality control and inspection program, a temporary construction emergency action plan, and a soil and erosion control plan.

217. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as-built. Article 304 provides for the filing of these drawings.

218. As discussed above, Condition 5.3(G) of Appendix B of this license requires Avista to acquire a minimum of about 43 acres of wetlands downstream of the Nine Mile development. Article 304 provides for the filing of revised Exhibit G drawings showing these new project lands once the lands have been acquired by Avista.

STATE AND FEDERAL COMPREHENSIVE PLANS

219. Section 10(a)(2)(A) of the FPA¹⁶⁶ 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.¹⁶⁷ Under section 10(a)(2)(A), federal and state agencies filed 91 comprehensive plans that address various resources in Washington and Idaho. Of these, the staff identified and reviewed 25 comprehensive plans that are relevant to this project.¹⁶⁸ No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

220. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,¹⁶⁹ we have evaluated Avista's record as a licensee for these areas: (1) conservation efforts; (2) compliance history and ability to comply with the new license; (3) safe management, operation, and maintenance of the project; (4) ability to provide efficient and reliable electric service; (5) need for power; (6) transmission services; (7) cost-effectiveness of plans; and (8) actions affecting the public.

A. Conservation Efforts

221. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of electricity consumption efficiency improvement programs for license applicants primarily engaged in the generation or sale of electric power, like Avista. Each year, Avista completes a comprehensive analysis of future load growth and the need for new resources, including customer efficiency programs, to meet its customer demand. Demand side management actions and goals proposed by the most recent report indicate that Avista promotes demand side load management practices for both residential and

¹⁶⁶ 16 U.S.C. § 803(a)(2)(A) (2006).

¹⁶⁷ Comprehensive plans are defined at 18 C.F.R. § 2.19 (2008).

¹⁶⁸ The list of applicable plans can be found in section 5.3 of the final EIS for the project. We have also reviewed the Intermountain Province Plan discussed above, and found no conflicts.

¹⁶⁹ 16 U.S.C. §§ 803(a)(2)(C) and 808(a) (2006).

commercial/industrial customers and has undertaken several programs to improve efficiency and promote energy conservation at its own plants.¹⁷⁰ These programs show that Avista is making an effort to conserve electricity and has made a satisfactory good faith effort to comply with section 10(a)(2)(C) of the FPA.

B. Compliance History and Ability to Comply with the New License

222. Based on a review of Avista's compliance with the terms and conditions of the existing license, we find that Avista's overall record of making timely filings and compliance with its license is satisfactory. Therefore, we believe that Avista can satisfy the conditions of a new license.

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

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

D. Ability to Provide Efficient and Reliable Electric Service

224. We reviewed Avista's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Our review indicates that Avista regularly inspects the project's turbine generator units to ensure that they continue to perform in an optimal manner, and schedules maintenance to minimize effects on energy production. Avista has undertaken several initiatives, such as funding energy efficiency investments, replacing lift gates and installing emergency generators, to ensure that the project is able to operate reliably into the future. We conclude that Avista is capable of operating the project to provide efficient and reliable electric service in the future.

E. Need for Power

225. Avista serves about 350,000 electric retail customers in portions of five states: Washington, Idaho, Oregon, California, and Montana. At the end of 2008, Avista facilities had a total net capability of 1,768 MW, of which 56 percent was hydroelectric, and 44 percent was thermal.¹⁷¹ Avista's total hydroelectric generating capacity is

¹⁷⁰ See Avista Utilities, 2007 Electric Integrated Resource Plan, Spokane, Washington (August 31, 2007).

¹⁷¹ Avista Corporation, 2008 Annual Stockholder Report at 3-4, *available at*
(continued...)

approximately 990 MW. The 137.67-MW Spokane River Project, as licensed, will generate up to 869,413 megawatt-hours annually. Based on Avista's reported total generation of 8,377,000 MWhs for calendar year 2008, the generation may represent up to 10.4 percent of total Avista energy generated.¹⁷²

226. Avista's 2007 Electric Integrated Resource Plan predicts that 835 MW of new resources will be required to meet its peak customer load plus an approximately 15-percent planning margin¹⁷³ through the year 2027. It plans to acquire these new resources through a combination of demand side management, new generation, expansion of existing resources, and market purchases.

227. The Pacific Northwest Coordination Agreement sets the framework for coordinating the operation of the Spokane River and other Columbia River Basin projects to help meet regional power demands. Regional forecasters project an annual electric load growth of more than one percent for the region through the next decade.¹⁷⁴ The Spokane River Project provides the regional power supply system with needed capacity and load following capability and helps maintain system reliability. The monthly operation of the project is coordinated with other projects in the region via the Coordination Agreement. The Spokane River Project is party to other coordination agreements, including those developed through Columbia Grid and the Western Electricity Coordinating Council's Northwest Power Pool, to facilitate operation of the western interconnected grid.

228. Power from the Spokane River Project can continue to meet the growing needs of Avista's customers, as well as meeting part of the regional need for power. The project may displace fossil-fueled electric power generation that the regional utilities currently use, and thereby may conserve nonrenewable fossil fuels and reduce the emission of noxious byproducts caused during the combustion of fossil fuels.

F. Transmission Services

229. FPA section 15(a)(2)(E) requires that the Commission consider existing and planned transmission services of the applicant. The project includes a total of 1.84 miles

<http://investor.avistacorp.com>.

¹⁷² *Id.*

¹⁷³ Avista 2007 planning reserves are set to 10 percent of the one-hour system peak load plus 90 MW, which amounts to roughly 15 percent of peak load.

¹⁷⁴ *See* Avista's 2007 Electric Integrated Resource Plan.

of primary transmission lines (in two parallel segments) at the Long Lake development, which deliver project power to the Devil's Gap substation, and a total of 600 feet of primary transmission lines (in three parallel segments) at the Nine Mile development, which delivers power to the Nine Mile switchyard. The two transmission lines at the Long Lake development are primary lines that extend beyond the existing project boundary, and therefore additional area will be added to the project boundary at the Long Lake development to enclose the primary transmission lines. Power supplied by the Upper Falls and Monroe Street developments flows directly into the Post Street substation. Power from the Post Falls development is fed into Avista's interconnected transmission system at the development's switchyard. The project and project transmission lines are important elements in providing power and voltage control to the communities served by Avista.

G. Cost-Effectiveness of Plans

230. Avista is not proposing any capacity expansion of the Spokane River Project. Based on the configuration of the developments, we would not expect any additional capacity to be cost-effective at this site. We conclude that the project, as presently configured and as operated according to this order, is consistent with environmental considerations, and fully develops the economical hydropower potential of the site in a cost-effective manner.

H. Actions Affecting the Public

231. During the existing license term, Avista provided facilities to enhance the public use of project lands and facilities, and operated the project with consideration to protecting public use of Coeur d'Alene Lake, as well as downstream uses of the Spokane River. We find that during this relicense process, the public was invited to participate in meetings and provide comments at each phase of the process. In addition to being responsive to public input that benefits the community, Avista uses the project to help meet the power needs of the region and pays taxes that contribute to the cost of public services provided by local governments.

PROJECT ECONOMICS

232. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower plants, as articulated in *Mead Corp.*,¹⁷⁵ the Commission uses current costs to compare the costs of the project and likely alternative power, with no

¹⁷⁵ *Mead Corp.*, 72 FERC ¶ 61,027 (1995).

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.

233. In applying this analysis to the Spokane River Project, we have considered two options: Avista's proposal, and the project as licensed herein. As proposed by Avista, the levelized annual cost of operating the Spokane River Project is \$28,763,477, or \$32.94/MWh. The project would generate an estimated average of 873,165 MWh of energy annually. When we multiply our estimate of average generation by the alternative power cost of \$52.53/MWh,¹⁷⁶ we get a total value of the project's power of \$45,868,438 in 2009 dollars. To determine whether the proposed project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power.¹⁷⁷ Therefore, in the first year of operation, project power would cost \$17,104,961, or \$19.59/MWh, less than the likely alternative cost of power.

234. As licensed herein, with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$30,548,266, or \$35.14/MWh. Based on an estimated average generation of 869,413 MWh as licensed, the project would produce power valued at \$45,671,341 when multiplied by the \$52.53/MWh value of the project's power. Therefore, in the first year of operation, project power would cost \$15,123,075, or \$17.39/MWh, less than the likely cost of alternative power.

COMPREHENSIVE DEVELOPMENT

235. Sections 4(e) and 10(a)(1) of the FPA,¹⁷⁸ respectively, 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 projection of recreational opportunities, and the preservation of other

¹⁷⁶ The energy value is based on Avista's estimate of short-term forward pricing and is consistent with alternative power costs based on a combined cycle combustion turbine operating at a 92-percent plant factor.

¹⁷⁷ Details of staff's economic methodology and analysis are included in the final EIS. The economic analysis of the project as licensed herein has been updated to include revised mandatory conditions, settlement agreement measures, and the combining of all five developments into a single project.

¹⁷⁸ 16 U.S.C. §§ 797(e) and 803(a)(1) (2006).

aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

236. 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 this license.

237. Based on our independent review and evaluation of the project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the final EIS, we have selected the proposed Spokane River Project, with the staff-recommended measures and mandatory conditions, as the preferred alternative, and find that it is best adapted to a comprehensive plan for improving or developing the Spokane River.

238. We selected this alternative because: (1) issuance of a new license will serve to maintain a beneficial, dependable, and inexpensive source of electric energy; (2) the required environmental measures will protect and enhance fish and wildlife resources, water quality, recreational resources, and historic properties; and (3) the 137.67 MW of electric energy generated from this renewable resource may offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

LICENSE TERM

239. Section 15(e) of the FPA¹⁷⁹ provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures.¹⁸⁰ This license authorizes an extensive amount of new environmental measures. Significant annual costs associated with environmental measures include \$139,000 for water quality improvements, \$443,000 for fisheries enhancements, \$261,000 for aesthetic flows, \$386,500 for recreation resources, \$140,500 for cultural resources, and \$3,658,000 per year for the Coeur d'Alene Reservation Trust Resources

¹⁷⁹ 16 U.S.C. § 808(c) (2006).

¹⁸⁰ See *Consumers Power Company*, 68 FERC ¶ 61,077, at 61,383-84 (1994).

Restoration Fund. Additionally, Avista is required to pay \$470,000 per year for the use of submerged lands within the Coeur d'Alene Reservation. Consequently, a 50-year license term for the Spokane River Project is appropriate.

The Commission orders:

(A) This license is issued to Avista Corporation (licensee), for a period of 50 years, effective the first day of the month in which this order is issued, to operate and maintain the Spokane River Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in these lands, enclosed by the proposed project boundary shown by Exhibit G filed on November 7, 2005. However the Exhibit G drawings are not approved as discussed in the "Administrative Provisions" section of this order.

(2) Project works consisting of:

Post Falls Reservoir -- Nine miles of the Spokane River between the development's dams and the natural outlet of Coeur d'Alene Lake and about 23 miles of Coeur d'Alene Lake and lower portions of the St. Joe, St. Maries, and Coeur d'Alene Rivers. Coeur d'Alene Lake has a normal full-pool elevation of 2,128 feet,¹⁸¹ a surface area of approximately 40,580 acres, a maximum depth of more than 200 feet, and usable storage of approximately 275,581.5 acre-feet at a pool elevation of 2,128 feet.

Post Falls Middle Channel dam -- (1) a 215-foot-long, 64-foot-high dam, with a top-of-dam elevation of 2,135 feet, located at river mile 102; (2) six 15-foot-wide, 14.8 foot-long vertical lift headgate intakes at elevation 2,113.75 feet; (3) six 56-foot-long, 11.25-foot-diameter steel penstocks; (4) a six-turbine powerhouse, integral to the Middle Channel dam, with a total nameplate capacity of 14.75 megawatts (MW) and a total hydraulic capacity of 5,400 cubic feet per second (cfs); (5) a substation; and (6) appurtenant facilities.

Post Falls South Channel dam-- (1) a 127-foot-long, 25-foot-high South Channel dam, with a top-of-dam elevation of 2,135 feet; (2) a 37-foot-long South Channel

¹⁸¹ This order references all elevations to Avista's data, a variation of the National Geodetic Vertical Datum 1929.

spillway on top of the South Channel dam with a spillway crest elevation of 2,128.5 feet; (3) six 6-foot-wide, 13-foot-high vertical sluice gates; and (4) appurtenant facilities.

Post Falls North Channel dam--(1) a 431-foot-long, 31-foot-high dam, with a top-of-dam elevation of 2,133 feet; (2) a spillway at elevation 2,114 feet; (3) a 100-foot-wide, 14-foot-high rolling sector gate; (4) seven 21-foot-wide, 12-foot-high radial gates; (5) one 12-foot-wide, 12-foot-high radial gate; and (6) appurtenant facilities.

Upper Falls -- a development located in the City of Spokane, Spokane County, which consists of: (1) a 366-foot-long, 35.5-foot-high concrete gravity dam across the North Channel of the Spokane River at elevation 1,870.5 feet located at river mile 74.2; (2) a 290-foot-wide spillway across the top of the North Channel dam with two 60-foot-wide, 16-foot-high rolling sector spill gates and four approximately 42-foot-wide, 13-foot-high vertical lift gates at elevation 1,876.9; (3) a 70-foot-long, 30-foot-high concrete gravity dam across the south channel at a normal full-pool elevation of 1,876.9 located at river mile 74.7; (4) three 11.8-foot-wide, 15-foot-high intake curtain headgates on the South Channel dam at elevation 1,861.4; (5) a 4-mile-long, 800-acre-foot reservoir with a surface area of 123 acres at a normal full pool elevation of 1,870.5; (6) a 350-foot-long, 18-foot-diameter reinforced concrete penstock; (7) a single-unit powerhouse on the south shore of the Spokane River with a Francis-type vertical shaft turbine and a generator nameplate capacity of 10 MW; and (8) appurtenant facilities.

Monroe Street -- a development located in the City of Spokane, Spokane County, which consists of: (1) a 240-foot-long, 24-foot-high concrete gravity dam with a crest height of 1,806 feet, located at river mile 74; (2) a 0.2-mile-long, 30-acre-foot reservoir with a surface area of 5 acres at a normal full pool elevation of 1,806.3 feet; (3) a 217-foot-wide spillway; (4) a 332-foot-long, 14-foot-diameter steel penstock; (5) an underground single-unit powerhouse with a vertical, Kaplan-style turbine and a generator nameplate capacity of 14.82 MW; and (6) appurtenant facilities.

Nine Mile -- a development located in Spokane County which consists of: (1) a 364-foot-long, 58-foot-high concrete gravity dam with a crest height at elevation 1,596.6 feet, located at river mile 58; (2) an approximately 6-mile-long, 4,600-acre-foot reservoir with a surface area of 348 acres at the normal full pool elevation of 1,606.6 feet; (3) a 225-foot-wide spillway at the crest of the dam, with two rows of 5-foot-high flashboards at elevation 1,596.6 feet to be replaced with a pneumatically operated spillway gate (rubber dam); (4) four intake chambers that feed flow to the turbines; (5) a 120-foot-long, 5-foot-diameter diversion tunnel; (6) a powerhouse with four horizontal Francis turbines and a generator nameplate capacity of 26.4 MW; (7) two parallel 200-foot-long 2.3-kilovolt (kV) transmission lines, and one 200-foot-long 13.8-kV transmission line; (8) a 150-foot-by-150-foot switchyard; (9) a 2.3-to-60/115-kV transformer and a 13.8/115-kV transformer; and (10) appurtenant facilities.

Long Lake -- a development located in Stevens, Lincoln and Spokane Counties, which consists of: (1) a 593-foot-long, 213-foot-high main dam with a crest at an elevation of 1,537 feet, located at river mile 34; (2) a crescent-shaped, 247-foot-long, 108-foot-high cutoff dam with a crest elevation of 1,537 feet, located approximately 750 feet upstream of the main dam; (3) a 23.5-mile-long, 105,080-acre-foot reservoir (known as Lake Spokane) with a surface area of 5,060 acres at a normal full-pool elevation of 1,536 feet; (4) four intake structures; (5) four 236-foot-long, 16-foot-diameter riveted steel penstocks; (6) a powerhouse containing four double-Francis-type, horizontal-shaft turbine units with a generator nameplate capacity of 71.68 MW; (7) a 207-foot-long, 56-foot-wide switchroom located inside the powerhouse; (8) two parallel 0.81-mile-long and 1.03-mile-long, 115-kV transmission lines; and (9) appurtenant facilities.

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

Exhibit A: The following approved sections of Exhibit A:

Spokane River Developments (Upper Falls, Monroe Street, Nine Mile, and Long Lake) filed on July 28, 2005: Pages A-1 through A-7.

Post Falls Development, filed on November 7, 2005: Pages A-1 through A-5.

Exhibit F: The following approved Exhibit F drawings, filed on November 7, 2005:

<u>Applicant Drawing¹⁸²</u>	<u>FERC EXHIBIT No. 2545 -</u>	<u>FERC DRAWING No. 2545-</u>	<u>Description</u>
2545 F-1	F-1	1001	Upper Falls Plan and Section of Control Works
2545 F-2	F-2	1002	Upper Falls Control Works and Section of Spillway
2545 F-3	F-3	1003	Upper Falls Control Works, Rolling Sector Gate Section
2545 F-4	F-4	1004	Upper Falls Control Works, Vertical Lift Gates
2545 F-5	F-5	1005	Upper Falls Penstock

¹⁸² The applicant filed the exhibit drawings for the developments under two separate project numbers (P-2545 and P-12606). Therefore, in this table the applicant's exhibit sheet numbers are preceded by the project number under which they were filed in order to differentiate exhibits with the same sheet number.

2545 F-6	F-6	1006	Upper Falls Penstock Intake
2545 F-7	F-7	1007	Upper Falls Headgates and Operating Mechanism
2545 F-8	F-8	1008	Upper Falls Section through Powerhouse
2545 F-9	F-9	1009	Upper Falls Generator Floor
2545 F-11	F-10	1010	Monroe Street General Plan
2545 F-12	F-11	1011	Monroe Street Penstock Plan and Profile
2545 F-13	F-12	1012	Monroe Street Intake Structure as Built for 1995 Modifications
2545 F-14	F-13	1013	Monroe Street Thrustblock Sections and Details
2545 F-15	F-14	1014	Monroe Street Powerhouse Plan
2545 F-16	F-15	1015	Monroe Street Powerhouse Transverse Section
2545 F-17	F-16	1016	Monroe Street Powerhouse Plans at Elevation 1,742 and 1,724
2545 F-18	F-17	1017	Monroe Street Powerhouse
2545 F-20	F-18	1018	Nine Mile General Plan
2545 F-21	F-19	1019	Nine Mile Spillway Cross Section
2545 F-22	F-20	1020	Nine Mile Section through Powerhouse
2545 F-23	F-21	1021	Nine Mile Transverse Section through Powerhouse Units 3 and 4
2545 F-24	F-22	1022	Nine Mile Diversion Tunnel General Arrangement – Elevation
2545 F-26	F-23	1023	Long Lake General Plan
2545 F-27	F-24	1024	Long Lake Elevation and Section at Main Dam
2545 F-28	F-25	1025	Long Lake Section through Intake Dam
2545 F-29	F-26	1026	Long Lake Cut-off Dam
2545 F-30	F-27	1027	Long Lake Section through Powerhouse
12606 F-1	F-28	1028	Post Falls HED North Channel Gates Plan and Section
12606 F-2	F-29	1029	Post Falls HED North Channel Sector Gate
12606 F-3	F-30	1030	Post Falls HED Powerhouse Plan and Headgate
12606 F-4	F-31	1031	Post Falls HED Middle Channel Dam and Powerhouse Elevation
12606 F-5	F-32	1032	Post Falls HED Middle Channel Dam and Powerhouse Section
12606 F-6	F-33	1033	Post Falls HED South Channel Dam Plan, Elevation and Section

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

(C) The Exhibits A and portions of Exhibits 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. The Exhibit G drawings and the portions of Exhibits F that are not approved are discussed in the “Administrative Provisions” section of this order and are listed below:

Exhibit F: Sheets 2545 F-10, 2545 F-19, 2545 F-25, 2545 F-31, and 12606 F-7.

Exhibit G:

Applicant <u>Drawing</u> ¹⁸³	FERC EXHIBIT No. 2545 -	FERC DRAWING No. 2545-	<u>Description</u>
2545 G-1A and 12606 G-1A	G-1	1029	Spokane River Project Map
2545 G-1	G-2	1030	Long Lake HED Project Map 1 of 15
2545 G-2	G-3	1031	Long Lake HED Project Map 2 of 15
2545 G-3	G-4	1032	Long Lake HED Project Map 3 of 15
2545 G-4	G-5	1033	Long Lake HED Project Map 4 of 15
2545 G-5	G-6	1034	Long Lake HED Project Map 5 of 15
2545 G-6	G-7	1035	Long Lake HED Project Map 6 of 15
2545 G-7	G-8	1036	Long Lake HED Project Map 7 of 15
2545 G-8	G-9	1037	Long Lake HED Project Map 8 of 15
2545 G-9	G-10	1038	Long Lake HED Project Map 9 of 15
2545 G-10	G-11	1039	Long Lake HED Project Map 10 of 15
2545 G-11	G-12	1040	Long Lake HED Project Map 11 of 15
2545 G-12	G-13	1041	Long Lake HED Project Map 12 of 15
2545 G-13	G-14	1042	Long Lake HED Project Map 13 of 15
2545 G-14	G-15	1043	Long Lake HED Project Map 14 of 15

¹⁸³ The applicant filed the exhibit drawings for the developments under two separate project numbers (P-2545 and P-12606). Therefore, in this table the applicant’s exhibit sheet numbers are preceded by the project number under which they were filed, in order to differentiate exhibits with the same sheet number.

2545 G-15	G-16	1044	Long Lake HED Project Map 15 of 15
2545 G-16	G-17	1045	Nine Mile Falls HED Map 1 of 3
2545 G-17	G-18	1046	Nine Mile Falls HED Map 2 of 3
2545 G-18	G-19	1047	Nine Mile Falls HED Map 3 of 3
2545 G-19	G-20	1048	Monroe St. and Upper Falls HED Project Map 1 of 4
2545 G-20	G-21	1049	Monroe St. and Upper Falls HED Project Map 2 of 4
2545 G-21	G-22	1050	Monroe St. and Upper Falls HED Project Map 3 of 4
2545 G-22	G-23	1051	Monroe St. and Upper Falls HED Project Map 4 of 4
12606 G-1	G-24	1052	Post Falls HED Project Map 1 of 19
12606 G-2	G-25	1053	Post Falls HED Project Map 2 of 19
12606 G-3	G-26	1054	Post Falls HED Project Map 3 of 19
12606 G-4	G-27	1055	Post Falls HED Project Map 4 of 19
12606 G-5	G-28	1056	Post Falls HED Project Map 5 of 19
12606 G-6	G-29	1057	Post Falls HED Project Map 6 of 19
12606 G-7	G-30	1058	Post Falls HED Project Map 7 of 19
12606 G-8	G-31	1059	Post Falls HED Project Map 8 of 19
12606 G-9	G-32	1060	Post Falls HED Project Map 9 of 19
12606 G-10	G-33	1061	Post Falls HED Project Map 10 of 19
12606 G-11	G-34	1062	Post Falls HED Project Map 11 of 19
12606 G-12	G-35	1063	Post Falls HED Project Map 12 of 19
12606 G-13	G-36	1064	Post Falls HED Project Map 13 of 19
12606 G-14	G-37	1065	Post Falls HED Project Map 14 of 19
12606 G-15	G-38	1066	Post Falls HED Project Map 15 of 19
12606 G-16	G-39	1067	Post Falls HED Project Map 16 of 19
12606 G-17	G-40	1068	Post Falls HED Project Map 17 of 19
12606 G-18	G-41	1069	Post Falls HED Project Map 18 of 19
12606 G-19	G-42	1070	Post Falls HED Project Map 19 of 19

(D) This license is subject to the conditions issued on June 5, 2008, by the Idaho Department of Environmental Quality pursuant to section 401(a) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2006) (filed June 19, 2008), as those conditions are set forth in Appendix A of this order.

(E) This license is subject to the conditions submitted by the Washington Department of Ecology pursuant to section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1) (2006) (filed May 11, 2009, as those conditions are set forth in Appendix B of this order).

(F) This license is subject to the conditions filed on May 4, 2007, by the U.S. Forest Service under section 4(e) of the FPA, as those conditions are set forth in Appendix C of this order.

(G) This license is subject to the conditions filed on January 27, 2009, by the U.S. Department of the Interior under section 4(e) of the FPA, as those conditions are set forth in Appendix D of this order.

(H) The Total Dissolved Gas Control and Mitigation Program (PF-WQ-1) filed by the licensee on July 28, 2005, (*see* Post Falls Project License Application, Volume II, Appendix B at B7 and B8) is approved and made a part of this license with the exception of the funding provision.

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

Article 201. Annual Charges.

(a) The licensee shall pay the United States annual charges, effective the first day of the month in which this license is issued, and as determined in accordance with the provisions of the Commission’s regulations in effect from time to time, for the purpose of reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 137.67 megawatts.

(b) The licensee shall pay the United States annual charges, effective the first day of the month in which this license is issued, and as determined in accordance with the provisions of the Commission’s regulations in effect from time to time, for the purpose of recompensing the United States for the use, occupancy, and enjoyment of federal lands, the acreage to be determined pursuant to Article 203.

(c)(1) For the purpose of reimbursing the Coeur d’Alene Tribe for the use, occupancy, and enjoyment of lands within the current boundaries of the Coeur d’Alene Indian Reservation, which are held in trust for the Tribe by the United States, the licensee, for any year in which it stores water on Coeur d’Alene Lake and its affected tributaries, shall pay to the Coeur d’Alene Tribe annual charges pursuant to section 10(e) of the Federal Power Act as follows: (i) \$400,000 a year for the first 20 years of this license; and (ii) \$700,000 a year for the remaining years of this license beginning in year 21 of this license, including during any annual licenses issued upon expiration of this license. The annual charges payment for the first year of this license will be made on the date agreed to by the licensee and the Coeur d’Alene Tribe, with subsequent yearly annual charges payments made on the anniversary date of the first year’s payment.

(2) Payment by the licensee in accordance with paragraph (c)(1) shall fully discharge the licensee's obligation under section 10(e) of the Federal Power Act during the term of this license and any annual licenses issued upon expiration of this license. The licensee, by its acceptance of this license, and the Coeur d'Alene Tribe, by its execution of the settlement agreement adopting the charges set forth in paragraph (c)(1), expressly waive any right to readjustment or modification of the section 10(e) annual charges at any time during the term of this license and any annual licenses issued upon expiration of this license and expressly agree not to seek readjustment or modification of the section 10(e) annual charges at any time during the term of this license and any annual licenses issued upon expiration of this license.

(d) To satisfy any obligation that the licensee may have to pay annual charges pursuant to section 10(e) of the Federal Power Act for its use of the submerged lands of the Coeur d'Alene Indian Reservation for the period from July 1, 1981, through the day before the effective date of this license, and to satisfy any claims the Coeur d'Alene Tribe may have for the same period to any portion of any headwater benefits payments that the licensee received or may be entitled to receive pursuant to section 10(f) of the Federal Power Act, during that period related to its use of the submerged lands, the licensee shall make the following payments to the Coeur d'Alene Tribe: (1) \$34 million in three payments as follows -- \$20 million within 30 days of the Master Agreement (which was December 16, 2008), \$10 million on the anniversary date of the initial payment), and \$4 million on the anniversary date of the second payment; and (2) \$400,000 annually beginning on the 30th day after the effective date of the Master Agreement and annually thereafter on the anniversary date of the first \$400,000 payment until issuance of this new license.

Article 202. Exhibit F Drawings. Within 45 days of the date of issuance of this license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats. Since the applicant has requested that the Post Falls Development continue to operate under the Spokane River Project and not receive a separate license as originally proposed, the applicant is required to refile all approved exhibit drawings with corrected sheet numbers and labels. Drawings shall be labeled using Commission-dedicated exhibit and drawing numbers.

(a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-2545-1001 through P-2545-1033) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office.

(b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office. Exhibit F drawings must be identified as (CEII) material under 18 C.F.R. § 388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-2545-1001, F-1, Upper Falls Plan and Section of Control Works, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY – black & white raster file
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4
RESOLUTION – 300 dpi desired, (200 dpi min)
DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max)
FILE SIZE – less than 1 MB desired

Article 203. Revised Exhibit G Drawings. Within 90 days of the effective date of the license, the licensee shall file, for Commission approval, revised Exhibit G drawings, which were not approved in Ordering Paragraph (C). The revised Exhibit G drawings should include only the project boundary as approved by the license, and eliminate all references to previous project boundary information. The licensee is required to file the revised Exhibit G drawings with the Commission-dedicated exhibit and drawing numbers.

The revised Exhibit G drawings must comply with sections 4.39 and 4.41 of the Commission's regulations.

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

The licensee shall file two separate sets of the project boundary data in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format) with the Secretary of the Commission, ATTN:

OEP/DHAC. The filing shall include both polygon data and all reference points shown on the individual project boundary drawings. A single electronic boundary polygon data file is required for the project boundary. Depending on the electronic file format, the polygon and point data can be included in a single file with multiple layers. The geo-referenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The data must be accompanied by a separate text file describing the spatial reference for the geo-referenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.).

Article 204. Amortization Reserve. Pursuant to section 10(d) of the Federal Power Act, a specific reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually, based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee's long-term debt and proprietary capital accounts, as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall 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 205. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits

received during the term of this new license. The benefits will be assessed in accordance with part 11, Subpart B, of the Commission's regulations.

Article 301. *Start of Construction.* The licensee shall commence installing the rubber dam within two years from the issuance date of the license and shall complete construction within 5 years from the issuance date of the license.

Article 302. *Cofferdam Construction Drawings.* Before starting construction, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations and shall make sure construction of the cofferdams and deep excavations are consistent with the approved design. At least 30 days before starting construction of the cofferdam, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 303. *Contract Plans and Specifications.* At least 60 days prior to start of construction, the licensee shall submit one copy of its plans and specifications, and supporting design document to the Commission's Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). The submittal must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. The licensee may not begin construction until the D2SI – Portland Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

Article 304. *Revised Exhibits and As-built Drawings.* Within 90 days of including new project lands or completing construction activities authorized by this license, the licensee shall file, for Commission approval, revised Exhibits A, F, and G, as applicable, to show the new project lands or describe and show those project facilities as built. A courtesy copy shall be filed with the Commission's Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer; the Director, D2SI; and the Director, Division of Hydropower Administration and Compliance.

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

(a) Requirement to File Plans for Commission Approval

Various conditions of this license found in Idaho Department of Environmental Quality's (Idaho DEQ) water quality certification (Appendix A) and Washington Department of Ecology's (Washington Ecology) water quality certification (Appendix B)

require the licensee to prepare plans in consultation with other entities for approval by Idaho DEQ and Washington Ecology and implement specific measures without prior Commission approval. Each such plan shall be submitted to the Commission for approval prior to implementation. The following table indicates the entities that the licensee shall consult with before preparing the plans along with the deadline for filing the plans with the Commission for approval.

No.	Appendix A, condition no.	Appendix B, condition no.	Plan name	Consulted entities	Due date
1	I(B)(1)		Discharge Flow Monitoring Plan	Idaho DEQ and Washington Department of Fish and Wildlife (Washington DFW)	Within 6 months of license issuance
2	III(A)		Water Quality Improvement and Erosion Control Plan	Idaho Department of Fish and Game (Idaho DFG) and U.S. Fish and Wildlife Service (FWS)	Within 1 year of license issuance
3	IV(A)		Wetland and Riparian Habitat Protection and Enhancement Plan	Idaho DFG and FWS	Within 1 year of license issuance
4		5.2(A)(2)	Upper Falls Aesthetics Spill Plan	Washington Ecology and Washington DFW	Within 1 year of license issuance
5		5.3(E)	Lake Spokane Aquatic Weed Management Plan	Washington DFW and Washington Department of Natural Resources	Within 1 year of license issuance

6		5.3(F)(1)	Monroe Street Dam Sediment Management Plan	FWS and Washington DFW	90 days prior to the first dredging activity
7		5.3(F)(2)	Nine Mile and Long Lake Reservoir Sediment Management Plan	FWS and Washington DFW	Within 4 years of license issuance
8		5.3(G)	Wetlands Enhancement Plan	FWS and Washington DFW	Within 3 years of license issuance
9		5.4(A)	Total Dissolved Gas (TDG) Monitoring Plan		Within 1 year of license issuance and by February 1 each year thereafter
10		5.4(D)	TDG Water Quality Attainment Plan for Long Lake Dam		Within 1 year of license issuance
11		5.6(B)	Long Lake Dam Phase II Feasibility and Implementation Plan		Within 1 year of license issuance
12		5.10(A)	Water Quality Monitoring and Quality Assurance Project Plan (QAPP)		Within 60 days of license issuance

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

(b) Requirement to File Amendment Applications

Certain water quality certification conditions in Appendices A and B contemplate changes in the requirements of this license. These changes may not be implemented without prior Commission authorization granted after the filing of an application to amend the license. These conditions are listed below.

Appendix A, condition no.	Appendix B, condition no.	Action
I(C)(2)		Modifying project operations
II(A)		Revisions to the Continued Monitoring of Water Quality Status and Trends in Coeur d'Alene Lake, Quality Assurance Project Plan
III(B)		Revisions to the Water Quality Improvement and Erosion Control Plan
IV(B)		Revisions to the Wetland and Riparian Habitat Protection and Enhancement Plan
V(A)		Revisions to the Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan
VII(A)		Revisions to the Fishery Protection and Enhancement Plan (Exhibit 1)
	5.2(A)	Modifying the North Channel and South Channel at Upper Falls development
	5.3(A) and 5.5(B)	Changes to project operations or physical structures
	5.3(B)	Implementing all reasonable and feasible actions to support and protect designated uses and achieve biological objectives
	5.3(C)(2)	Implementing adaptive management measures to restore the beneficial uses of the Spokane River
	5.4(C)	Modifying Nine Mile Dam
	5.10(B)	Changes to the QAPP

Article 402. Lake Spokane Drawdown. The licensee shall limit the drawdown of Lake Spokane to no more than 14 feet below the normal full-pool elevation of 1,536 feet. The drawdown requirement may be temporarily modified if required by operating emergencies beyond the control of the licensee. If the drawdown level is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. Operational Compliance Streamflow Monitoring. The licensee shall ensure that the Post Falls gage (U.S. Geological Survey gage no. 12419000) is operated and maintained to provide real-time streamflow monitoring data.

Article 404. Ramping Rate Evaluation. No later than December 31 of the first complete year of project operation following license issuance, the licensee shall file, for Commission approval, a ramping rate evaluation report. The report shall include:

(1) the results of a rainbow trout fry stranding study, developed and implemented after consultation with Idaho Fish and Game, Washington Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service, that documents the effects of the ramping rates contained in Appendix A, Condition VI.A, and any potential stranding on rainbow trout fry during the first complete spring/summer rearing period following license issuance;

(2) any recommendations from the consulted entities for more restrictive ramping rates based on the outcome of the rainbow trout fry stranding study; and

(3) the associated costs to implement more restrictive ramping rates, including the potential costs of reduced power generation and any construction costs needed to modify the Post Falls dam to provide more restrictive ramping rates if recommended by the consulted entities.

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

The Commission reserves the right to require changes to project operations or facilities based on the results or recommendations in the report.

Article 405. Trout Stocking. The licensee shall annually stock catchable-sized (about 6 to 8 inches long) sterile rainbow trout at the following locations, and in the

following quantities: (1) Upper Falls reservoir, 6,000 trout; and (2) Nine Mile reservoir, 9,000 trout.

By no later than March 31 of each year, the licensee shall consult with the Washington Department of Fish and Wildlife on the desired date(s) and specific location(s) within each reservoir to conduct the trout stocking. By no later than December 31 of each year, the licensee shall file a report with the Commission detailing that year's stocking efforts, including the date(s) of stocking, the specific location(s) within each reservoir where the stocking occurred, and total numbers of trout stocked within each reservoir.

Article 406. Lake Spokane Fishery Enhancement. Within one year of license issuance, the licensee shall file, for Commission approval, a Lake Spokane fishery enhancement and creel survey plan, for the purpose of creating a put-and-take fishery for stocked rainbow trout in Lake Spokane. The plan shall include, but not necessarily be limited to:

(1) a provision to annually stock 155,000 catchable-sized sterile rainbow trout in Lake Spokane, beginning in the second complete year following license issuance and continuing for the next four years thereafter (five consecutive years);

(2) a provision to annually conduct creel surveys to monitor the success of the stocking program;

(3) the specific quantities of rainbow trout that will be released at each identified release location within Lake Spokane;

(4) the specific protocols to determine, through creel surveys, whether the program is successful in creating a viable put-and-take recreational fishery for rainbow trout; and

(5) a provision to prepare and file a report, by the beginning of the seventh year following license issuance, that documents the results of the program and includes the licensees' proposals and agency recommendations for future stocking.

The plan shall be developed after consultation with the Washington Department of Fish and Wildlife (Washington DFW). The licensee shall include with the plan an implementation schedule, documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to the Washington DFW, and specific descriptions of how the agency's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Washington DFW to comment and to

make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. The licensee shall not begin implementing the plan until after the Commission approves it. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 407. *Non-native Predator Fish Removal.* The licensee shall enhance conditions for federally listed bull trout and its designated critical habitat by implementing its proposed Targeted Non-native Predator Fish Removal Program filed on July 17, 2008, with the following modification. The licensee shall file a report within six months following the conclusion of the initial three-year study period that (a) documents the results of the monitoring study, (2) includes any recommendations for specific measures to reduce the effects of non-native fish on bull trout within the project boundary, and (3) provides a schedule for implementing any recommended measures. To ensure that all necessary sampling permits are in place, the initial three-year study period shall begin within two years of license issuance.

The licensee shall include with the report and enhancement measures (if any), documentation of consultation with the U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Coeur d'Alene Indian Tribe; copies of comments and recommendations on the completed report after it has been prepared and provided to the agencies and tribe; and specific descriptions of how the agencies' and tribe's comments are accommodated by the report and enhancement measures. The licensee shall allow a minimum of 30 days for the agencies and tribe to comment and to make recommendations before filing the report and enhancement measures with the Commission. If the licensee does not adopt an agency or tribe recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the enhancement measures included with the report. Implementation of the enhancement measures shall not begin until they are approved by the Commission. Upon Commission approval, the licensee shall implement the enhancement measures and schedule, including any changes required by the Commission.

Article 408. *Spokane River Trout Public Education and Outreach.* Within one year of license issuance, the licensee shall file, for Commission approval, a Spokane River rainbow trout fisheries public education and outreach plan, for the purpose of educating the public about protection and enhancement measures implemented at the

Spokane River developments for wild rainbow trout, and measures that can be taken by the public to minimize their impacts on native trout and their habitats. The plan shall include, but not necessarily be limited to:

- (1) the specific number of signs and the specific information that will be placed on the signage for the program;
- (2) the specific locations where the signage will be placed at the Spokane River developments; and
- (3) the specific details of any other outreach activities that will occur under the program.

The plan shall be developed after consultation with the Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, and the U.S. Fish and Wildlife Service. The licensee shall include with the plan an implementation schedule, 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 shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The licensee shall not begin implementing the plan until after the Commission approves it. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 409. *Coeur d'Alene Lake Fisheries Public Education and Outreach.* For the purpose of educating the public about fisheries protection and enhancement measures implemented at the Post Falls development, and measures that can be taken by the public to minimize their impacts on native fish and their habitats, the licensee shall incorporate the following provisions for a fishery public education and outreach program into the Fishery Protection and Enhancement Plan required by Appendix A, Condition VII(A):

- (1) the specific number of signs and the specific information that will be placed on the signage for the outreach program;
- (2) the specific locations where the signage will be placed at project-affected waters; and
- (3) the specific details of any other outreach activities that will occur under the program.

In addition to an implementation schedule, the licensee shall include with the plan, documentation of consultation with the Idaho Department of Fish and Game, Coeur d'Alene Indian Tribe, and the U.S. Fish and Wildlife Service; copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies; and specific descriptions of how the agencies' and tribe's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies and tribe to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan and associated schedule shall not begin until the plan and schedule are approved by the Commission. Upon Commission approval, the licensee shall implement the plan and schedule, including any changes required by the Commission.

Article 410. *Coeur d'Alene Lake Aquatic Weed Management for Non-tribal Waters.* Within one year of license issuance, the licensee shall file, for Commission approval, a Coeur d'Alene Lake aquatic weed management plan for the purpose of providing education, monitoring, and control of aquatic noxious weeds in the Coeur d'Alene Lake basin on non-tribal waters. The plan shall include, but not necessarily be limited to:

- (1) a provision to establish or expand educational programs with respect to noxious aquatic weeds in non-tribal waters affected by the project;
- (2) a provision to annually monitor the distribution of noxious aquatic weeds within non-tribal waters affected by the project; and
- (3) management strategies to help control noxious aquatic weeds as they are identified within non-tribal waters affected by the project.

In addition to an implementation schedule, the licensee shall include with the plan, documentation of consultation with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service; copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted entities; and specific descriptions of how the consulted entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan and associated schedule shall not begin until the plan and schedule are

approved by the Commission. Upon Commission approval, the licensee shall implement the plan and schedule, including any changes required by the Commission.

Article 411. *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 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, and 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. *Wetlands Enhancement Plan.* The licensee shall include with the Wetlands Enhancement Plan required by Appendix B, Condition 5.3(G), provisions to monitor wetlands after the rubber dam has been installed at the Nine Mile development and file a report of the results along with any recommendations for additional wetland enhancement. The report shall be due within 6 months of completing the wetlands monitoring. Any proposal for additional wetlands enhancement shall be filed for Commission approval.

Article 414. *Bald Eagle Management Plan.* Within one year of license issuance, the licensee shall file, for Commission approval, a bald eagle management plan. The plan shall contain measures for surveying, monitoring, and protecting bald eagles.

The plan shall include at a minimum: (1) annual monitoring during the bald eagle nesting season (about February 1 to July 31) of all known bald eagle nests that are associated with waters impounded by the project to determine nesting occupancy and productivity; (2) annual surveys to identify new bald eagle nests using, in part, a combination of fixed winged aircraft and watercraft to conduct the surveys; (3) monitoring over two consecutive nesting seasons to identify bald eagle nesting territories including primary use areas, home ranges, and key use sites (nest stands, perch sites, and roost sites); (4) a schedule for filing annual monitoring reports with the U.S. Fish and Wildlife Service (Fish and Wildlife Service), Idaho Department of Fish and Game (Idaho Fish and Game), Washington Department of Fish and Wildlife (Washington DFW), and the Commission with the results of its monitoring and survey activities required above; and (5) a schedule for filing, with the Fish and Wildlife Service, Idaho Fish and Game,

Washington DFW, and the Commission, site-specific management plans for individual nesting territories that include any proposed measures to reduce bald eagle/human conflicts that may occur on project lands.

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

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 415. Transmission Line Management Plan. Within one year of license issuance, the licensee shall file, for Commission approval, a transmission line management plan, to minimize raptor injuries and mortality and to employ a minimally invasive, non-chemical approach to vegetation management in the transmission line corridor.

The plan shall include, at a minimum: (1) provisions to configure all new or replacement project transmission line structures in accordance with the guidelines set forth in "*Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*," by the Avian Power Line Interaction Committee or comparable publication, as such publications may be updated from time to time; (2) provisions for annually inspecting the project's transmission line during the nesting season and for taking appropriate action to preclude nesting on transmission line structures, including the option of providing nearby nesting platforms; (3) provisions for taking remedial actions in the event of bird injury, mortality, or other indication that a particular transmission line structure poses a threat to raptors; (4) provisions to only remove or suppress (a) plants that are a direct threat to transmission line structures, (b) noxious weeds, or (c) vegetation that must be removed for vehicle or other transmission line construction and maintenance access; (5) provisions to minimize the use of herbicides in removing or suppressing vegetative growth and provisions for using best management practices to control soil erosion; and (6) a schedule for filing monitoring reports with the U.S. Fish and Wildlife Service (Fish and Wildlife Service) and the Washington Department of Fish and Wildlife (Washington DFW).

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

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

Article 416. *Spokane River Developments Recreation Plan.* Within one year of license issuance, the licensee shall file for Commission approval a Recreation Plan to enhance recreation resources at the Spokane River developments. The plan, at a minimum, shall include the following measures:

(1) Identify and develop up to 10 boat-in-only semi-primitive campsites on Lake Spokane, including a map or maps that identify the location of the campsites in relation to the developments' boundary and signage showing the campsites as part of the Spokane River developments. The sign shall meet the requirements of 18 C.F.R. § 8.2 (2008).

(2) Continue to operate and maintain Huntington Park, located at the Monroe Street development, as a natural area/buffer.

(3) At the Nine Mile development: (a) develop an interpretive center and (b) relocate the overlook to accommodate disabled individuals.

(4) At the Spokane House, redevelop the interpretive displays in coordination with the Historic Properties Management Plan required under Article 421.

(5) Immediately upstream from Nine Mile development: (a) identify and develop a boat take-out, and (b) develop a parking area near the boat take-out.

(6) At the Nine Mile Resort, reconfigure the resort as a day-use area with boating access to Nine Mile reservoir.

(7) At the overlook at Long Lake development: (a) redevelop the overlook to blend with the natural surroundings; (b) reconfigure the parking area; and (c) install interpretive signs.

(8) At the river access at Long Lake development: (a) develop a carry-in boat launch immediately downstream from the Long Lake picnic area; and (b) improve the parking area and picnic facilities.

The recreation plan also shall include: (1) conceptual site drawings for each recreation site; (2) a description of soil erosion and sediment control measures to be used where ground-disturbing activities are proposed; (3) a discussion of how the needs of the disabled were considered in the planning and design of the recreation facilities; (4) a provision for trash clean-up and removal; (5) operation and maintenance costs; and (6) an implementation schedule.

The licensee shall develop the plan after consultation with the Washington Department of Fish and Wildlife (Washington DFW), Washington State Parks and Recreation Commission (Washington State Parks), Washington Department of Natural Resources (Washington DNR), and U.S. Fish and Wildlife Service (Fish and Wildlife Service). The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

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

The licensee shall operate and maintain or arrange for the operation and maintenance of the existing and new recreation facilities.

Article 417. Post Falls Development Recreation Plan. Within one year of license issuance, the licensee shall file for Commission approval a Recreation Plan to enhance recreation resources at the Post Falls development. The plan, at a minimum, shall include the following measures:

(1) At Falls Park and Q'emiln Park, specific details for improving the Falls Park and Q'emiln Park existing trail systems, scenic overlooks, and interpretive displays. Details shall also include the length and description of each trail system.

(2) At the Post Falls development, a provision for extending six boat ramps at: (a) Anderson Lake; (b) Sun Up Bay; (c) Lofts Bay; (d) Harrison; (e) Rocky Point; and (f) Chatcolet.

(3) At the Higgins Point Boat Launch, provisions for: (a) constructing a breakwater for the boat launch area; (b) stabilizing the shoreline; and (c) reconstructing the docks at the boat-in-only site.

The plan also shall include: (1) a map or maps that identify the location of three project recreation facilities: Falls Park, Q'emiln Park, and the Trailer Park Wave Access Site; (2) conceptual site drawings for each recreation site; (3) a description of soil erosion and sediment control measures to be used where ground-disturbing activities are proposed; (4) a discussion of how the needs of the disabled were considered in the planning and design of the recreation facilities; (5) a provision for trash clean-up and removal; (6) operation and maintenance costs; and (7) an implementation schedule.

The licensee shall develop the plan after consultation with the Idaho Department of Fish and Game (Idaho Fish and Game), Idaho Department of Parks and Recreation (Idaho DPR), U.S. Bureau of Land Management (BLM), and the Idaho State Historic Preservation Office (Idaho SHPO). The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Trailer Park Wave Access Site Assessment

Within one year of license issuance, the licensee shall, after consultation with Idaho DPR, Idaho Fish and Game, and Kootenai County Parks and Waterways, conduct an assessment at the proposed Trailer Park Wave Access Site, located immediately downstream from Post Falls dam, to determine the feasibility of developing the site for public access; and, if the site is not feasible, identify an alternative boat access site. Amenities at the site shall include parking, a carry-in-only boat launch, a toilet, and signage.

Within 6 months after completion of the assessment, the licensee shall, after consultation with the above entities, file a report for Commission approval that shall include, but not be limited to, a discussion of the results of the assessment, documentation of consultation, copies of recommendations on the completed report after

it has been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated by the report. If the assessment indicates that the Trailer Park Wave Access Site shall be developed as a project facility, the report shall include a discussion of proposed measures, estimated operation and maintenance costs, and a provision to modify the Post Falls development boundary accordingly. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations prior to filing the report with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The report also shall contain a provision for scheduled flow releases to provide whitewater boating at the Trailer Park Wave Access Site. To the extent that the flow releases shall not cause the licensee to violate Condition No. I (Lake Levels and Discharge Flows) of the Idaho water quality certification, the licensee shall release flows for whitewater boating ranging from a minimum flow of 3,300 cubic feet per second (cfs) to a maximum flow of 5,500 cfs from Post Falls dam into the Spokane River. The flow releases and schedule (dates and times) of flow releases, once approved by the Commission, shall be made available to the public via telephone or internet access.

The Commission reserves the right to require changes to the report. The report shall not be implemented until the licensee is notified that the report is approved. Upon Commission approval, the licensee shall implement the report, including any changes required by the Commission.

Revised Exhibit G Drawings

The licensee shall include a provision in the plan for filing revised Exhibit G drawings showing the recreation facilities at Q'emiln Park and the Trailer Park Wave Access Site enclosed within the project boundary.

Operation and Maintenance of Project Recreation Facilities

The licensee shall operate and maintain or arrange for the operation and maintenance of the existing and new recreation facilities.

Article 418. Interpretation and Education Plan. Within one year of license issuance, the licensee shall file for Commission approval an Interpretation and Education Plan. The plan, at a minimum, shall include: (1) a description of interpretive materials informing the public about the Spokane River developments, Post Falls development, and associated environmental resources; (2) a provision for incorporating a bald eagle education and interpretive program; (3) a provision for developing and installing an interpretive display regarding the Ice Age Floods; (4) a provision for incorporating

interpretive materials and/or a program to improve public awareness of and the need to protect historic properties; and (5) an implementation schedule.

The licensee shall develop the plan after consultation with the Washington Department of Fish and Wildlife, Washington State Parks and Recreation Commission, Washington Department of Natural Resources, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, Idaho Department of Parks and Recreation, U.S. Bureau of Land Management, Washington State Historic Preservation Office (SHPO), and the Idaho SHPO. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

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

Article 419. Land Use Management Plan. Within one year of license issuance, the licensee shall file for Commission approval a Land Use Management Plan to protect the scenic quality and environmental resources of the Spokane River and Coeur d'Alene Lake.

The plan, at a minimum, shall include, for project lands and adjacent waters:

- (1) identification of land use management goals;
- (2) a provision for land use categories, with associated acres, that identify and describe the four land use categories as:
 - (i) conservation,
 - (ii) public recreation,
 - (iii) private recreation, and
 - (iv) closed/restricted;
- (3) an identification of allowable and prohibited uses in each land use category;
- (4) a map or maps that identify the land use categories in relation to the Spokane River developments and the Post Falls development project boundaries;
- (5) a provision to control terrestrial noxious weeds, including:
 - (i) specific goals, objectives, and success criteria;
 - (ii) a list of noxious and undesirable plants to be controlled based on any state and county lists of noxious and undesirable plants, and provisions for periodically updating this list; and
 - (iii) proposed methods for controlling noxious weeds and for evaluating the effectiveness of implemented control measures;
- (6) an implementation schedule, including a schedule for filing noxious weed monitoring reports with the U.S. Fish and Wildlife Service (Fish and Wildlife Service), Washington Department of Fish and Wildlife (Washington DFW), the Washington Department of Natural Resources (Washington DNR), Idaho Department of Fish and Game (Idaho Fish and Game), and the Commission; and
- (7) a review and an update of the plan every 5 years.

The licensee shall develop the plan after consultation with the Washington DFW, Washington State Parks and Recreation Commission, Washington DNR, Fish and Wildlife Service, Idaho Fish and Game, Idaho Department of Parks and Recreation, U.S. Bureau of Land Management, and the Coeur d'Alene Tribe. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

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

Article 420. Aesthetic Flows Release. The licensee shall release 46 cubic feet per second from the Post Falls development North Channel dam on Saturdays and Sundays between the hours of 12 noon and 6 p.m. (daily) from Memorial Day weekend through Labor Day of each license year to enhance the aesthetic quality of the North Channel bypassed reach.

In the event that there are conflicts between the requirements of Appendix A, Condition I, and those of this article, Appendix A, Condition I, shall be controlling.

The licensee may temporarily modify the aesthetic flow release if required by operating emergencies beyond the control of the licensee. If the operation is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 421. Programmatic Agreements: (a) The licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission and the Washington State Historic Preservation Officer for Managing Historic Properties that May be Affected by a License Issuing to Avista Corporation for the Continued Operation of the Spokane River Hydroelectric Developments in Spokane, Lincoln, and Stevens Counties, Washington," executed on October 10, 2007. Pursuant to the requirements of this Programmatic Agreement, the licensee shall file for the Commission's approval a final HPMP within one year of issuance of this order. 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 the Commission's approval of the HPMP, the licensee shall obtain approval from the Commission and the Washington State Historic Preservation Officer 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, and;

(b) Except with respect to lands of the Coeur d'Alene Reservation, the licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission, Idaho State Historic Preservation Officer, and Coeur d'Alene Tribal Historic Preservation Officer for Managing Historic Properties that May be Affected by a License Issuing to Avista Corporation for the Continued Operation of the Post Falls Hydroelectric Development in Kootenai and Benewah Counties, Idaho," executed on October 10, 2007. Pursuant to the requirements of this Programmatic Agreement, the licensee shall file for the Commission's approval a final HPMP within one year of issuance of this order, which shall not include lands of the Coeur d'Alene Reservation. 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 shall obtain approval from the Commission, Idaho State Historic Preservation Officer, and Coeur d'Alene Tribal Historic Preservation Officer, 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 422. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall 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 shall 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 shall take any lawful action necessary to correct the violation. For a merited 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 approve 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 facilities are 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 shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall 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 shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

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

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are

located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or 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 submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, 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 shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer; (2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or 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 shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall 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 shall not unduly restrict public access to project waters; and (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 shall 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 shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

Article 423. The Commission reserves the authority, after notice and opportunity for a hearing, to require the licensee to implement additional measures necessary for the protection of natural or cultural resources located on lands affected by the project within the Coeur d'Alene Indian Reservation.

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

(K) The motion for late intervention filed on April 6, 2007, by the Northwest Power and Conservation Council is denied.

(L) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2006), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2008). 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, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Form L-1
(October, 1975)

**FEDERAL ENERGY REGULATORY COMMISSION
TERMS AND CONDITIONS OF LICENSE
FOR CONSTRUCTED MAJOR PROJECT AFFECTING
LANDS OF THE UNITED STATES**

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

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

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

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the

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

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

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project

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

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

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

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

Article 10. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power

and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

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

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

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

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

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

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

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

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

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

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

Article 21. Timber on lands of the United 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 22. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and

to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

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

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

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

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

Article 27. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation,

telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

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

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

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

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

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

APPENDIX A**IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY CERTIFICATION
UNDER SECTION 401 OF THE FEDERAL CLEAN WATER ACT**

Issued June 5, 2008 (filed June 19, 2008)

I. LAKE LEVELS AND DISCHARGE FLOWS**A. Discharge Flows.**

1. Avista's operational target or goal shall be to achieve and then maintain the Lake at full-pool elevation at or near 2,128 feet ("summer full-pool elevation") as early as practicable each year and maintain the Lake elevation at or near 2,128 feet until the Tuesday after Labor Day. After such time, Avista shall initiate draw down of the Lake to an elevation no lower than 2,120 feet 6 inches ("fall draw down"). Lake elevations are to be determined using the USGS gage 12415500 (Coeur d'Alene Lake at Coeur d'Alene, or "Tubbs Hill" gage).

2. Avista shall achieve and maintain the summer full-pool elevation in a manner that is consistent with the Upper Spokane River Rainbow Trout Spawning and Fry Emergence Monitoring and Protection Plan (2004).

3. Beginning June 7 of each year, Avista shall maintain a minimum discharge of 600 cfs from the Project, as measured at the USGS gage 12419000 (Spokane River at Post Falls).

4. Should the lake elevation fall below 2,127 feet 9 inches during July, August, or September prior to the Tuesday following Labor Day ("low flow conditions"), Avista shall reduce the discharge from the Project to 500 cfs, and maintain the discharge at 500 cfs until fall draw down, unless operating for purposes of the monitoring program described in Section B.2. below.

5. Avista shall at all times operate the project to meet the required flows set forth in this certification. Avista shall be deemed in compliance with this condition so long as any short-term deviations are within 25 cfs of the required flows if, at the same time, daily mean flows are within 10 cfs of the required flows. In addition, Avista may deviate from the required flows as a result of the circumstances beyond Avista's reasonable control described in Section VI.B. of this certification. Within seven (7) days of any deviation resulting from such circumstances, Avista shall notify IDEQ of the deviation and the circumstances that caused the deviation.

B. Monitoring Plan Regarding Discharge Flows.

1. Avista shall, after issuance of a New License, develop, in consultation with IDEQ, a Monitoring Plan that includes the elements described below. The Monitoring Plan shall be submitted to IDEQ for approval within six months after issuance of a New License. The purpose of the Monitoring Plan is to evaluate the data and assumptions upon which the required discharge flows are based. The Monitoring Plan shall address the relationship between discharge flows and water temperature in the Spokane River. The Monitoring Plan shall provide for five (5) years of monitoring. The Monitoring Plan shall include a Quality Assurance Control Project Plan ("QAPP"). The QAPP shall include (a) appropriate protocols for flow and temperature measurements, (b) flow monitoring conducted continually from July 1st through September 30th at the following locations, or at alternative locations agree to by IDEQ and Avista; Spokane River at Post Falls (USGS 12419000), Spokane River at Greenacres (USGS 12420500) and Spokane River at Spokane, WA (USGS 12422500), and (c) a description of the manner in which Avista shall, in accordance with the requirements set forth in Section B.2., incrementally increase and monitor discharges during low flow conditions. The QAPP shall be consistent with applicable Idaho water quality law. Upon approval, the Monitoring Plan shall be implemented in accordance with the QAPP for a period of five (5) years, unless IDEQ determines that five (5) full years of monitoring are not necessary.

2. In order to monitor the effects of alternative discharge flows during low flow conditions when the reduction to 500 cfs would otherwise be required by Section I.A.4. of this certification, Avista shall, in accordance with the approved Monitoring Plan, incrementally increase and monitor flows up to 700 cfs during low flow conditions. Avista shall not, however, increase discharge flows above 600 cfs except upon prior notification to, and approval by, IDEQ.

C. Data Review Decision Making.

1. Avista shall provide all raw temperature and flow data collected to IDEQ as soon as practicable after September 30 each year. At the end of the five (5) years, or earlier, if monitoring is terminated by IDEQ, Avista shall submit a report of findings to IDEQ.

2. IDEQ intends to review the annual data and report of findings in coordination and consultation with the Idaho Department of Fish and Game, Washington Department of Ecology, Washington Department of Fish and Wildlife and the Coeur d'Alene Tribe. In addition, prior to making a final decision regarding whether discharge operations require such modification, IDEQ shall

provide for public notice and an opportunity for comment. After such coordination and consultation, IDEQ shall proceed as follows:

- a. Should IDEQ determine the data supports the discharge operations required by Section I.A., Avista shall continue to operate the Project in accordance with Section I.A., except that Avista will no longer be required to implement the alternative discharge flows in Section I.B.2., of this certification. Avista shall notify FERC of IDEQ's decision.
- b. Should IDEQ determine that the discharge operations set forth in Section I.A. require modification; IDEQ shall notify Avista of the required modification and Avista shall thereafter operate the Post Falls facility in compliance with the required modified discharge operations. Avista shall notify FERC of the modifications in operations.
- c. Should IDEQ determine that data are insufficient to make a determination regarding the discharge operations, Avista shall extend the period of data collection until at least two (2) years of data under "low-flow" conditions (when the reduced flow of 500 cfs is implemented) have been collected. Any additional data will be submitted to IDEQ as soon as practicable after September 30 each year. Within ninety (90) days of acquiring the two (2) years of such data, Avista shall submit a supplemental report to IDEQ. IDEQ shall review the supplemental report and data as provided in Section C.2. above and make a determination regarding discharge operations. Avista shall notify FERC of IDEQ's decision.

II. WATER QUALITY MONITORING

A. Avista shall monitor or provide funding to IDEQ for monitoring of water quality parameters in the Spokane River upstream of the Post Falls Dam, and in Coeur d'Alene Lake and any tributaries of Coeur d'Alene Lake. This monitoring will be conducted according to the "*Continued Monitoring of Water Quality Status and Trends in Coeur d'Alene Lake, Quality Assurance Project Plan* (DEQ/Coeur d'Alene Tribe 2007 et seq.) (QAPP) or any revisions to the QAPP. In the event FERC, in the New License, requires Avista to develop a water quality monitoring plan for FERC approval that duplicates the monitoring described herein, the funding provided by Avista herein will be applied towards development of said plan (whether developed by IDEQ or Avista). The funding may also be used for other monitoring consistent with the current or any revised Coeur d'Alene Lake Management Plan objectives, for the term of the New License. Expenditure of the funds on various monitoring projects will be governed by Section VIII.A. of this certification.

B. Avista shall make available \$50,000 annually for the term of the New License to implement the water quality monitoring described in Section II.A. of this certification. The \$50,000 shall be made available on or before July 1 of the first year of the New License, and on or before July 1 every year thereafter for the term of the New License. The funding provided by Avista shall be used to pay for work performed IDEQ or any agreed-upon contractor to the state of Idaho, for the planning, implementing, or reporting components of this condition. Any funds not expended within one (1) year shall carry over and can be used in following years consistent with Section VIII.A. of the certification. Any funds carried over shall be in addition to the annual \$50,000 provided by Avista. The fact that funds have not been expended in one (1) year are carried over and does not diminish Avista's responsibility for providing \$50,000 annually for the life of the New License. Provided, however, funds which are carried over and not expended within five (5) years will no longer be available in accordance with section VIII.A. of the certification. The \$50,000 annual payment shall be adjusted in accordance with Section VIII.B. of this certification.

Avista's internal administrative costs to implement this condition shall be part of Avista's overall costs for license implementation and compliance. The funds described in this Section II.B. shall not be used to support Avista's internal administrative costs to implement this condition.

III. WATER QUALITY IMPROVEMENT AND EROSION CONTROL

A. Avista shall develop and implement a Water Quality Improvement and Erosion Control Plan ("Plan"). The Plan shall include the following components:

1. **Water Quality Improvement and Erosion Control Plan.** Avista shall develop a Water Quality Improvement and Erosion Control Plan that identifies and prioritizes actions to protect and improve water quality associated with the Post Falls Project and protect beneficial uses. Avista shall include in the Water Quality Improvement and Erosion Control Plan site-specific erosion control actions. Consultation with stakeholders through the alternative licensing process ("ALP") has provided guidance regarding potential locations and types of erosion control actions that may be included in the Plan. (Stoker, 2004). The current Coeur d'Alene Lake Management Plan, or any revisions to the Lake Management Plan, may also provide Avista with a set of potential actions that could be implemented to reduce sedimentation, reduce nutrient loading, or improve water quality and protect beneficial uses.

2. **Five (5) Year Plan:** The Plan shall describe prioritized measures to be implemented in the first five-year period following the issuance of the New License.

B. Within the first year after the New License becomes effective, Avista shall develop and submit to IDEQ for approval the Water Quality Improvement and Erosion Control Plan. Upon approval by IDEQ, Avista shall implement the Plan. Every five (5) years after the New License becomes effective and continuing for the term of the license, Avista shall update and revise the Plan to describe those measures to be implemented within the following five (5) years. The updated Plan shall be submitted to IDEQ for approval, and upon approval by IDEQ, shall be implemented by Avista. Avista shall consult with IDEQ annually regarding those measures to be carried out within the year. Implementation of the Plan and expenditure of funds for specific projects will be governed by Section VIII.A. of this certification.

C. Avista will prepare and submit to IDEQ a summary report every five (5) years documenting implementation of the measures described in the Water Quality Improvement and Erosion Control Plan. The report shall be submitted to IDEQ, within six (6) months of the end of each reporting period. The report will summarize the activities conducted under this condition during the preceding five (5) years and the results achieved, the overall results achieved to date (subsequent to first 5-year period), and the general nature of the activities that will be implemented during the next 5-year period.

D. By July 1st after the effective date of the New License, and every July 1st thereafter for the term of the New License, Avista shall make available \$75,000 to implement this condition. Any funds not expended within one (1) year shall carry over and can be used in the following year consistent with Section VIII.A. of this certification. Any funds carried over shall be in addition to the annual \$75,000 provided by Avista. The fact that funds have not been expended in one (1) year and are carried over does not diminish Avista's responsibility for providing \$75,000 annually for the term of the New License. Provided, however, that funds which are carried over and not expended within five (5) years shall no longer be available in accordance with Section VIII.A. of the certification. The funding provided by Avista shall be used to pay for work by Avista, IDEQ or their contractors for planning, implementing, or reporting components of this measure. The \$75,000 annual payment shall be adjusted in accordance with section VIII.B. of this certification.

Avista's internal administrative costs to implement this measure shall be part of Avista's internal costs for license implementation and compliance. The funds described in this Section III.B. shall not be used to support Avista's internal administrative costs to implement this condition.

IV. WETLAND AND RIPARIAN HABITAT PROTECTION AND ENHANCEMENT

A. Avista shall develop and implement a Wetland and Riparian Habitat Protection and Enhancement Plan (Plan). The Plan shall include the following components:

1. **Wetland and Riparian Habitat Protection and Enhancement Plan.** Avista's Wetland and Riparian Habitat Protection and Enhancement Plan shall include actions to identify, evaluate, and undertake wetland and riparian protection, restoration, creation, and enhancement projects. Preference will be given to sites where perpetual protection is possible; to existing wetlands associated with or in proximity to the Project, with an emphasis on those that cannot be easily replaced through mitigation; and to sites that are "in basin" and "in kind" to the Project-affected wetlands.

2. **Five (5) Year Plan.** The Plan shall set forth and describe a prioritized set of measures to be implemented in the first five (5) year period following the effective date of the New License.

B. Within the first year after the effective date of the New License, Avista shall develop and submit the Plan to IDEQ for approval. IDEQ shall consult with the Idaho Department of Fish and Game ("IDFG") regarding the Plan. Once approved by IDEQ, Avista shall implement the Plan. Every five (5) years beginning with the approval of the first Plan and continuing for the term of the New License, Avista shall update the Plan to describe those measures to be implemented within the next five (5) years. The updated Plan shall be submitted to IDEQ, for approval, and upon approval, shall be implemented by Avista. Avista shall consult with IDEQ and IDFG annually regarding those measures to be carried out within the year. Implementation of the Plan and expenditure of funds for specific projects will be governed by Section VIII.A. of this certification.

C. Avista will prepare and submit to IDEQ a summary report every five (5) years documenting implementation of the measures described in the Plan. The report shall be submitted to IDEQ within six (6) months of the end of each reporting period. The report will summarize the activities conducted under this condition during the preceding five (5) years and the results achieved, the overall results achieved to date (subsequent to first 5-year period), and the general nature of the activities that will be implemented during the next 5-year period.

D. By the first July 1st after the effective date of the New License, and every July 1st thereafter for the term of the New License, Avista shall make available \$75,000 to implement this condition. Any funds not expended within one (1) year shall carry over

and can be used in the following year consistent with Section VIII.A. of this certification. Any funds carried over shall be in addition to the annual \$75,000 provided by Avista. The fact that funds have not been expended in one (1) year and are carried over does not diminish Avista's responsibility for providing \$75,000 annually for the life of the New License. Provided, however, that funds which are carried over and not expended within five (5) years shall no longer be available in accordance with Section VIII.A. of this certification. The funding provided by Avista shall be used to pay for work by Avista, IDEQ, or their contractors for the planning, implementing, or reporting components of this condition. The \$75,000 annual payment shall be adjusted in accordance with Section VIII.B. of this certification.

Avista's internal administrative costs to implement this measure shall be part of Avista's internal costs for license implementation and compliance. The funds described in this Section IV.D. shall not be used to support Avista's internal administrative costs to implement this condition.

V. POST FALLS PROJECT SPAWNING AND EMERGENCE FLOWS

A. Avista will comply with the Post Falls Project discharge levels as outlined in the *Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan* ("Plan") (Avista, 2004), or as this Plan may be revised through consultation with cooperating resource agencies and subject to FERC approval, if required. The Plan addresses Project impacts on the aquatic environment and was developed by Avista in consultation with IDFG, the United States Fish and Wildlife Service ("USFWS"), WDFW, and the Coeur d'Alene Tribe for the purpose of maintaining Project flow releases in the Spokane River to protect wild rainbow trout spawning and incubation.

VI. POST FALLS PROJECT RAMPING RATE; OPERATING CONDITION EXCEPTIONS

A. Avista shall maintain a maximum allowable per-hour discharge down-ramping rate at the Project that corresponds to no more than a 4-inch reduction per hour in downstream water levels at the USGS gage located on the Spokane River near Post Falls (USGS Gage No. 12419000). The required discharge down-ramping rates will be determined using USGS rating tables for this gage.

B. Post Falls Project discharge flow conditions and restrictions are required under normal operating conditions. Exceptions to these normal operating conditions include operating emergencies beyond the reasonable control of Avista, such as might occur due to safety concerns or unexpected electrical or mechanical failure. The flow conditions and restrictions may be revised on a temporary basis for other reasons if IDEQ approves the change in operations after consulting with the natural resource and/or public safety agencies, as it deems necessary.

VII. FISHERY PROTECTION AND ENHANCEMENT

A. Avista shall develop and implement a Fishery Protection and Enhancement Plan in accordance with Exhibit 1 of this certification.

VIII. FUNDING

A. Except as otherwise provided in this Section VIII., all funds to be provided by Avista described in this certification will be subject to the cost caps set forth in the certification and will remain in Avista's control until individual measures or activities required by this certification are implemented. Avista will fund individual measures and activities as they are implemented, in accordance with the plans required by this certification, and in coordination with IDEQ and, when applicable, IDFG. All funds required by this certification to carry out measures or activities include the costs of permitting such measures and undertaking any necessary studies and monitoring. If funds are made available for measures or activities conducted IDEQ or IDFG, IDEQ or IDFG shall provide an accounting/invoice to Avista quarterly. Within 30 days of receipt, Avista shall reimburse IDEQ or IDFG for the costs set forth in the accounting/invoice, up to the cost caps set forth in this certification. Funds not expended in a given year will remain available during the subsequent five (5) years and will not bear interest or be further escalated pursuant to Section VIII.B. below. Any funds provided by Avista pursuant to this certification or any funds carried over may be used to carry out and fund any measures set forth in Sections II, III, IV and VII of this certification. Funds carried over and not spent within five (5) years will no longer be available to implement the conditions of the certification.

B. Unless otherwise indicated, all costs or payment amounts specified in dollars shall be deemed to be stated as of the year the New License is issued. Annual funding required by this certification will be adjusted according to a formula agreed to by IDEQ, IDFG, and Avista.

C. In the event conditions in the New License require actions on the part of Avista that duplicate or overlap with the requirements of this certification, IDEQ and Avista shall cooperate to avoid duplication of effort and cost. IDEQ and Avista may agree that actions required by FERC in the New License also fulfill, in whole or in part, certain funding and other obligations required under this certification. In the event IDEQ agrees that there is such overlap or duplication, Avista's obligations under this certification will be proportionately reduced and accounted for in the reports and plans required in this certification.

IX. OTHER PROVISIONS

IDEQ reserves the right to amend this certification as authorized under applicable law if it discovers new information not reasonably ascertainable regarding Project impacts that have a significant adverse effect on water quality which is not addressed in this 401 certification. Avista retains all rights under applicable law to challenge or appeal any attempt by IDEQ to amend this certification. This 401 certification and associated conditions may be appealed by submitting to IDEQ a petition to initiate a contested case, pursuant to Idaho Code section 39-107(5) and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of this letter.

EXHIBIT 1 OF POST FALLS WATER QUALITY CERTIFICATION

A. Fishery Protection and Enhancement Plan. Avista shall develop and implement a Fishery Protection and Enhancement Plan (“Plan”) that includes the following components:

1. The Plan shall identify and describe fish habitat protection and enhancement activities, fish population assessment and monitoring activities, and education/outreach actions that will be implemented over the term of the New License. Potential actions are outlined in the *Coeur d’Alene Lake Basin Bull Trout and Westslope Cutthroat Trout Protection, Mitigation, and Enhancement Implementation Plan* (Kleinschmidt, 2004) (2004 Plan). The 2004 Plan, developed by Avista, technical working groups, and fisheries managers describes a framework for Avista’s participation in basin-wide efforts to improve the aquatic environment for bull trout and westslope cutthroat trout. The 2004 Plan provides for Avista to work with fishery resource managers to select and implement aquatic habitat restoration and restoration measures commensurate with project-related impacts on fishery and aquatic resources. Basin-wide activities include riparian habitat restoration and protection projects; acquisition or other long-term protection of private lands where aquatic habitat important to bull trout and westslope cutthroat trout exists; suppression of exotic species; collection of required or relevant baseline data; fish stocking programs to deflect recreational angling pressure away from wild populations of bull trout and westslope cutthroat trout; and strategies to prevent illegal harvest of wild rainbow trout from the Spokane River.

2. The Plan will identify and describe a prioritized set of measures to be implemented or funded in the first five-year (5) period after the New License becomes effective.

B. Within the first year after the New License becomes effective, Avista shall submit to IDFG, for approval, the Plan that includes the above-described components. IDFG shall consult with IDEQ and USFWS regarding the Plan. Upon approval by IDFG, Avista shall implement the Plan. Within the first five (5) years after the New License becomes effective, Avista will implement at least one enhancement project that improves bull trout habitat. Every five (5) years after the New License becomes effective, and continuing for the term of the New License, Avista shall update and revise the Plan to identify and describe actions to be carried out within the following five (5) years. The updated Plan shall be submitted to IDFG for approval. IDFG shall consult with IDEQ and USFWS before approving an updated Plan. Priority shall be given to projects that enhance benefits for multiple native salmonids. Upon approval of an updated Plan, it shall be implemented by Avista. Avista shall consult with IDFG, IDEQ, and USFWS annually regarding those activities to be carried out within the year.

C. Avista shall prepare and submit to IDFG and IDEQ a summary report every five (5) years documenting implementation of the measures described in the Plan. The report shall be submitted to IDEQ and IDFG within six (6) months following each reporting period. The report will summarize the activities conducted under this measure during the preceding five (5) years and the results achieved, the overall results achieved to date (subsequent to the first five (5) year period), and the general nature of the activities that will be implemented during the next five-year (5) period.

By the first July 1st after the New License becomes effective, and every July 1st thereafter for the term of the New License, Avista shall make available \$150,000 to implement this condition. Any funds not expended within one (1) year shall carry over and can be used in the following year consistent with Section VIII.A. of IDEQ's 401 certification. Any funds not expended for the specific measures outlined in the Plan may also be used in accordance with Section VIII.A. of IDEQ's 401 certification. Any funds carried over shall be in addition to the annual \$150,000 provided by Avista. The fact that funds have not been expended in one (1) year and are carried over does not diminish Avista's responsibility for providing \$150,000 annually for the term of the New License. Provided, however, that funds which are carried over and not expended within the subsequent five (5) years shall no longer be available in accordance with Section VIII.A. of IDEQ's 401 certification. The funding provided by Avista shall be used to pay for work by Avista, IDFG, or their contractors for the planning, implementing, or reporting components of this condition. Avista's internal administrative costs to implement this condition, shall be part of Avista's internal overall costs for license implementation and compliance, and will not be supported by the funding identified above. The \$150,000 annual payment shall be adjusted in accordance with Section VIII.A of IDEQ's 401 certification.

APPENDIX B

WASHINGTON DEPARTMENT OF ECOLOGY CERTIFICATION CONDITIONS UNDER SECTION 401 OF THE FEDERAL CLEAN WATER ACT

Issued May 8, 2009 and filed on May 11, 2009

In view of the foregoing and in accordance with Section 401 of the Clean Water Act (33 USC 1341), RCW 90.48.260 and WAC Chapter 173-201A, Ecology finds reasonable assurance that implementation of the compliance schedule and adaptive management strategy contained in the proposed license will result in the attainment and compliance with state and federal water quality standards and other appropriate requirements of state law provided the following conditions are met. Accordingly, through this Order issued and enforceable under RCW 90.48, Ecology grants Section 401 water quality Certification to the Licensee, Avista Utilities (Avista) for the Spokane River Hydroelectric Project (FERC No. 2545) subject to the following conditions. This Order will hereafter be referred to as the "Certification".

5.1 General Requirements

- A. The Project shall comply with all water quality standards (currently codified in WAC 173-201A), ground water standards (currently codified in WAC 173-200), and sediment quality standards (currently codified in WAC 173-204) and other appropriate requirements of state law that are related to compliance with such standards, as all such standards are applied in this Certification.
- B. Discharge of any solid or liquid waste to the waters of the state of Washington is prohibited, Water Pollution Control Act (RCW 90.48).
- C. In the event of changes or amendments to the state water quality, ground water, or sediment standards, or changes in or amendments to the state Water Pollution Control Act (RCW 90.48), or changes in or amendments to the Federal Clean Water Act, Ecology may by Administrative Order incorporate such provisions, standards, criteria or requirements into this Certification and any attendant agreements, orders or permits, to the fullest extent permitted by law.
- D. The Licensee shall notify Ecology before undertaking any change to the Project or Project operations that might significantly and adversely affect the water quality (including impairment of designated uses) or compliance with any applicable water quality standard (including designated uses) or other appropriate requirement of state law. If, following such notification, Ecology determines that such a change would violate state water quality standards or other appropriate requirements of state law. Ecology reserves the right to condition or deny such change by Administrative Order, in accordance with applicable federal and state law.
- E. This Certification does not exempt compliance with other statutes and codes administered by federal, state, and local agencies.
- F. The Washington State Department of Fish and Wildlife (WDFW) require a Hydraulic Project Approval (HPA) (under 75.20 RCW) for work in waters of the State. The Licensee will obtain an HPA from WDFW for any activity that may affect water quality or designated uses, prior to the beginning of those activities, and must comply with all conditions of the applicable WDFW HPA. To ensure compliance with HPA

requirements, contact WDFW, currently available at: Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501-1091, (360) 902-2200. For further information on HPA requirements and WDFW contacts, visit the following respective web pages: <http://www.wa.gov/wdfw/hab/hpapage.htm>, <http://www.wa.gov/wdfw/depinfo.htm> .

- G. Ecology retains the right by Administrative Order to require additional monitoring, studies, or measures, in consultation with the Licensee, if it determines there is likelihood or probability that violations of water quality standards or other appropriate requirements of state law have or may occur, or insufficient information exists to make such a determination.
- H. Ecology reserves the right to issue Administrative Orders, assess or seek penalties, and to initiate legal actions in any court or forum of competent jurisdiction for the purposes of enforcing the requirements of this Certification.
- I. Ecology retains the right by Administrative Order to modify schedules and deadlines, in consultation with the Licensee, provided under this Certification or provisions it incorporates.
- J. If a conflict or inconsistency arises between this Certification and any Settlement Agreement or any part thereof, the terms of this Certification shall govern.
- K. Ecology reserves the right, if five or more years elapse, between the date this Certification is issued and issuance of the new FERC license for the Project, to issue an Administrative Order declaring that this Certification shall be deemed to be expired and denied at such time, and instructing the Licensee to send Ecology an updated 401 application that reflects the current conditions, regulations and technologies. This provision shall not be construed to otherwise limit the reserved authority of Ecology to withdraw, amend, or correct the Certification before or after the issuance of a FERC license.
- L. This Certification may be modified or withdrawn by Ecology by Administrative Order prior to the issuance of the license based upon significant new information or changes to any Settlement Agreement or water quality standards or appropriate requirements of state law.
- M. Ecology reserves the right to amend this Certification by further Administrative Order if it determines that the provisions hereof are no longer adequate to provide reasonable assurance of compliance with applicable water quality standards or other appropriate requirements of state law. Such determination shall be based upon provisions in the new FERC license or new information or changes in: (i) the construction or operation of the Project; (ii) characteristics of the water; (iii) water quality criteria or standards; (iv) Total Maximum Daily Load (TMDL) requirements; or (v) effluent limitations or other applicable requirements of state law. Amendments of this Certification shall take effect immediately upon issuance, unless otherwise provided in the Administrative Order containing the amendment. Ecology shall transmit such amending orders to FERC to update FERC's records as to the current Certification conditions.
- N. Copies of this Certification and associated permits, licenses, approvals and other documents shall be kept on site and made readily available for reference by the Licensee, its contractors and consultants, and Ecology.
- O. The Licensee shall allow Ecology access to inspect the Project and Project records required by this Certification for the purpose of monitoring compliance with the

conditions of this Certification. Access will occur after reasonable notice, except in emergency circumstances.

- P. The Licensee shall, upon request by Ecology, fully respond to all reasonable requests for materials to assist Ecology in making determinations under this Certification and any resulting rulemaking or other process.
- Q. The conditions of this Certification should not be construed to prevent or prohibit the Licensee from either voluntarily or in response to legal requirements imposed by a court, the FERC, or any other body with competent jurisdiction, taking actions which will provide a greater level of protection, mitigation, or enhancement of water quality or of existing or designated uses.
- R. If an action required under or pursuant to this Certification requires as a matter of federal law that the FERC approve the action before it may be undertaken, the Licensee shall not be considered in violation of these requirements to the extent that FERC refuses to provide such approval, provided that the Licensee diligently seeks such approval and so notifies Ecology.
- S. Any work that is out of compliance with the provisions of this Certification, or conditions that result in distressed, dying or dead fish, or any unpermitted discharge of oil, fuel, or chemicals directly or indirectly into state waters, is prohibited. If these occur, the Licensee shall immediately take the following actions:
1. Cease work at the location of the violation to the extent such work is causing or contributing to the problem.
 2. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
 3. Notify Ecology of the failure to comply.
Spill events shall be reported immediately to Ecology's 24-Hour Spill Response Team at 509-329-3400. Other non-compliance events shall be reported to Ecology's permit manager, or to Ecology's ERO Water Quality Permit Unit Manager.
 4. Submit a detailed written report to Ecology within two weeks 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.
Compliance with these requirements does not relieve Avista from responsibility to maintain continuous compliance with the terms and conditions of this Certification or the resulting liability from failure to comply.
- T. Submittals required by this Certification are summarized in Appendix E. Unless indicated otherwise, submittals shall be sent to the permit manager at the Department of Ecology, Eastern Regional Office, Water Quality Section, 4601 North Monroe, Spokane, Washington 99205-1295.
- U. This Certification addresses work associated with the Project. Any additional work not specified in this Certification that may impact water quality (e.g. hatcheries, riparian habitat restoration projects, etc.) will require attaining of the applicable permits and/or Certifications at the appropriate time. The Licensee shall consult with Ecology to determine whether a specific project triggers the need of additional permits or a new Section 401 Certification. If a project would result in a new discharge or alteration to an

existing discharge that is not specifically addressed in this Certification, it will in most cases require a new Section 401 Certification.

- V. All information prepared or collected as a requirement of this Certification (e.g. plans, reports, monitoring results, meeting minutes, and raw data) shall be made available to the public on the Licensee's website or other readily accessible means. Where data or quantitative analysis is involved, it shall be provided in a format that allows others to efficiently validate and analyze data and results.
- W. Where this Certification refers to "reasonable and feasible" actions and measures, Ecology retains the authority to ultimately determine if an action or measure qualifies as "reasonable and feasible".
- X. Within this Certification, Ecology has required the use of an Adaptive Management process to meet a number of state water quality standards. As used in this Certification, Adaptive Management means an iterative and rigorous process used to improve decision-making and achieve objectives in the face of uncertainty. It is intended to improve the management of natural resources affected by Project in order to achieve desired objectives as effectively and efficiently as possible.
- Y. Ecology acknowledges that Avista reserves the right to appeal to the Pollution Control Hearings Board pursuant to RCW 43.21B, or to any court or other forum of competent jurisdiction pursuant to applicable law, any Administrative Order or civil penalty issued by Ecology relating to this Certification, including the right to challenge Ecology's authority to issue such Administrative Order or penalty. Ecology also acknowledges that Avista reserves the right to appeal to the Hydraulics Appeals Board pursuant to RCW 77.55, or to any court or other forum of competent jurisdiction pursuant to applicable law, any HPA issued by WDFW, and to challenge WDFW's authority to require that Avista obtain an HPA.

5.2 Aesthetic Flow

A. Upper Falls Dam

1. Upon issuance of the new license, and as an interim measure before channel modifications, the Licensee shall provide aesthetic spill through the Upper Falls Dam bypass reach, year-round, for the term of the FERC License, subject to the following qualifications:
 - a) Day-time aesthetic spill of a minimum of approximately 500 cfs shall occur between 6:00 a.m. and one-half hour after sunset. However, when flows are between 800 cfs and 1,000 cfs at the Spokane Gage, the Licensee shall provide approximately 500 cfs through the Upper Falls Powerhouse, and shall provide the remaining flow, with a minimum of 300 cfs, as aesthetic spill through the bypass reach. If flows drop below 800 cfs at the Spokane Gage, the minimum aesthetic spill through the bypass reach will be at least 300 cfs.
 - b) Night-time aesthetic spill of at least 100 cfs shall occur between one-half hour after sunset and 6:00 a.m.
2. Within one year of the issuance of the FERC License, the Licensee shall develop an Upper Falls Aesthetics Spill Plan ("Aesthetic Spill Plan"), in consultation with the

Washington Department of Ecology (“Ecology”) and the Washington Department of Fish and Wildlife (“WDFW”). The purpose of the Aesthetic Spill Plan is to achieve desired aesthetic characteristics similar to or better than those observed at 500 cfs spills, as indicated in the Louis Berger Aesthetic Study Report, by modifying the north and south channels of the Upper Falls bypass reach, subject to the following qualifications:

- a) Day-time aesthetic spill of at least 300 cfs through the Upper Falls bypass reach between 6:00 a.m. and one-half hour after sunset, year-round, for the term of the FERC License. However, if flows drop below 800 cfs at the Spokane Gage, the minimum aesthetic spill through the bypass reach will be at least 250 cfs.
- b) Night-time aesthetic spill of at least 100 cfs shall occur between one-half hour after sunset and 6:00 a.m., year-round, for the term of the FERC License.
- c) A design objective of achieving, through channel modifications, the most desired visual and audible effects similar to or better than those achieved by a spill of 500 cfs through the bypass reach without channel modifications, in part by dividing the aesthetic spill between the north and south channels. A design objective of achieving desirable aesthetic effects at multiple viewpoints of major falls features (e.g., not just the final drops in the north and south channels).
- d) A pilot study to evaluate the effectiveness of potential channel modifications developed and conducted cooperatively and in good faith with interested Stakeholders, including opportunities for public input.
- e) Review and approval by Ecology, in consultation with WDFW, of the proposed channel modifications, including engineering documents describing how the channels will be modified to direct flows, and documentation of the related visual and audible effects.
- f) An inventory and analysis of resources and ecological functions of the impacted channels, and potential impacts of variable flows and rate of flow adjustments. A monitoring plan that examines fish entrainment, stranding and trapping.
- g) A schedule for identifying and securing all permits needed for the pilot study and permanent channel modifications.
- h) A schedule for implementation of any proposed channel modifications.
- i) Following completion of the channel modifications, the falls will be assessed to determine whether the modifications have achieved the design objectives as provided for in subsection 2.c. If it is not mutually agreed upon that the results adequately achieve the design objectives, the Licensee will work in good faith to achieve the design objectives through 1) the implementation of additional channel modifications; and/or 2) aesthetic spill up to 300 cfs (instead of the 250 cfs identified in 2.a).

If the evaluation discussed in subsection 2.f above indicates that significant ecological functions are being negatively impacted by diurnal timing of the flows, the Licensee shall provide to Ecology a plan to address those impacts.

3. In the event the Licensee is unable to complete the channel modifications either due to failure to obtain all the necessary permits, or for other reasons mutually agreed upon, the Licensee shall continue the aesthetic spills identified in 1 above for the term of the FERC license (provided Aesthetic Spill Plan 2.f above is met).

B. Monroe Street Dam

Upon issuance of the new license, the Licensee shall provide aesthetic spill over the Monroe Street Dam, year-round, for the term of the FERC License, subject to the following qualifications:

1. Day-time aesthetic spill of at least 200 cfs shall occur between 10:00 a.m. and one-half hour after sunset.
2. Night-time aesthetic spill of at least 100 cfs shall occur between one-half hour after sunset and 10:00 a.m.

5.3 Aquatic Resources

A. General Conditions

The Licensee shall operate the Project in compliance with the conditions set forth below.

Ecology expects the conditions contained within this section will be adequate to protect aquatic life as required under state law and the Clean Water Act. In the event that the conditions fail, or begin to fail, as determined by Ecology in consultation with WDFW, to adequately protect in a timely manner existing and designated uses or water quality, Ecology reserves the right by Administrative Order to require such reasonable and feasible changes or additions to, the conditions as it determines necessary to address the impacts of Project operations.

Ecology, in consultation with WDFW, reserves the right by Administrative Order to modify the processes or decisions described herein, including timeframes. If timely progress is not made or plans or reports are not timely submitted, Ecology reserves the right to impose penalties.

B. Biological Objectives

Appendix F lists biological and management goals and objectives (Biological Objectives) that Ecology and WDFW have identified for the Spokane River. The Biological Objectives are expected to guide a long-term process for addressing the many factors affecting fish habitat and populations in the Spokane River.

The Biological Objectives are important but not exclusive goals and objectives for the Spokane River. They are not intended to serve as a surrogate for the requirement to support and protect designated uses of the waters. The Biological Objectives are attached to provide context for this Certification. Ecology, in consultation with WDFW, reserves the authority to modify or supplement any of the Biological Objectives.

C. Minimum Discharge Operational Releases for the Protection of Fish

Monroe Street and Upper Falls Dam Operations

Avista shall operate the Monroe Street and Upper Falls facilities as provided in this condition to discharge the following minimum flows as measured at the Spokane River at Spokane Gage (USGS 12422500) during the specified times of the year:

June 16 - September 30	850 cfs
October 1 - March 31	1,100 cfs

The minimum discharge flows included in this condition are based on recommended flows necessary to protect rainbow trout and mountain whitefish habitat.

1. However, should the instantaneous flow at that gage fall below 850 cfs, Avista shall collect pertinent data to verify that during the period(s) when 850 cfs flows are not being met, changes in the storage of water behind the Monroe Street and Upper Falls Dam is not occurring due to the operations of those dams. However, minor changes in storage or flows that are necessary to meet aesthetic spill requirements shall not be considered a change in storage or flows for the purpose of this condition. In addition, short-term changes due to safety, emergencies, or mechanical failure beyond the Licensee's control, shall not be considered a change in storage or flows for the purposes of this condition.
2. When the daily average discharge is below 850 cfs for more than five consecutive days at the Spokane Gage (USGS 12422500), Avista shall convene with Ecology for the purpose of reviewing the data and other information to determine whether flows at the Spokane Gage are below 850 cfs due to discharges from Avista's Post Falls, Idaho facility.

If it is determined that the low flows are due to the operation of Avista's Post Falls, Idaho facility, Avista and Ecology will convene with IDEQ to determine if Avista should alter Post Falls' discharge flows/levels and timing to meet the 850 cfs flow at the Spokane Gage. Any alteration of discharge flows/levels and timing at Avista's Post Falls, Idaho facility shall be made pursuant to the process and terms set forth in Idaho's 401 Certification, and Avista shall implement any such alteration.

Spawning Flow Requirement (April 1 - June 15):

Spawning flows shall be determined based on a quantitative analysis of spawning habitat, spawning success, and population response to flow alterations in the lower Spokane River. This analysis is described in Condition D.2.

Relationship to the Idaho 401 Certificate:

The minimum discharge provisions in this 401 Certification apply to the Monroe Street and Upper Falls Dams. Although the Avista Post Falls, Idaho facility is the first control structure on the Spokane River system, the operation of the Post Falls, Idaho facility is subject to the Idaho 401 Certification and the terms and conditions of the final FERC license for that facility. Nothing in this Certification is intended as a condition on the Post Falls facility.

Pursuant to the section 401 certification of the State of Idaho issued on June 5, 2008, for the Post Falls facility, Avista is required to complete certain monitoring studies on how incremental increases of flow in specified summer periods will affect temperature and

water quality, including temperature and water quality downstream in the State of Washington. Avista shall provide Ecology and the FERC with copies of all reports and other submittals relating to such monitoring studies at such time as they are submitted to the State of Idaho. If the section 401(a)(2) process of the CWA relating to the Post Falls certification is triggered by the State of Washington, the FERC shall condition the related license “in such manner as may be necessary to insure compliance with applicable water quality standards.”

D. Fisheries

The Spokane River dams influence aquatic conditions in the reservoirs including habitat types, species composition and abundance, and harvest opportunities. Discharge operations influence spawning success, rearing habitat, population abundance, and harvest opportunities in the river. Development and implementation of the following measures, is required:

1. Upper Falls Dam

Avista shall conduct a three-year baseline assessment to provide information pertinent to understanding potential effects of the proposed operational change related to aesthetic flows, on resident fish.

The baseline assessment shall include data analyses of the fish population between Upper Falls Dam and Upriver Dam for three years: specifics include the calculation of indices and statistics related to species composition, abundance catch per unit effort (CPUE), age, growth, and condition. This assessment shall begin in year two of the FERC license.

2. Monroe Street Dam to the Nine Mile Dam Pool

Operation of the dams on the Spokane River influences flows, bedload movement and spawning success. The river portion between Monroe Street dam and the Nine Mile dam pool includes spawning habitat important to native trout.

Additional information is needed to better understand how the following specific factors relate to trout spawning success between Monroe Street dam and the Nine Mile dam pool. Within two years after issuance of the new FERC license (except for subparagraph d), below), the Licensee shall in consultation with WDFW and Ecology:

- a) Quantify the quality and quantity of trout spawning habitat: determine the most productive and least productive spawning areas by developing quality strata at all flow/discharge elevations.
- b) Quantify spawn to emergence success: determine survival from egg to emergence by strata using artificial redd construction. Correlate egg-to-emergence survival for each stratum with corresponding flow/discharge and include velocity, depth, and temperature as variables.
- c) Quantify redd dewatering at different flow/discharge elevations for each habitat quality stratum.
- d) Determine redband trout abundance estimates annually (for 10 years) to assess year class association with flow/discharge levels. Correlate year class strength with flow/discharge and egg to emergence survival. Determine overall spawning success with regard to flow/discharge levels and timing.

Once this information is gathered and provided to Ecology and WDFW, Avista shall, in consultation with Ecology, and WDFW, develop an adaptive management plan to be approved by Ecology regarding discharge flows/levels and timing to improve spawning success and produce successful year classes consistent with the Upper Spokane River Rainbow Trout Spawning and Fry Emergence Plan and pursuant to the Idaho 401 certification.

In addition, implementation measures may result from the Monroe Street Dam Sediment Management Plan as it relates to downstream spawning habitat.

E. Non–Native Aquatic Invasive Plants

The Licensee shall develop a Lake Spokane Aquatic Weed Management Program in conjunction with FERC, WDFW and Ecology for review and approval within one year of issuance of the FERC license. The Program shall include but not be limited to:

1. Cooperation/Coordination

The development of monitoring plans to identify, design, and implement an agreed upon in-field action to control the spread and occurrence of Eurasian watermilfoil with a primary focus on access sites.

The Licensee will also work with the cooperating parties to monitor and control the other existing exotic aquatic weeds and any new exotic aquatic weeds that may become established. This may also include educating the public and area landowners about the threats posed by the spread of aquatic weeds and the appropriate means of limiting their spread or reducing their occurrence.

2. Site-specific Weed Control

Specific in-field weed control actions supported by or implemented under this Program may include but not be limited to any or all of the following: mechanical removal of plants, bottom barriers, chemical treatments, biological treatments, and Project operational measures. It is anticipated that, as new technologies for weed control are developed, they will be implemented when and where appropriate.

The Licensee will work with and coordinate Project operational measures related to this Program with the cooperating parties. This includes scheduled drawdowns of Lake Spokane on a multi-year (2 to 4 year) cycle of up to 10 to 14 feet (levels necessary) to accommodate the installation, maintenance and/or replacement of bottom or physical barriers with the cooperating parties. The Licensee shall target anticipated periods of below-freezing temperatures during the months of January or February for these scheduled drawdowns in order to accomplish more reservoir-wide aquatic weed control as outlined below.

3. Weed Control Lake Drawdowns

In addition to scheduled drawdowns associated with placement and maintenance of bottom barriers or other site-specific weed control efforts, the Licensee shall also implement lake drawdowns for the specific purpose of aquatic weed control. Ecology recognizes that winter drawdowns have varying rates of success due to the amount of the exposed lake bed, duration of exposure, presence of springs, and weather conditions at the time of drawdown. This type of operational measure will entail periodic winter drawdowns of Lake Spokane specifically

intended to take advantage of freezing conditions that can kill or otherwise adversely affect the exposed aquatic weeds on a reservoir-wide basis.

In order to maximize the effectiveness of these drawdowns for reservoir-wide weed control purposes, the Licensee will seek to:

- Achieve a 13-14 foot drawdown in order to maximize the amount of exposed aquatic weeds;
- Achieve the desired drawdown level at a time when an extended period of below-freezing temperatures are anticipated;
- Maintain the desired drawdown level for a sufficient period of time to achieve the desired adverse effects on the targeted weed species (i.e. freezing and mortality of the plants); and
- Conduct these types of drawdowns on a frequency sufficient to maintain at least a moderate level of ongoing aquatic weed control in the exposed areas (i.e., between 0-14 foot depths) as determined appropriate by follow-up monitoring of weed response and subsequent reestablishment.

4. Monitoring

Monitoring plans specific to evaluating bottom barriers and drawdowns will be developed and implemented. The cooperating parties will select representative sites (reservoir-wide and at the public access sites) to assess the effectiveness of the weed control strategies (e.g. bottom barriers and winter drawdowns). An initial base-line assessment will be conducted at the sites to assess weed species occurrence, stem densities, plant heights, etc.

Water level, air temperature, subsurface temperature, and other relevant variables will be monitored and recorded during the lake drawdowns done for weed control.

One year after the weed control strategies are implemented, associated sites will be reassessed to evaluate weed species occurrence and density. Following this, periodic monitoring will be conducted as identified in the monitoring plans. The monitoring results will be included in the annual report and will be used in the decision-making process for future years.

5. Nine Mile Reservoir

The Licensee shall also discuss non-native invasive aquatic plant issues regarding Nine Mile reservoir in the Lake Spokane Aquatic Weed Management Program. Avista shall monitor Nine Mile reservoir for non-native aquatic plants during even-numbered years. If non-native plants are detected within the Nine Mile reservoir, Avista shall develop a revised monitoring and control plan within one year of detection.

6. Reporting

The Licensee will prepare an annual report that summarizes the activities conducted in the previous year and results that were achieved for submission to Ecology. The report will include discussions on the effectiveness of the weed control efforts that have been implemented and any proposed changes or adjustments and will be used to guide weed control efforts for the upcoming year.

F. Sediments

1. Monroe Street Dam

Sediment and dredging activities at Monroe Street Dam shall be evaluated to ensure compliance with state water quality standards and to protect downstream beneficial uses.

This Certification shall apply to all of Avista's dredging activities that occur at Monroe Street Dam pursuant to the current Army Corps of Engineers permit #1997-4-0098, and to all future 404 permits issued by the Corps of Engineers for Avista's dredging activities at Monroe Street Dam during the term of the new FERC license; provided, however, that this Certification shall not apply to any 404 permit issued after the effective date of a change in applicable water quality standards.

Prior to the first dredging activity after issuance of the FERC license, the Licensee shall develop a Sediment Management Plan to be approved by Ecology in consultation with WDFW that addresses the periodic removal of sediments behind the Monroe Street Dam, the placement of the sediments below the dam or off-site, long-term monitoring, and the predredge sampling requirements identified below.

The Licensee shall provide Ecology with at least 2 business days written notice prior to undertaking any dredging.

The Licensee shall provide sample results from the sediments that it expects to remove from behind the dam prior to the first and second dredging activities after issuance of the FERC license, and prior to the first dredging activity that takes place on or after every tenth anniversary of issuance of the FERC license. The Licensee shall also provide sample results from sediments in advance of other dredging activity if Ecology determines that a spill or other event that has occurred upstream of the dam is likely to result in deposition of sediments behind the dam that exceed water quality standards, or if the results from the last sampling event indicate that the sediments exceeded water quality standards.

The Licensee shall provide the following information to Ecology at least 2 business days prior to any dredging, based on pre-dredge sediment samples taken from the dredging area behind the dam:

- A characterization of the hydrological event(s) responsible for the deposits;
- A determination of the size-class of the sediments;
- An analysis of the chemical composition of the sediments;
- A volumetric estimate of the sediments that are to be, removed, and placed downstream;
- The expected dates and duration of each dredging occurrence; and
- A description of the type(s) of equipment expected to be used for moving the, sediments and method of placement if applicable.

Sixty days after dredging, the licensee shall submit a post dredging assessment that addresses dredging results and sediment redistribution for activities listed in the aforementioned dredging schedule. Information provided by these assessments may be used to supplement the Monroe Street Dam to the Nine Mile Dam Pool studies identified in Section 5.3.D. If the sample results indicate that the sediments exceed applicable water quality standards, the Licensee will manage the sediments in accordance with the Sediment Management Plan to protect downstream beneficial uses. Nothing in the Sediment Management Plan shall prevent Ecology from requiring another party responsible for an upstream spill or other event that triggers pre-dredging sampling by Avista to sample and/or clean up sediments from behind the dam in accordance with existing law.

2. Nine Mile and Long Lake Reservoirs

The Licensee shall prepare a sediment management plan for Nine Mile and Long Lake Reservoirs as described in the Final EIS, Spokane River and Post Falls Hydroelectric Projects. This plan shall be submitted for approval to Ecology within four years of issuance of the FERC license. The plan shall address:

- Sediment transport and the impacts to the river system
- Sediment characterization
- A process for regular monitoring of sediments trapped by the developments/dams
- Document the current deposition and transport rates and patterns in the reservoirs including the effect of the dams on how sediment is stored in the reach
- A plan for final disposition of sediments
- Develop and implement a Sediment Management Plan to enhance fish and wildlife habitat in Nine Mile Reservoir and Lake Spokane

G. Wetlands

The applicant provided no data to determine pre-project existence of wetlands along the Spokane River between Nine Mile Dam and Lake Spokane Dam. However, a cursory wetlands inventory was developed by the applicant for the relicensing process.

In its relicensing application, the applicant proposed to purchase a piece of property roughly 47 acres in size along Lake Spokane for the purpose of protecting high quality wetlands (PM&E SRP-TR-1).

Because of a lack of baseline data, a comparative analysis was performed between wetlands present along the free-flowing reaches of the river and wetlands present downstream of Nine Mile Dam. Both acreage and type of wetlands were analyzed. This in no way accounts for what has been lost or converted along the entire system through inundation or altered flow regimes, but does attempt to restore diversity of wetlands and wetland functions below Nine-Mile Dam to present day levels. Nor does it accurately reflect lost function which serves as the basis for determining mitigation ratios.

Based on the Parametrix inventory (Table 3-1), the following types of wetlands exist along the free-flowing stretches of the river and Lake Spokane.

Table 5-1 Existing Wetlands along the Spokane River

Type	Spokane River	Lake Spokane
Palustrine acres	138	92
Lacustrine acres	0	373
Riverine acres	6	0
Total	144	465
River miles	27.5	23

Table 5-2 Acres of Palustrine Wetlands along the Spokane River

Type of wetland	Spokane River acreage	Lake Spokane acreage
Acres Palustrine – scrub-shrub	39	12
Acres Palustrine – forested	60	10
Acres Palustrine – forested cottonwood	5	0
Acres Palustrine - emergent	36	70

The existing acreage of Palustrine wetland per river-mile is:

Table 5-3 Acreage of Palustrine Wetland per River Mile

Type	Spokane River	Lake Spokane
Ac/mile Scrub Shrub	1.42	.52
Ac/mile Forested	2.18	.43
Ac/mile Forested Cottonwood	.19	0
Ac/Mile Emergent	1.31	2.95

Based on the present day ratios along free flowing stretches of Spokane River, Palustrine wetlands along the Lake Spokane reach would be expected to compare in the following manner:

Table 5-4 Comparison of Acreage that should Exist and Acreage that Does Exist.

	<u>Expected</u> acreage along Lake Spokane based on river ratios	<u>Existing</u> acreage along Lake Spokane	<u>Acreage Gained (+) or Lost(-)</u>
Scrub Shrub	32.66	12	-20.66
Forested	50.14	10	-40.14
Forested Cottonwood	4.37	0	- 4.37
Emergent Other	0	22.66 *	+22.66
Total Acreage			-42.51

*There is presently 68 acres in the emergent category; however, because the creation was the result of dam operation, Ecology guidance is to apply a ratio of 1:3 for this wetland category. For three acres currently present, one acre of credit will be given for mitigating losses (68x.33 – 22.66).

The Licensee shall, in collaboration with Ecology, develop a site-specific wetland creation, restoration, enhancement, and protection plan (“Wetlands Plan” or “Plan”) based on the conditions specified below and the *Guidance on Wetland Mitigation in Washington State*, Ecology publication 04-06-013a.

The Wetland Plan(s) shall be completed and submitted to Ecology for approval prior to the end of the third year following the issuance of this Certification.

The Wetland Plan(s) shall include, but not be limited to, schedules, developmental plans, permitting, construction, operation and maintenance and monitoring plans.

Access and acquisition to all properties identified for wetland protection, creation, restoration or enhancement shall be completed no later than five years following the issuance of this Certification.

The Licensee shall acquire, restore and/or enhance a minimum of 42.51 acres of wetlands downstream of Nine Mile Dam (42.51 was rounded down due to baseline data limitations). The primary objective is to create proportions of wetland type based on existing proportions along free-flowing stretches of the Spokane River:

- Scrub shrub – 37%
- Forested – 58%
- Forested/Cottonwood – 5 %

Mitigation credit will be applied in the following manner:

Table 5-5 Credit for Type of Mitigation

Type of Mitigation	Acreage proposed	Credit toward the 42.51 acres
Enhancement/Restoration	1	1
Creation	1	1
Preservation (must include long term protection tools. i.e. easements, etc)	10	1

Note: The ratios proposed are conservative when compared to existing state policy because the baseline data is so general in nature. For example, forested wetlands in particular tend to provide higher and more diverse ecological function, and therefore tend to rate higher under the Eastside Rating System upon which replacement ratios are based. All forested wetlands within a floodplain are Category 2 wetlands, but may have higher functional scores that warrant Category 1 rating. Ecology guidelines state that Category 2 forested wetlands should be replaced, in-kind, at ratios of between 4:1 to 16:1. The specific ratio depends on the type of mitigation proposed, but in any case these ratios assume that the replacement wetlands are of the same type and quality as those lost. Using this ratio would make such a project economically infeasible and unreasonable from a practicality standpoint. However, more appropriate ratios would be required if a detailed historical analysis had been performed including field verification and functional assessments of comparison reaches.

1. Buffers and uplands at mitigation sites may be considered as part of the mitigation package. Credit is determined on a case-by-case basis in accordance with Guidance on Wetland Mitigation in Washington State, Ecology publication 04-06-013a.
2. Nothing shall prohibit the applicant from proposing to fulfill its mitigation requirements within the immediate vicinity of the confluence of the Spokane River and the Little Spokane River, and/or the confluence of Hangman Creek and the Spokane River.
3. Nothing shall prevent the applicant from proposing "In-Lieu of" mitigation, or utilizing mitigation bank credits.

5.4 Total Dissolved Gas

A. General Conditions

The Project shall not cause any exceedances of the TDG water quality criteria as specified in WAC 173-201A 030 (5)(c)(iii) and 173-201A-060 (4)(a) in any waters of the Project.

The Licensee shall provide a TDG monitoring plan for Ecology review and approval within one year of license issuance and each year thereafter to be submitted yearly with the annual monitoring report.

The TDG monitoring plan shall include a quality assurance portion with a description of compliance locations, short-term and long term studies, monitoring and a schedule (see section 5.10).

B. 7Q10

The Project shall meet water quality standards of 110 percent saturation for TDG at the tailrace for Nine Mile and Long Lake Dams.

Provided that all reasonable and feasible operational efforts to minimize TDG exceedances are made, compliance with the 110 percent TDG criterion does not apply when: Flows exceed the rate equivalent to the 7Q10 flows as defined in WAC 173-201A-060(4)(a). The 7Q10 flow for the Spokane River at Long Lake Dam and Nine Mile Dam is 32,000 cfs.

C. Nine Mile Dam

The Licensee shall monitor TDG in the forebay and near the end of the aerated zone (the area of bubble entrainment and dissipation) of Nine Mile Dam. The Licensee shall collect TDG data for two years when flows occur during the 7Q10 median flow of 25,400 cfs or higher at the Spokane gage (USGS 12422500). The flows may or may not be consecutive years. If within these two years, the data show that Nine Mile Dam is not exceeding the 110 percent TDG criterion then Ecology will consider the dam in compliance with the 110 percent water quality standards criterion for TDG of 110 percent saturation and may allow the Licensee to cease or reduce this monitoring.

If any modifications to the dam such as construction (i.e. installation of a rubber dam), the Licensee shall collect TDG data for two years when flows occur during the 7Q10 median flow of 25,400 cfs or higher at the Spokane gage (USGS 12422500) after such installation or construction has occurred. The flows may or may not be consecutive years.

The Licensee shall develop a compliance schedule if Nine Mile Dam is creating TDG greater than 110 percent.

Within six months of the discovery of any exceedance of the 110 percent TDG criterion caused by spill, the Licensee shall submit a TDG Water Quality Attainment Plan (TDG WQAP) to Ecology for review and approval. The TDG WQAP plan shall include:

1. A description of standard Dam operations with regard to minimizing TDG associated with spills;
2. A description of how the Licensee will minimize all spills that produce TDG exceedances at the Dam;
3. An evaluation of all reasonable and feasible potential and preferred structural and/or operational improvements to minimize TDG production;
4. A timeline showing when operational adjustments will occur;
5. A schedule for construction, if appropriate; and
6. Monitoring plans to further evaluate TDG production and to test effectiveness of gas abatement controls at the Dam.

The Licensee shall operate according to the approved TDG WQAP with the objective of eliminating TDG exceedances.

Upon approval of the TDG WQAP, the Licensee shall immediately begin the necessary steps identified in the TDG WQAP to eliminate TDG criteria exceedances.

If monitoring to test the effectiveness of gas abatement controls implemented through the TDG WQAP shows the TDG abatement measures identified in the Plan and subsequently employed are not successful in meeting the TDG water quality criteria at the end of the ten year compliance period, and the Licensee is unable to meet water quality standards after evaluating all reasonable and feasible alternatives under WAC 173-201A-510(5)(g), then the Licensee will propose an alternative action to achieve compliance with the TDG standards, such as new reasonable and feasible technologies or other options to achieve compliance with the standards, a new compliance schedule, or other alternatives as allowed by WAC173-201A-510.

D. Long Lake Dam

The Licensee shall monitor TDG in the forebay or generation plume and near the end of the aerated zone (the area of bubble entrainment and dissipation) of Long Lake Dam upon issuance of the FERC license.

The Licensee shall monitor for TDG to assess gas production from Long Lake Dam during flows close to the 7Q10.

Within one year of the issuance of the FERC license, the Licensee shall develop a compliance schedule and TDG Water Quality Attainment Plan for Long Lake Dam for Ecology review and approval. The plan shall include:

1. Submit to Ecology a Detailed Phase II Feasibility and Implementation Plan based on Long Lake Dam TDG Abatement Initial Feasibility Study Report. Avista may request a special temporary permit to spill from Long Lake Dam to achieve higher spill closer to the 7Q10. This does not guarantee that Ecology will grant this special permit. Ecology must first consult with other agencies and the Spokane Tribe before doing so;
2. A description of standard Project operations with regard to minimizing TDG associated with spills;

3. A description of how the Project will minimize all spills that produce TDG exceedances at the Project;
4. An evaluation of all potential and preferred structural and operational improvements to minimize TDG production;
5. A timeline showing when operational adjustments will occur;
6. A schedule for construction; and
7. Monitoring plans to further evaluate TDG production and to test effectiveness of gas abatement controls.

The Project shall operate according to the approved TDG WQAP with the objective of eliminating TDG exceedances.

Upon approval of the TDG WQAP, the Licensee shall immediately begin the necessary steps identified in the TDG WQAP to eliminate TDG criteria exceedances.

If monitoring to test the effectiveness of gas abatement controls implemented through the TDG WQAP shows the TDG abatement measures identified in the Plan and subsequently employed are not successful in meeting the water quality criterion within the ten year compliance period, and the Licensee is unable to meet water quality standards after evaluating all reasonable and feasible alternatives under WAC 173-201A-510(5)(g), then the Licensee will propose an alternative action to achieve compliance with the standards, such as new reasonable and feasible technologies or other options to achieve compliance with the standards, a new compliance schedule, or other alternatives as allowed by WAC173-201A-510.

5.5 Temperature

A. General Conditions

The primary purpose of the following conditions is to achieve water quality, protect aquatic uses, and achieve numeric criteria for temperature. The Project shall comply with the standards found in WAC 173-201A, as further described in this Certification.

If at the end of the ten year compliance period, the Licensee is unable to meet water quality standards, after evaluating and implementing all reasonable and feasible alternatives under WAC 173-201A-510(5)(g), then the Licensee will propose an alternative action to achieve compliance with the standards, such as new reasonable and feasible technologies or other options to achieve compliance with the standards, a new compliance schedule, or other alternatives as allowed by WAC173-201A-510.

B. Lake Spokane

The Licensee shall develop a temperature Water Quality Attainment Plan (WQAP) for review and approval by Ecology within 18 months of FERC license issuance, in accordance with WAC 173-201A-510(5), that provides a detailed strategy for maintaining the highest attainable water quality condition to best protect the biota with respect to temperature that is reasonable and feasible to achieve in the Long Lake Dam reservoir and tailrace. Any operational or structural change that conflicts with other conditions of this Certification requires prior approval by Ecology.

The WQAP shall also identify a temperature regime that is reasonably and feasibly achievable based upon such evaluation, such that the summer temperature discharge from the Dam is not increased from current levels. Ecology recognizes that a trade-off

between surface temperature and downstream temperatures may be required (i.e. discharging the preferred cooler waters from deep in a reservoir as opposed to mixing in the reservoir).

Thus, when it is not reasonable and feasible to meet the temperature criteria both upstream and downstream, the intent is to find the balance where biological protection would be optimized.

If at the end of the ten year compliance period, the Licensee is unable to meet water quality standards, after evaluating and implementing all reasonable and feasible alternatives under WAC 173-201A-510(5)(g), then the Licensee will propose an alternative action to achieve compliance with the standards, such as new reasonable and feasible technologies or other options to achieve compliance with the standards, a new compliance schedule, or other alternatives as allowed by WAC173-201A-510.

5.6 Dissolved Oxygen

A. General Conditions

The primary purpose of the following conditions is to achieve water quality numeric criteria for DO, in order to protect beneficial uses. The Project shall comply with the standards found in WAC 173-201A, as further described in this Certification.

Upon completion of the ten year compliance period, the Licensee shall operate the Project in full compliance with the state water quality standards.

Ecology is developing a Total Maximum Daily Load for Dissolved Oxygen in the Spokane River (DO TMDL). As part of that process, Ecology will determine the Project's contribution to the DO problem in the Spokane River, and the Licensee's proportional level of responsibility for control measures.

B. Long Lake Dam

The Licensee shall submit to Ecology a Detailed Phase II Feasibility and Implementation Plan based on the Long Lake HED DO Aeration Study within one year of license issuance, choosing one or several options to implement. The plan shall contain:

- Anticipated compliance schedule for conducting preliminary and final implementation plans; and
- A monitoring plan to evaluate compliance (including avoidance of super-saturation) and coordinate results with the DO TMDL efforts.

C. Lake Spokane

After EPA's approval of the DO TMDL, Ecology will amend this Certification by Administrative Order to require the Licensee to develop, within two years of the effective date of the amendment, and FERC has issued the new license, a DO WQAP for review and approval by Ecology, in accordance with WAC 173-201A-510(5).

The DO WQAP will provide a detailed strategy to address the Licensee's proportional level of responsibility, based on its contribution to the dissolved oxygen problem in Lake Spokane as determined in the DO TMDL.

The DO WQAP shall include, at a minimum, the following elements:

- Implementation plan – A plan to analyze, evaluate and implement reasonable and feasible measures to improve dissolved oxygen conditions in Lake Spokane, based on the DO TMDL. The Licensee's commitments shall be sufficient to

address its proportional level of responsibility, based on its contribution to the dissolved oxygen problem in the Lake. Any operational or structural change that conflicts with other conditions of this Certification requires prior approval by Ecology.

- Schedule – A compliance schedule for implementation that to the degree reasonable and feasible, is synchronized with the milestones and assessments of the DO TMDL for the Spokane River and that does not exceed ten years (WAC 173-201A-510(5)).

If, at any time during the ten year compliance period, the Licensee demonstrates to Ecology's satisfaction that the Project is able to address and continue to address the Licensee's proportional level of responsibility as determined in the DO TMDL consistent with the provisions of this Certification, Ecology may make appropriate changes to reduce or ease the burden of reporting and monitoring requirements.

If at the end of the ten year compliance period, the Licensee is unable to address its proportional level of responsibility as determined in the DO TMDL, after evaluating and implementing all reasonable and feasible alternatives under WAC 173-201A-510(5)(g), then the Licensee will propose an alternative action to achieve compliance with the DO TMDL, such as new reasonable and feasible technologies or other options to achieve compliance with the DO TMDL, a new compliance schedule, or other alternatives as allowed by WAC173-201A-510(5)(g).

5.7 Turbidity

The primary purpose of the following conditions is to achieve water quality numeric criteria for turbidity measured in NTUs, while protecting aquatic uses. The Project shall comply with the standards found in WAC 173-201A, as further described in this Certification. Upon completion of the compliance period, the Licensee shall operate the project in full compliance with the state water quality standards.

5.8 Spills

The primary purpose of the following conditions is to achieve water quality numeric criteria for water quality, while protecting aquatic uses. The Project shall comply with the standards found in WAC 173-201A, as further described in this Certification. Upon completion of the compliance period, the Licensee shall operate the project in full compliance with the state water quality standards.

A. General Oil Spill Prevention & Control Conditions (applies to all four projects)

1. No oil, fuel or chemicals shall be discharged into waters of the state, or onto land with a potential for entry into waters of the state as prohibited by Chapter 90.56 RCW and Chapter 90.48 RCW.
2. Wash water containing oils, grease or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal, and shall not be discharged into state waters.
3. Any visible floating oils released from project operation, maintenance activities or construction must be contained and removed from the water.
 - a) In the event of a discharge of oil, fuel or chemicals in state waters, or onto land with a potential for entry into state waters, immediately begin and complete containment and clean-up efforts, taking precedence over normal work. Clean-

up shall include proper disposal of any spilled material and used clean-up materials.

- b) Spills into state waters and spills onto land with a potential for entry into state waters, or other significant water quality impacts, shall be reported immediately (within one hour) to the Department of Ecology, Eastern Regional Office at (509) 329-4000 (24-hour phone number).
 - c) The Licensee shall participate in the Incident Command System (ICS) whenever a Unified Command is established in response to a spill incident that involves or potentially impacts one or more Projects.
 - d) Do not use emulsifiers or dispersants in state waters including water contained in sumps or other areas that discharge to sumps or the Spokane River.
 - e) Project Operators shall be familiar with and trained on use of oil spill cleanup materials. In the event of a spill, properly dispose of used/contaminated materials and oil and as soon as possible restock new supplies. Include records of proper disposal in the oil consumption records and keep copies of disposal records of contaminated cleanup supplies on-site and available for inspection by Ecology.
 - f) Install, or have on-site to deploy, stair cases, ladders, etc., which will allow oil spill response personnel to safely reach areas that could, in the event of an oil spill, need to be accessed to deploy sorbent pads, boom material or other clean-up equipment.
 - g) Following all spills into state waters, or onto land with a potential for discharge to state waters, the Licensee will provide a written follow-up report to Ecology's Eastern Regional Office within 15 days of the incident. The report shall include a copy of the Licensee's Spill Report Form, a description of the incident, response actions taken and any spill prevention measures taken or recommended to prevent similar spills.
 - h) Within 90 days, the Licensee shall identify and map floor drains in each Project. Post these maps at each Project in a conspicuous location for use by Operators and other personnel in the event of a spill. Floor drains that are no longer needed shall be blocked or sealed.
4. Oil, fuel and chemical storage containers, containment areas, conveyance systems and oil-filled operating equipment.
- a) Within 180 days, the Licensee shall provide Ecology with oil inventory lists and diagrams noting location of containers and oil-filled operating equipment holding less than 55-gallons of oil. The Project-specific oil inventories shall include location, type of container, number of containers, volume per container, total shell volume, spill potential, type of oil, PCB content and direction of flow in the event of a spill. Project-specific diagrams should note location of these containers and oil-filled equipment and general oil spill flow direction;
 - b) The Licensee shall keep records of the amounts of oil used on-site for all project equipment containing or using oil. These records shall be kept on-site and available for inspection by Ecology;
 - c) Provide proper containment around each storage container (including transformers) or around a combination of storage containers as appropriate. Proper containment equals the volume of the largest container plus 10 percent;

- d) Provide appropriate level markings for all oil gauges (including sight-glass gauges) to ensure Project Operators and maintenance personnel can easily identify an unusual condition;
- e) Check all fuel and lubrication hoses, oil drums, oil or fuel transfer valves and fittings, etc., for drips and leaks daily. Maintain and properly store them to prevent spills into state waters;
- f) Inspect equipment containing oil and view oil-level gauges daily;
- g) Provide full oil spill containment capacity plus 10 percent when working on oil-containing equipment that might spill or drip oil.

5. Sumps

- a) Visually inspect sumps daily or immediately if oil is suspected to be present, such as in the event of an oil level alarm or other indication that oil could reach the sump. Any oil detected in the sumps requires immediate cleanup and Emergency Management Division (EMD) and National Response Center (NRC) notification.
- b) Immediately repair oil leaks that are of sufficient volume to reach the sump and that cannot be contained by placing a container underneath the leak.
- c) Provide water-proof lighting in the sumps or spotlights adequate to observe oil sheens on the surface of the water in the sumps.
- d) Within 90 days, the Licensee shall develop an annual maintenance schedule for cleaning the sumps to remove all oil and oil residue from walls, piping and other structures in contact with sump water and provide that schedule to Ecology.

6. Transformers

- a) Verify that transformer containment areas are impervious and fill cracks, caulk pipe penetrations or otherwise ensure that containment areas will contain spills.
- b) Conduct daily inspections of transformer containment areas.
- c) Obtain prior approval from Ecology before breaching containment areas for reasons other than containment area maintenance.
- d) Conform to industry standards, use Best Management Practices or utilize other control measures for protecting water quality and preventing and containing oil spills when conducting in-place maintenance work on transformers, transporting transformers and transferring transformer oil.

7. Stormwater Pollution Prevention and Containment Area Management

- a) The Licensee will utilize Best Management Practices or other control measures to prevent any oil-contaminated stormwater on the Project site from entering state waters.
- b) Stormwater in transformer and oil-filled operating equipment containment areas will be monitored for the presence of oil. If oil is present, the oil-contaminated stormwater shall not be discharged to the ground or state waters but properly disposed of and recorded.
- c) Discharge of non-contaminated stormwater from containment areas will be also recorded. Records of all stormwater removed or discharged from containment areas will be kept on-site and available for inspection by Ecology.

- d) Snowy or icy conditions require close and at minimum daily inspection of containment areas and containment drains. Remove any observed stormwater pooling in containment areas as per condition 8 (b)/(c).

8. Other

- a) Maintain site security at the Projects to reduce chance of oil spills.
- b) The Licensee shall coordinate spill response planning and response efforts with other oil-handling facilities and spill response agencies on the Spokane River, such as, through participation in the Ecology-initiated Spokane River Response Group, a component of the Columbia-Snake River Spill Response Initiative (CSRSRI).
- c) Compliance with these conditions does not relieve the Licensee from responsibility to maintain continuous compliance with terms and conditions of this Certification or resulting liability from further failure to comply.

B. Facility-Specific Oil Spill Prevention & Control Conditions

1. Upper Falls Dam

- a) The Licensee shall comply with its most recent/current version of the Spill Deterrent Control & Countermeasure (SDCC) Plan for this Project. The Licensee shall provide Ecology, Eastern Regional Office, with copies of its most up-to-date SDCC Plan.
- b) Within 30 days, the Licensee shall evaluate measures (including the plugging of floor drains and equipment vault openings) to prevent oil spilled inside the powerhouse from discharging to the Spokane River. Proposed measures to prevent spilled oil from discharging to the Spokane River shall be submitted to Ecology, Eastern Regional Office, for approval.
- c) Within 30 days, the Licensee shall modify the metal cover over the trough where turbine pit water flows (located in the room adjacent to station service transformers) prior to discharge to the Spokane River to allow easy access for opening to facilitate inspection and access in the event of a spill.
- d) Within 60 days, the Licensee shall amend the SDCC Plan as appropriate to be consistent with the conditions of this Certification and specifically to include:
 - The correct agency notification procedures (page 12 SDCC) per state and federal law; and,
 - Written procedures for oil transfers (non-tank truck transfers) to equipment and oil drip collection.

2. Monroe Street Dam

- a) The Licensee shall comply with its most recent/current version of the Spill Deterrent Control & Countermeasure (SDCC) Plan for this Project. The Licensee shall provide Ecology, Eastern Regional Office, with copies of its most up-to-date SDCC Plan.
- b) Sorbent material, such as a ten foot section of sausage boom, shall be deployed continuously in the sump. A mechanism, such as rope, should be used to facilitate deployment and retrieval of the boom in the sump. The boom should be removed whenever oil is detected in the sump or on the boom, or when the boom has become water-saturated and is no longer effective in collecting oil.

- c) Within 30 days, the Licensee shall provide Ecology with an evaluation of the need for containment for the station service transformer located east of the Project roof deck to prevent a release of oil from flowing into the Spokane River under adverse weather conditions.
- d) Within 60 days, the Licensee shall amend the SDCC Plan as appropriate to be consistent with the conditions of this 401 Certification and specifically to include:
 - The correct agency notification procedures (page 12 SDCC) per state and federal law;
 - Written procedures for oil transfers (non-tank truck transfers) to equipment and oil drip collection; and
 - Inspection checklists (similar to the Long Lake SPCC Plan).

3. Nine Mile Dam

- a) The Licensee shall comply with its most recent/current version of the Spill Prevention Control & Countermeasure (SPCC) Plan for this Project. The Licensee shall provide Ecology, Eastern Regional Office, with copies of its most up-to-date SPCC Plan.
- b) Sorbent material, such as a ten foot section of sausage boom or bilge pillows, shall be deployed continuously in the sump. A mechanism, such as rope, should be used to facilitate deployment and retrieval of the sorbent material. The sorbent material should be removed whenever oil is detected in the sump or on the sorbent material, or when it has become water-saturated and is no longer effective in collecting oil.
- c) Within one year, the Licensee shall pressure wash the sump when it is dewatered for cleaning including the removal of sediment. The Licensee shall have the sediment tested for the presence and concentration of petroleum products and report those results to Ecology.
- d) Within 30 days, the Licensee shall evaluate and report to Ecology regarding the adequacy of the containment structures for the transformer located at the northwest corner of the powerhouse, and outside the building (2.3/115kV Transformer #1).
- e) Within 30 days, the Licensee shall evaluate the containment structure under the transformer in the Main Entrance Substation (13.8/115kV Transformer) and report to Ecology the method of detecting and removing stormwater.
- f) Within 60 days, the Licensee shall amend the SPCC Plan as appropriate to be consistent with the conditions of this Certification and specifically to include:
 - The correct agency notification procedures (page 11 SPCC Plan) per state and federal law;
 - Revisions to the section addressing secondary containment for the headgate hydraulic oil reservoirs on the Power House Roof;
 - Revised written procedures for oil transfers (non-tank truck transfers) to equipment and oil drip collection; and
 - Inspection checklists (similar to the Long Lake SPCC Plan).

4. Long Lake Dam

- a) The Licensee shall comply with its most recent/current version of the Spill Prevention Control & Countermeasure (SPCC) Plan for this Project. The Licensee shall provide Ecology, Eastern Regional Office, with copies of its most up-to-date SPCC Plan.
- b) Drums and containers of oil located in the Wheelroom shall be staged on containment pallets (as stated on page 8 of the SPCC Plan).
- c) Every effort shall be made to keep grease on the wicket gate control wheels from discharging to the turbine pits. Sorbent material deployed in the turbine pits should be removed and properly disposed of whenever grease is observed on the material.
- d) Sorbent material, such as a ten foot section of sausage boom, shall be deployed continuously in the sump. A mechanism, such as rope, should be used to facilitate deployment and retrieval of the boom in the sump. The boom should be removed whenever oil is detected in the sump or on the boom, or when the boom has become water-saturated and is no longer effective in collecting oil.
- e) Within 30 days, the Licensee shall provide Ecology a plan addressing containment for the two transformers located in the Switchyard to prevent a release of oil from flowing down to the parking lot area west of the powerhouse that at times is under water during high flows.
- f) Within 60 days, the Licensee shall amend the SPCC Plan as appropriate to be consistent with the conditions of this Certification and specifically to include:
 - The correct agency notification procedures (page 14 SPCC Plan) per state and federal law; and
 - Revised written procedures for addressing oil transfers (non-tank truck transfers) to equipment (including the tug boat kept on Long Lake) and oil drip collection.

5.9 Construction Projects, Miscellaneous Discharges and Habitat Modifications

The following applies to all over-water or near-water work related to the Project that can impact surface or ground water quality. This includes, but is not limited to, construction, operation, and maintenance of fish collection structures, generation turbines, penstocks, transportation facilities, portable toilets, boat ramps, transmission corridors, structures, and staging areas. This also includes emergencies for all activities related to Project operation.

- A. If water quality exceedances are predicted as being unavoidable during construction or maintenance of a project, a short term modification must be applied for in writing to Ecology at least three months prior to project initiation. If any project has a long term impact on a regulated water quality parameter, characterization monitoring must be performed for the impacted parameter(s), and a monitoring plan must be outlined in the Water Quality Protection Plan discussed below. This may require additional management practices to minimize impacts of the license period.
- B. A Water Quality Protection Plan (WQPP) shall be prepared, and followed for all Project related work that is in or near water that has the potential to impact surface and/or ground

water quality. The WQPP shall include control measures to prevent contaminants from entering surface water and groundwaters, and shall include, but not be limited to, the following elements:

1. A Stormwater Pollution Prevention Plan (SWPPP) shall specify the Best Management Practices (BMPs) and other control measures to prevent contaminants entering the Project's surface water and groundwaters. The SWPPP shall address the pollution control measures for the Licensee's activities that could lead to the discharge of stormwater or other contaminated water from upland areas. The SWPPP must also specify the management of chemicals, hazardous materials and petroleum (spill prevention and containment procedures), including refueling procedures, the measures to take in the event of a spill, and reporting and training requirements.
2. An In Water Work Protection Plan (IWWPP) shall be consistent with SWPPP and shall specifically address the BMPs and other control measures for the Licensee activities that require work within surface waters.

Turbidity and dissolved oxygen shall be monitored upstream of the location where in-water construction is taking place and at the point of compliance (as defined in WAC 173-201A-110) during construction. Samples shall be taken at a minimum of once each day during construction in or adjacent to any water bodies within the Project area that may be affected by the construction. The IWWPP shall include all water quality protection measures consistent with a Hydraulics Project Approval (HPA) for the Project.

3. The WQPP shall include procedures for monitoring water quality, actions to implement should water quality exceedances occur, and procedures for reporting any water quality violations to Ecology. The WQPP shall include all water quality protection measures consistent with a HPA for the Project. The WQPP shall be submitted to Ecology for review and approval at least three months prior to Project initiation and a copy of the WQPP shall be in the possession of the on-site construction manager and available for review by Ecology staff whenever construction work is under way.
4. When a construction project meets the coverage requirements of the National Pollutant Discharge Elimination System (NPDES) permit and Stat Waste Discharge General Permit for Stormwater Discharges associated with construction activity, the Licensee shall, at Ecology's discretion, either apply for this permit and comply with the terms and conditions of the permit or apply for and comply with the terms of an individual NPDES permit.

C. Best Management Practices

1. Work in or near the reservoir, water within the dam, the river, or any wetlands shall include all reasonable measures to minimize the impacts of construction activity on waters of the state.

Water quality constituents of particular concern are turbidity, suspended sediment, settleable solids, oil and grease, and pH. These measures include use of Best Management Practices (BMPs) to control erosion and sedimentation, proper use of chemicals, oil and chemical spill prevention and control, and clean up of surplus construction supplies and other solid wastes.

2. During construction, all necessary measures shall be taken to minimize the disturbance of existing riparian, wetland, or upland vegetation.

3. All construction debris shall be properly disposed of on land so that the debris cannot enter a waterway or cause water quality degradation to state waters. Retention areas or swales shall be used to prevent discharging of water from construction placement areas.
4. The Licensee shall ensure that any fill materials that are placed for the proposed habitat improvements in any waters of the State do not contain toxic materials in toxic amounts.

5.10 Water Quality Monitoring

A. Quality Assurance Project Plan

Within 60 days after the new license is issued, the Licensee shall prepare a water quality monitoring and quality assurance project plan (QAPP) for each parameter to be approved by Ecology. Ecology requests coordination with the Licensee to locate its monitoring locations prior to the development of the QAPP.

Monitoring occurring in Long Lake related to dissolved oxygen and temperature parameters will be located in similar locations identified in the Ecology document Data Summary: Spokane River and Lake Spokane (Long Lake) Pollutant Loading Assessment for Protecting Dissolved Oxygen August 2003 Publication No.03-03-023 to maintain consistency in monitoring for the future of the DO TMDL and compliance points. This document can be found online at <http://www.ecy.wa.gov/biblio/0303023.html>.

The QAPPs shall follow the Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (July 2004 Ecology Publication Number 04-03-030) or its successor.

The QAPPs shall contain, at a minimum, a list of parameter(s) to be monitored, a map of sampling locations, and descriptions of the purpose of the monitoring, sampling frequency, sampling procedures and equipment, analytical methods, quality control procedures, data handling and data assessment procedures, and reporting protocols.

B. Updates

The Licensee shall review and update the QAPPs annually based on a yearly review of data and data quality. Ecology may also require future revisions to the QAPP based on monitoring results, regulatory changes, changes in project operations and/or the requirements of Total Maximum Daily Load. Implementation of the monitoring program shall begin as soon as Ecology has provided the Licensee with written approval of the QAPP. Changes to the QAPP need written approval by Ecology before taking effect. Ecology may unilaterally require implementation of the QAPP.

C. Reporting Results

Water quality monitoring results, along with a summary report, shall be submitted by March 1st of each year to the Department of Ecology, Eastern Region Office. Ecology will use the monitoring results to track the project's progress toward meeting and remaining in compliance with state water quality standards.

D. Duration

The monitoring without specific limiting timelines required under this Certification shall continue throughout the life of the new license and any subsequent renewals of that license, unless modified by Ecology

5.11 Penalties and Appeals

Any person who fails to comply with any provision of this Certification shall be liable for criminal and civil penalties under state and/or federal law.

This Certification may be appealed. The appeal must be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington 98504-0903 within thirty days of receipt of this Order. At the same time, the appeal must also be sent to the Department of Ecology, Eastern Regional Office, North 4601 Monroe, Spokane, Washington 99205-1295. An appeal alone will not stay the effectiveness of this Certification. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Chapter 43.21B RCW.

APPENDIX C**CONDITIONS FILED BY THE U.S. FOREST SERVICE
PURSUANT TO SECTION 4(e) OF THE FPA**

Filed May 4, 2007

(adopting as final conditions those filed on August 18, 2006)

Condition No. 1 – USDA Forest Service Approval of Final Design

Before any construction of the recreation improvements specified in PF-REC-2 at Bell Bay Campground, Medimont Recreation Area, and Rainey Hill Recreation Area occurs on National Forest System (“NFS”) lands, the Licensee shall obtain the prior written approval of the USDA Forest Service for all final design plans for such improvements that the USDA Forest Service deems as affecting or potentially affecting NFS resources. The Licensee shall follow the schedules and procedures for design review and approval as specified by the USDA Forest Service, including in any required construction temporary special use authorization. As part of such prior written approval, the USDA Forest Service may require adjustments in final plans and facility locations to preclude or mitigate impacts and to assure that the improvements are compatible with on-the-ground conditions. Should such necessary adjustments be deemed by the USDA Forest Service, the Commission, or the Licensee to be a substantial change, the Licensee shall follow procedures of standard L-Form Articles 2 and 3 of the license.

Condition No. 2—Indemnification

The Licensee shall indemnify, defend, and hold the United States harmless for any damages or losses sustained by the United States during construction of the recreation improvements specified in PF-REC-2 at Bell Bay Campground, Medimont Recreation Area, and Rainey Hill Recreation Area and for judgments, claims, or demands assessed against the United States during the construction of such recreation improvements, in connection with the construction of such improvements; provided, however, that the provisions of this condition do not apply to any damages, judgments, claims, or demands arising out of the sole negligence or willful misconduct of the United States or other third parties outside of the Licensee's control. The Licensee's indemnification of the United States shall include, but not be limited to, any loss by personal injury, loss of life and damage to property during the construction of such recreation improvements in connection with the construction of such improvements. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, and other mitigation; fire suppression and other types of abatement costs; third party claims and judgments; and all administrative costs, interest, and other legal expenses. The Licensee's liability hereunder shall be limited to reasonable

damages, costs, claims, and judgments. Upon surrender, transfer, or termination of the license, the Licensee's obligation to indemnify, defend, and hold the United States harmless hereunder shall survive for all valid claims that arose prior to such surrender, transfer, or termination.

Condition No. 3—Damage to Land, Property, and Interests of the United States

The extent of the Licensee's liability for fire and other damages to National Forest System lands shall be determined in accordance with standard L-Form Articles 22 and 24 of this license.

Condition No. 4—Risks and Hazards

As part of its occupancy and use of National Forest System (“NFS”) lands in association with its partial funding of the construction of the recreation improvements as specified in PF-REC-2 at Bell Bay Campground, Medimont Recreation Area, and Rainey Hill Recreation Area, the Licensee has a continuing responsibility during such construction to reasonably identify and report to the USDA Forest Service all known or observed hazardous conditions on or directly affecting such NFS lands that would affect the recreation improvements, resources, or pose a risk of injury to individuals. Licensee will abate those conditions, except those caused by third parties or not related to the construction of the recreation improvements. Any non-emergency actions to abate such hazards on NFS lands shall be performed after consultation with the USDA Forest Service. In emergency situations, the Licensee shall notify the USDA Forest Service of its actions as soon as possible, but not more than 48 hours, after such actions have been taken. Whether or not the USDA Forest Service is notified or provides consultation, the Licensee shall remain solely responsible for all abatement measures performed. Other hazards shall be reported to the appropriate agency as soon as possible.

APPENDIX D**CONDITIONS FILED BY THE U.S. DEPARTMENT OF INTERIOR
PURSUANT TO SECTION 4(e) OF THE FPA**

Filed January 27, 2009

1. Implementation of Conditions

- A. The Licensee shall implement these Final § 4(e) Conditions consistent with the terms of the Settlement Agreement Addressing Federal Power Act Section 4(e) Conditions for Spokane River Project, FERC No. 2545, among the United States Department of the Interior acting through and on behalf of the Bureau of Indian Affairs, the Coeur d'Alene Tribe, and the Avista Corporation (4(e) Agreement). Implementation Plans required by Conditions 4 through 8 shall be developed in collaboration with the Coeur d'Alene Tribe (Tribe) and shall include:
1. Scientifically rigorous and current methodologies;
 2. Reasonably specific program goals;
 3. Criteria by which to measure progress towards program goals;
 4. Adaptive management to achieve stated goals by redirecting effort as necessary;
 5. Schedule for implementation of activities to achieve goals; and
 6. A monitoring plan to evaluate progress towards achievement of goals.
- B. The Licensee shall develop any amendments to approved Plans required by Conditions 4 through 8 in collaboration with the Tribe. In accordance with Condition 3 B, such amendments shall be submitted for review and approval by the Secretary of the Department of the Interior (DOI) (Secretary) and thereafter the Commission as part of an Annual Implementation Report.

2. Coeur d'Alene Reservation Trust Resources Restoration Fund and Inflation Protection Account

- A. Creation of CDR Fund and Schedule of Deposits
1. Within 33 days of license issuance, the Licensee shall deposit \$10 million into a Coeur d'Alene Reservation Trust Resources Restoration Fund (CDR Fund). The CDR Fund shall be established as an investment account held by the Licensee at an accredited financial institution or investment management firm agreeable to the Tribe. The Licensee shall develop investment criteria agreeable to the Tribe to guide reasonable and prudent management of this account. Those criteria shall seek relatively safe

investments that offer a higher return than federal government securities. Any accrued interest and/or investment gains shall be credited to and reinvested in the CDR Fund. The Licensee shall provide to the Tribe on a monthly basis a statement of account showing all account activities relating to, and the balance of monies held in, the CDR Fund. If the License as it pertains to the Post Falls Hydroelectric Development is terminated or surrendered, or at the end of the license term as extended by any annual licenses, the Licensee shall transfer all remaining funds in the CDR Fund to the Tribe to address natural and/or cultural resources on the Reservation affected by the Project, and the Licensee shall have no further payment obligation to the CDR Fund.

2. The Licensee shall make deposits to the CDR Fund on each anniversary of the initial \$10 million deposit, pursuant to the following schedule: \$2 million each year for years 2 through 33 of the license; \$1.5 million each year for years 34 through 49 of the license; and \$0 for year 50 of the license. The Licensee shall also deposit \$2 million into the CDR Fund on the anniversary date of the initial \$10 million deposit for any annual licenses issued upon expiration of the license. These payments and the amount specified in Condition 2 B 1 represent the limit of the Licensee's obligation to provide funding or expend funds, as specified in part D below, to implement Conditions 3 through 8. If any of the payments required are not paid within 30 days of the due dates specified above, interest shall accrue at the rate specified in 18 C.F.R. § 35.19a(a)(2)(iii) (2008) owing on the unpaid amount from the specified due date until paid.

B. Creation of IPA and Schedule of Deposits

1. Within 33 days of license issuance, the Licensee shall deposit \$2 million into an Inflation Protection Account ("IPA"). Funds in the IPA shall be guaranteed by the Licensee to yield a gain of 5.5 percent per year. The Licensee shall provide to the Tribe an annual statement of the account balance. If the License as it pertains to the Post Falls Hydroelectric Development is terminated or surrendered, the Licensee shall transfer all remaining funds in the IPA to the Tribe to address natural and/or cultural resources on the Reservation affected by the Project and the Licensee shall have no further payment obligation to the IPA.
2. All funds shall remain in the IPA for a period of at least twenty (20) years from the date of the initial \$2 million deposit. At the end of such 20-year period, the Licensee, with the written approval of the Tribe, shall transfer all accrued interest in the IPA to the CDR Fund. Following such 20-year period and during the remaining years of the license term, the Licensee,

with the written approval of the Tribe, shall transfer annually accrued interest in the IPA to the CDR Fund. At the beginning of the last year of the license term, the Licensee shall transfer the initial \$2 million deposit and any accrued interest to the CDR Fund.

C. Disbursements

If the Licensee, the Tribe, and/or DOI files a request for rehearing as specified in Section 5.4.2 of the 4(e) Agreement, the Licensee shall make the initial deposits to the CDR Fund and the IPA within the timeframes specified above. If the Licensee obtains a stay of Conditions 4 through 8, no disbursements or payments shall be made from the CDR Fund or the IPA for the period specified in Section 5.6 of the 4(e) Agreement. In the event the 4(e) Agreement is terminated as specified in Section 5.5 of the 4(e) Agreement, the Licensee's initial deposits into the CDR Fund and IPA, and all interest and investment gains accrued therein, shall revert to the Licensee upon such termination.

D. Use of CDR Fund

1. The Licensee shall use the CDR Fund to develop the Erosion Inventory and Assessment, Erosion Control Implementation Plan, Water Quality Monitoring Plan, Initial Cultural Resource Response Program, Cultural Resources Management Plan, Aquatic Weed Management Plan, and Wetland and Riparian Habitat Plan required by Conditions 4 through 8, and any revisions thereto (collectively "Plans"). Subject to Condition 2 D 2, the Licensee shall use the CDR Fund to implement only those work activities specified, budgeted for, and approved by the Secretary, in either the above Plans or an Annual Implementation Report developed by the Licensee in collaboration with the Tribe pursuant to Condition 3. Use of any funds in excess of amounts budgeted for such activities must be approved by the Secretary. The Licensee shall give preference to the Tribe, if qualified and available, when contracting with others to implement Conditions 4 through 8 using the CDR Fund.
2. The CDR Fund may be used for the following only upon mutual agreement by the Licensee and the Tribe, subject to approval by the Secretary: (1) preparing an Annual Implementation Report pursuant to Condition 3; (2) compensation of the Licensee for undertaking activities to implement Conditions 4 through 8; and (3) fulfilling additional obligations imposed by DOI under Section 3.3 of the 4(e) Agreement.
3. The Licensee shall not use the CDR Fund for the following: (1) the Licensee's administrative, legal, and overhead costs associated with the

management of the CDR Fund and IPA; (2) conceptual planning and budgeting for annual work activities to be included in an Annual Implementation Report developed pursuant to Condition 3; and (3) any additional costs incurred by the Licensee in complying with license obligations due to the failure of the Tribe or other contractor, or the Licensee's employees, undertaking activities to implement Conditions 4 through 8 to complete those activities.

3. Section 4(e) Annual Implementation Reports

- A. Within 135 days of license issuance, the Licensee shall file with the Commission for approval an Annual Implementation Report, which shall be developed in collaboration with the Tribe. Thereafter, the Licensee shall file with the Commission for approval an Annual Implementation Report by June 30 or other date as mutually agreed to by the Licensee, the Tribe, and the Secretary every year during the term of the license and any subsequent annual licenses. The Licensee shall submit the Report to the Secretary for review and approval at least 45 days before filing it with the Commission. When filing the Annual Implementation Report with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Annual Implementation Report with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. Implementation of annual work activities set forth in the Report shall commence upon approval of the Report by the Secretary and the Commission.
- B. The Annual Implementation Report shall describe: (1) the work accomplished during the previous year in implementing approved Plans required by Conditions 4 through 8, as applicable, including itemized expenditures of monies in the CDR Fund; (2) progress made toward the goals of such conditions; (3) a work plan of specific activities, including a schedule, performance standards, success criteria, monitoring and an estimated budget, for the upcoming year and the ensuing four years; (4) proposals to redirect effort including proposed amendments to approved Plans and justification, per adaptive management; and (5) any transfers from the IPA to the CDR Fund.
- C. All activities, work plans, and CDR Fund expenditures included in or derived from any Annual Implementation Report, shall be consistent with approved Plans required by Conditions 4 through 8. If the Licensee and the Tribe are unable to agree on activities, work plans, or CDR Fund expenditures to be undertaken pursuant to an Annual Implementation Report, they shall use the dispute resolution procedures set forth in Section 7 of the 4(e) Agreement.

4. Coeur d'Alene Reservation Lake and Tributary Shoreline Erosion Control**A. Erosion Inventory and Assessment**

Within two (2) years of license issuance, the Licensee shall file with the Commission for approval an Erosion Inventory and Assessment, which shall be prepared in collaboration with the Tribe. The Licensee shall submit the Erosion Inventory and Assessment to the Secretary for review and approval at least 45 days before filing it with the Commission. When filing the Assessment with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Assessment with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so.

The Erosion Inventory and Assessment shall identify and assess all shoreline erosion occurring on lands within the Reservation that are held in trust for the Tribe by the United States, up to and including the 2,128-ft elevation Project boundary, and on any affected uplands contiguous thereto.

The Erosion Inventory and Assessment shall include:

1. A list containing all existing erosion sites individually identified and numbered;
2. A map indicating the boundaries of each identified erosion site;
3. A complete physical description of each identified erosion site including the following:
 - a. measured dimensions, including shoreline length, height and depth, of the current and estimated future extent of erosion;
 - b. an assessment of the potential cumulative effects of erosion control measures on cultural resources, terrestrial, aquatic, riparian, and wetland habitats, water quality, and transport and deposition of heavy metals;
 - c. an assessment of the potential for erosion control measures to cause additional erosion at other locations and, if so, recommendations to prevent such additional erosion;
 - d. a geotechnical characterization of the site and an assessment of site stability and factors contributing to instability;
 - e. a minimum of one relocatable topographic survey transect;
 - f. photographic documentation;
 - g. an elevation profile showing the 2,128-ft elevation and any affected

- h. uplands contiguous thereto; and
 - h. identification of any cultural resources present and the degree to which they are affected by current erosion.
- 4. A prioritized list of recommended erosion control sites on the St. Joe River and/or Coeur d'Alene Lake that comprise a total of approximately 50% of the total linear feet of all erosion sites on the St. Joe River.

B. Erosion Control Implementation Plan

Within eighteen (18) months after Commission approval of the Erosion Inventory and Assessment under part A of this condition, the Licensee shall file with the Commission for approval an Erosion Control Implementation Plan, which shall be prepared in collaboration with the Tribe. The Licensee shall submit the Plan to the Secretary for review and approval at least 45 days before filing it with the Commission. When filing the Plan with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Plan with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The Licensee shall implement the Plan upon its approval by the Secretary and the Commission.

The Plan shall provide for the remediation of Project-caused erosion through either:
1) erosion control at sites determined under part A(4) of this condition; or
2) restoration or replacement of some or all of these sites with equivalent lands under part C of this condition.

The Erosion Control Implementation Plan shall include:

- 1. Erosion control designs for those sites identified under part A(4) of this condition that the Licensee and the Tribe mutually agree upon. Each erosion control design, wherever possible, shall employ bioengineering measures rather than rip-rap, restore the habitat type and ecological function that existed prior to erosion, and protect the eroded area and immediately adjacent area from further erosion. Each erosion control design shall include the following:
 - a. Scale drawings and cross-sectional profile views of each erosion control design as an overlay on existing topographic surface transects;

- b. An estimate of the treatment surface area, and the type and quantity of treatment material;
 - c. An estimate of the longevity of the erosion control design and the frequency for reconstruction, if necessary, during the term of the license and any annual licenses;
 - d. A detailed description of, and a cost estimate for, all construction, as well as required pre-construction activities, including but not limited to, permitting, right-of-way acquisitions, cultural resource surveys, and other required approvals and authorizations to implement the erosion control design, along with a schedule for implementation;
 - e. A detailed description of, and cost estimate for, all maintenance and monitoring activities for each erosion control design, including:
 - (1) a description of the monitoring techniques to assess the performance of the erosion control design, including but not limited to, photographic documentation, repeat shoreline profile transect surveys, and repeat vegetation survival and stem density measurements where revegetation is part of the erosion control design; and
 - (2) a description of the potential maintenance activities needed and the criteria used to determine when maintenance will be performed, including any estimated reconstruction described in part B(1)(c) of this condition.
 - f. Subject to part B(2) of this condition, a schedule for construction of all erosion control designs, with all construction completed within ten (10) years after Commission approval of the plan. After completing construction of each erosion control design, the Licensee shall provide as-built plans to the Tribe.
2. Documentation of any determination by the Tribe that preparation of an erosion control design for any identified site: (i) is not feasible, practical or desirable, and that restoration or replacement of equivalent lands should occur under part C of this condition; or (ii) should be deferred until the effects of erosion control designs implemented under this condition are evaluated.

3. Identification of any erosion control site for which the Licensee will not prepare an erosion control design, but will instead acquire lands for restoration or replacement under part C of this condition. The Licensee shall include a description of the shoreline length, surface area, habitat type, and ecological function associated with any acquired lands, and a justification for why such lands are an appropriate substitute for the sites identified under this paragraph.

C. Tribal Acquisition and Operation and Maintenance of Replacement Lands

1. If the Tribe determines, pursuant to part B(2)(i) of this condition, that preparation of an erosion control design for any identified erosion site is not feasible, practical or desirable, the Licensee shall use the CDR Fund for the Tribe's acquisition of land, preferably on the Reservation, to restore or replace an equivalent amount of shoreline length or surface area, habitat type and ecological function based on the estimated extent of future erosion at the identified site. The Licensee shall receive credit for any land acquired for this purpose upon completion of any needed restoration activities on the acquired lands.
2. If lands acquired for purposes of this condition are within the Project Boundary, the Licensee shall obtain from the Tribe a conservation lease, easement, or other interest in land for operation and maintenance activities that provides for timely prior notice to the Tribe. The Licensee shall hold any such interests in lands for the term of the license and any subsequent annual licenses.
3. Within 18 months after lands described in Condition 4(C)(2) are acquired, the Licensee shall, in collaboration with the Tribe, develop and implement a management plan for each replacement parcel located within the Project Boundary describing any activities (e.g., restoration, monitoring, operation and maintenance) and the schedule for implementing those activities. These management plans shall be appended to the appropriate Annual Implementation Report prepared pursuant to Condition 3.
4. The acquisition of any lands described in Condition 4(C)(1) located outside the Project Boundary and funding for initial restoration projects thereon shall be a one-time obligation using CDR Funds.
5. Lands or interests in lands acquired with CDR funds pursuant to Condition 4 may be disposed of and replaced with equivalent lands held by the Tribe if the Licensee and the Tribe mutually agree and provide appropriate provision for reimbursement to the CDR Fund from the proceeds of

disposition. Such disposal is subject to approval by the Secretary and the Commission.

5. Water Quality Standards and Water Quality Monitoring

A. Coeur d'Alene Indian Reservation Water Quality Monitoring Plan

Within one (1) year of license issuance, the Licensee shall file with the Commission for approval a Water Quality Monitoring Plan, which shall be prepared in collaboration with the Tribe. The Licensee shall submit the Plan to the Secretary for review and approval at least 60 days before filing it with the Commission. When filing the Plan with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Plan with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The Licensee shall implement the Plan upon its approval by the Secretary and the Commission.

The Plan shall provide that the Licensee shall:

1. Monitor water quality at the following, or other appropriate, sites as agreed to by the Licensee and the Tribe and approved by the Secretary:
 - a. mid-lake between Browns Point and north-end of Shingle Bay (referred to in USGS lake studies as site C5);
 - b. Chatcolet Lake in the central portion of the deepest area (referred to in USGS lake studies as site C6);
 - c. Benewah Lake;
 - d. the "60-foot deep hole" in the sharp bend upstream of USGS gage 12415140, St. Joe River near Chatcolet, Idaho (site to be referred to as SJ1); and
 - e. Round Lake.
2. Conduct continuous monitoring of temperature, specific conductance, pH, and dissolved oxygen at sites A(1)(b)-(e) from June through November.
3. Develop profiles of water column conditions for temperature, specific conductance, pH, dissolved oxygen, in situ chlorophyll fluorescence, and solar radiation, at all sites at least twice monthly from June through November.
4. Collect profiles (in accordance with part A(3) of this condition) throughout the water column to characterize physical/chemical conditions in the euphotic zone and lower hypolimnion, and to define the depth and magnitude of the thermocline. Use accepted limnological sampling

practices and equipment. The Licensee shall take measurements at 1 meter depth increments through the euphotic zone (defined as the depth to which 1% of incident solar radiation at the surface penetrates the water column) and thermocline, and at appropriate depth increments through the hypolimnion to within 1 meter above the lake bottom.

5. Using appropriate limnological/oceanographic sampling equipment and sample collection techniques, collect water samples at each site as follows:
 - a. a euphotic zone composite (defined as 3-5 evenly spaced samples taken from 0.5 m below the surface to the depth to which 1% of incident solar radiation at the surface penetrates, composited in a churn splitter, and from which subsamples are withdrawn for laboratory analysis);
 - b. 1 meter above the lake bottom; and
 - c. at site C5 (part A(1)(a) of this condition) only, in the zone of maximum chlorophyll fluorescence.
6. Using appropriate quality assurance/quality control measures (such as field and equipment blank and duplicate samples), analyze one sample per month of the water samples collected pursuant to parts A(3),(4), and (5), for the following parameters and with the detection limits listed:
 - a. total Nitrogen (50 micrograms / L);
 - b. nitrite (NO₂) + nitrate (NO₃) Nitrogen (10 micrograms / L);
 - c. ammonia nitrogen (NH₃) (10 micrograms / L);
 - d. total Phosphorus (5 micrograms / L);
 - e. dissolved Phosphorus (5 micrograms / L);
 - f. ortho Phosphorus (2 micrograms / L); and
 - g. chlorophyll a (1 micrograms / L); in euphotic composite and zone of maximum chlorophyll fluorescence samples.
7. Collect one phytoplankton subsample per month from the euphotic zone composite samples taken at all sites in accordance with part A(5)(a) of this condition, and analyze these subsamples for taxa present (identified to species level whenever possible), and the number of organisms present by taxon.
8. Maintain data using an electronic database and/or spreadsheet software, and report data in tabular, graphical and narrative formats.

9. Transmit to the Tribe all data collected in the field within thirty (30) working days after collection or laboratory analysis by the Licensee, its agent(s) or subcontractor(s). The Licensee shall promptly respond to Tribal requests for additional information regarding such data. Upon Tribal request, the Licensee shall also promptly transmit to the Tribe copies of any drafts or work products generated by the Licensee, its agent(s), or its subcontractor(s) that interpret, model, or otherwise analyze waters within the Reservation within the Project Boundary.

B. Monitoring Plan Review

1. Unless otherwise agreed by the Licensee and the Tribe working in collaboration, the Licensee shall, in collaboration with the Tribe, conduct a critical review of the monitoring plan after 5 years and again after 10 years to assess whether data being collected adequately contributes to the purpose of examining and documenting the influence of the Project on water quality within the Reservation.
2. Unless otherwise agreed by the Licensee and the Tribe working in collaboration, for the purpose of part B(1), the Licensee shall employ the services of a qualified, non-biased peer reviewer acceptable to the Tribe.
3. The Licensee shall include the results of this critical review as part of the appropriate Annual Implementation Report required by Condition 3, and shall include an assessment as to whether the monitoring plan should be updated based on this review, any new data, data collection technologies, remediation technologies, or any other reason.

6. Protection of Cultural Resources

A. Geographic Scope and Implementation of this Condition

1. This condition shall apply to all pre-historic, proto-historic, and historic cultural resource sites, isolated artifacts, features and properties (collectively, cultural sites and properties), burial sites, and human remains located on the Coeur d'Alene Indian Reservation (Reservation) within the Area of Potential Effects (APE), and to Traditional Cultural Properties (TCP) located on the Reservation within the APE.
2. For purposes of this condition, the APE for all cultural sites and properties on the Reservation shall include the area calculated pursuant to condition 4(A)(3)(a) that is, in the absence of control measures, estimated to erode in the future. If a portion of a site falls within the APE as defined, the requirements of this condition shall apply to the entire site unless mutually

agreed otherwise by the Licensee and the Tribe and approved by the Secretary.

B. Identification, Evaluation, Assessment and Treatment of Cultural Resource Sites

1. In collaboration with the Tribe, including the Tribal Historic Preservation Officer (THPO), and in consultation with the State Historic Preservation Officer (SHPO) (if applicable), the Licensee shall, to the extent not already completed as of license issuance, identify all cultural sites and properties on the Reservation within the APE.
2. The Licensee shall, to the extent not already completed, evaluate for eligibility on the National Register of Historic Places (NR) all identified cultural sites and properties on the Reservation within the APE; *provided, however*, that nothing herein shall prohibit the Licensee and the Tribe from mutually agreeing that cultural sites and properties shall be considered as eligible for the NR without specific eligibility determinations. The Licensee shall consult with the THPO and the SHPO (if applicable) to determine an appropriate timeline for evaluation; complete appropriate site forms and establish accurate site boundaries in accordance with professional standards; and submit copies of all site forms to the THPO and the SHPO (if applicable). The Licensee shall collaborate with the Tribe and the THPO, and consult the SHPO (if applicable), in applying the NR criteria (36 C.F.R. Part 60) to evaluate such cultural sites and properties. In applying the NR criteria, the Licensee shall be guided by the Secretary's Standards and Guidelines for Evaluation.
3. The Licensee shall assess effects of the Project on all cultural sites and properties located on the Reservation within the APE. If there are cultural sites and properties that may be affected by the Project during the term of the license and any subsequent annual licenses, the Licensee shall immediately notify the Tribe, the THPO, and the SHPO (if applicable) and shall consult with them to determine if the effects are adverse. In meeting these requirements of this condition, the Licensee shall apply the criteria of adverse effect (36 C.F.R. § 800.5(a)(1)).
4. In collaboration with the Tribe, the Licensee shall determine the appropriate treatment and protection for all adversely affected cultural sites and properties located on the Reservation within the APE. In making this determination, the Licensee shall collaborate with the Tribe and the THPO, and consult the SHPO (if applicable), to develop and evaluate treatment alternatives to avoid, minimize or mitigate adverse effects to such cultural sites and properties.

C. Initial Cultural Resource Response Program

Within 135 days of license issuance, the Licensee shall file with the Commission for approval an Initial Cultural Resource Response Program to address immediate threats to cultural resources prior to the establishment of a Cultural Resource Management Plan. The Program shall be prepared in collaboration with the Tribe. The Licensee shall submit the Program to the Secretary for review and approval at least 45 days before filing it with the Commission. When filing the Program with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Program with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The Licensee shall implement the Program upon its approval by the Secretary and the Commission.

The Program shall provide that the Licensee shall:

1. Provide for the protection of cultural sites and properties on the Reservation within the APE through patrolling and other appropriate means to prevent unauthorized looting, collecting, vandalism and other destruction; and
2. Conduct periodic monitoring of known cultural sites and properties on the Reservation within the APE to assess impacts from Project activities, recreational use, vandalism, erosion or any other impacts.

D. Coeur d'Alene Indian Reservation Cultural Resources Management Plan

Within eighteen (18) months of license issuance, the Licensee shall, in collaboration with the Tribe and the THPO, and in consultation with the SHPO (if applicable), file with the Commission for approval a Cultural Resources Management Plan (CRMP). The Licensee shall submit the CRMP to the Secretary for review and approval at least 45 days before filing it with the Commission. When filing the CRMP with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the CRMP with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The CRMP shall incorporate appropriate provisions of the final Historic Properties Management Plan to be developed by the Licensee and submitted to the Commission within 1 year of license issuance, pursuant to Article 421. The Licensee shall implement the CRMP upon its approval by the Secretary and the Commission.

The CRMP shall provide that the Licensee shall:

1. Complete the identification, evaluation, assessment and treatment of cultural sites and properties on the Reservation within the APE consistent with part B of this condition;
2. Complete on-going TCP inventory and evaluation to address information treatment and preservation of significant TCPs and other cultural sites and properties located within the Reservation;
3. Develop and implement a Cultural Resources Research Design and Synthesis Plan to establish a rational and efficient approach to gathering and evaluating information about cultural sites and properties;
4. Provide for the protection of cultural sites and properties on the Reservation within the APE through patrolling and other appropriate means to prevent unauthorized looting, collecting, vandalism and other destruction, and establish a schedule for patrolling and monitoring necessary for adequate protection of sites;
5. Develop and implement a program to educate the public about the importance to the Tribe of cultural sites and properties on the Reservation within the APE and to discourage unauthorized looting, collecting, vandalism and other destruction;
6. Develop an emergency recovery plan for the efficient and timely treatment, pursuant to professional standards, in response to inadvertent discovery of cultural sites and properties exposed as a result of Project operations; and
7. Conduct periodic monitoring of known cultural sites and properties on the Reservation within the APE to assess impacts from Project activities, recreational use, vandalism, erosion or any other impacts.

E. Management of Material Remains and Records Recovered from Reservation Lands

1. Consistent with 36 C.F.R. § 79.7(d), the Licensee shall fund the initial processing, cataloging and accessioning of material remains and associated records recovered and developed as a result of cultural resource inventory, evaluation, assessment and treatment of cultural resources on the Reservation within the APE, as well as material remains and records recovered as a result of efforts to monitor and protect such resources.

2. Consistent with 36 C.F.R. § 79.7(d), the Licensee shall fund the storage, inspection, inventory, maintenance and conservation of material remains and associated records recovered and developed as a result of cultural resource inventory, evaluation, assessment and treatment of cultural resources on the Reservation within the APE, as well as material remains and records recovered as a result of efforts to monitor and protect such resources.
3. The Licensee shall fund the long-term curatorial services described in parts E(1) and E(2) of this condition in a suitable repository that meets the requirements of 36 C.F.R. § 79.9 and the storage in that facility of all collections of material remains and associated records recovered from cultural sites and properties on the Reservation within the APE. If the Tribe maintains a suitable repository on the Reservation, the Licensee shall fund such services and storage at that repository.

F. Human Remains

1. The Licensee shall avoid disturbance of any human skeletal remains or graves known to exist on lands located on the Reservation within the APE. Prior to conducting any ground-disturbing activities on such lands, the Licensee shall contact the Tribe officials to initiate monitoring.
2. If, as a result of either Project operation or compliance with any condition of the license, the Licensee disinters or discovers human remains or graves on lands located on the Reservation within the APE, the following conditions shall apply:
 - a. The Licensee shall immediately cease work in the area of the disinterment or discovery; shall promptly protect the remains from public view and from exposure to weather; and shall immediately notify Tribal officials and other officials as required by law.
 - b. The Licensee shall promptly retain a qualified archaeologist to determine whether any additional human remains exist in the area of the discovered human remains. If so, the archaeologist shall also determine whether, as a result of either the Licensee's operation of the Project or its compliance with any condition of the license, the additional human remains are in danger of being disinterred or damaged.
 - c. The Licensee shall immediately collaborate with the Tribe to determine appropriate measures, including but not limited to

appropriate temporary modifications to Project operations, necessary to secure, protect and prevent additional damage to any identified remains or associated graves or cemeteries. All measures to treat and protect human remains and graves shall be undertaken with strict adherence to all applicable Federal, State, and Tribal laws regarding the treatment of human remains. Such laws include, but are not limited to, the Native American Grave Protection and Repatriation Act of 1990 (25 U.S.C. § 3001 *et seq.*; 43 C.F.R. Part 10), the Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa-mm), and the National Historic Preservation Act of 1966 (16 U.S.C. §§ 471 *et seq.*).

7. Coeur d'Alene Reservation Aquatic Weed Management

Within one (1) year of license issuance, the Licensee shall file with the Commission for approval a Coeur d'Alene Indian Reservation Aquatic Weed Management Plan to control exotic and noxious aquatic weeds in waters affected by the Project that are within or immediately adjoining the Reservation. The Plan shall be prepared in collaboration with the Tribe. The Licensee shall submit the Plan to the Secretary for review and approval at least 60 days before filing it with the Commission. When filing the Plan with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Plan with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The Licensee shall implement the Plan upon its approval by the Secretary and the Commission.

The Plan shall provide that the Licensee shall:

1. Conduct surveys annually, or at other appropriate periods if agreed to by the Licensee and the Tribe and approved by the Secretary, using divers, underwater video equipment, or other appropriate technology to identify, assess and map infestation and distribution of exotic and noxious aquatic weeds, such as, but not limited to, Eurasian watermilfoil;
2. Formulate management actions, based on results of required surveys, specific to each identified weed for implementation during the following growing season. Management actions shall include, but are not limited to, public awareness and education, appropriate and approved herbicide treatment, diver-operated suction removal, diver hand removal and bottom barriers;

3. Provide a schedule for required surveying and implementation of management actions;
4. Coordinate Plan actions with management of other resources, including but not limited to effects on cultural resources and properties, terrestrial, aquatic, riparian and wetland habitat, water quality, wildlife, fisheries, recreation, and transport and deposition of heavy metals. Plan actions may be based on a review of relevant case studies and literature, if available, that identify and assess new weed management techniques and proposals appropriate for use on Coeur d'Alene Lake; and
5. Develop criteria to measure progress towards control of each identified weed.

8. Wetland and Riparian Habitat Replacement and Maintenance

A. Wetland and Riparian Habitat Plan

Within one (1) year of license issuance, the Licensee shall file with the Commission for approval a Coeur d'Alene Indian Reservation Wetland and Riparian Habitat Plan, which shall be prepared in collaboration with the Tribe. The Licensee shall submit the Plan to the Secretary for review and approval at least 60 days before filing it with the Commission. When filing the Plan with the Commission, the Licensee shall include documentation of collaboration with the Tribe, and copies of any comments and recommendations from the Tribe. If the Licensee files the Plan with the Commission without first obtaining the Secretary's approval, the Licensee shall include specific reasons for doing so. The Licensee shall implement the Plan upon its approval by the Secretary and the Commission.

The Plan shall provide for the restoration and/or replacement of at least 1,368 acres of equivalent in-kind emergent, scrub-shrub and/or forested lands, riparian habitat and associated uplands, preferably within the Reservation. The Plan shall describe proposed restoration and/or acquisition of replacement lands and related operation and maintenance activities, as described in part B of this condition.

B. Restoration and Acquisition of Replacement Lands

1. The Licensee shall use the CDR Fund for: (1) restoration of equivalent in-kind emergent, scrub-shrub and/or forested lands, riparian habitat and associated uplands; and (2) the Tribe's acquisition of such lands, habitat and

uplands. The Licensee shall receive credit for any land restored or acquired for this purpose upon completion of any needed restoration activities on the acquired lands.

2. If lands acquired for purposes of this condition are within the Project Boundary, the Licensee shall obtain from the Tribe a conservation lease, easement, or other interest in land for operation and maintenance activities that provides for timely prior notice to the Tribe. The Licensee shall hold any such interests in lands for the term of the license and any subsequent annual licenses.
3. Within 18 months after lands described in Condition 8(B)(2) are identified or acquired, the Licensee shall, in collaboration with the Tribe, develop and implement a management plan for each parcel located within the Project Boundary describing any activities (e.g., restoration, monitoring, operation and maintenance) and the schedule for implementing those activities. These management plans shall be appended to the appropriate Annual Implementation Report prepared pursuant to Condition 3.
4. The acquisition of any lands described in Condition 8(B)(1) located outside the Project Boundary and funding for initial restoration projects thereon shall be a one-time obligation using CDR Funds.
5. Lands or interests in lands acquired with CDR funds pursuant to Condition 8 may be disposed of and replaced with equivalent lands held by the Tribe if the Licensee and the Tribe mutually agree and provide appropriate provision for reimbursement to the CDR Fund from the proceeds of disposition. Such disposal is subject to approval by the Secretary and the Commission.

9. Inspection

The Licensee shall allow representatives of the Tribe and the Department access to, through, and across the Project lands and works located within the Reservation for the purpose of inspecting facilities and monitoring data to ensure compliance with license conditions; provided that representatives of the Tribe and the Department show proper credentials, give the Licensee reasonable advanced notice of such inspections, and follow the Licensee's standard safety procedure when engaged in such inspections.

10. Secretarial Approval

The Secretary may accept or reject, in whole or in part, any document submitted by the Licensee for the Secretary's approval. Notwithstanding the Commission filing deadlines

included in Conditions 3 through 8, the Licensee shall make a good faith effort to revise and resubmit to the Secretary any rejected portions of its submission(s) to address the Secretary's concerns and shall notify the Commission of the revision, as necessary. Whenever the Licensee is required to obtain the approval of the Secretary, documents should be submitted to:

Regional Director
Bureau of Indian Affairs
911 NE 11th Avenue, Suite 2
Portland, OR 97232

11. Reservation of Authority

- A. The Secretary reserves the authority to review the Licensee's compliance with any requirement of these conditions. If the Licensee is not in compliance with any requirement of these conditions, the Secretary may seek such permissible remedies as provided by the Federal Power Act and other applicable law.
- B. The Licensee shall implement, upon order of the Commission, such additional measures as may be identified by the Secretary pursuant to the authority provided in § 4(e) of the Federal Power Act, as necessary to ensure the adequate protection and utilization of the Coeur d'Alene Indian Reservation, *provided, however*, that the exercise of this reserved authority shall be consistent with Section 3.3 of the 4(e) Agreement.