112 FERC ¶ 61,055 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;

Nora Mead Brownell, Joseph T. Kelliher,

and Suedeen G. Kelly.

Public Utility District No. 1 of Pend Oreille County Project No. 2042-013

ORDER ISSUING NEW LICENSE

(Issued July 11, 2005)

INTRODUCTION

1. Pending before us is an application, filed by Public Utility District No. 1 of Pend Oreille County (District), for a new license for the continued operation of the 72-megawatt (MW) Box Canyon Hydroelectric Project, located on the Pend Oreille River in northeastern Washington and northwestern Idaho. The project occupies about 717 acres of federal lands, including about 190 acres within the Colville National Forest and about 493 acres within the Kalispel Indian Reservation. The Kalispel Tribe of Indians opposes issuance of the license because the project reservoir occupies about ten percent of the land comprising the Tribe's 4,500-acre reservation. For the reasons discussed below, we find that issuing a new license is in the public interest because it would allow the project to continue generating electric energy to serve growing regional demand while requiring appropriate conditions to protect and enhance important environmental, recreational, tribal, and cultural resources.

¹The project also occupies lands administered by the Bonneville Power Administration, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Bureau of Land Management.

BACKGROUND

- 2. The Commission issued an original license for the Box Canyon Project in 1952, for a term expiring January 31, 2002. Since then, the District has operated the project under an annual license pending disposition of its new license application.
- 3. The Kalispel Indian Reservation lies along the Pend Oreille River in the upper half of the project's 55-mile-long reservoir, and the United States holds title to these lands. When the project was originally licensed, the upper 31 miles of the project's reservoir and the lands inundated in this part of the reservoir as a result of project operations (including portions of the Kalipsel Reservation) were not included within the project boundary. In 1963, the license was amended to allow the project to be operated in a manner that inundated additional lands, but the project boundary was not changed.³
- 4. In 1980, the U.S. Department of Justice (United States), as trustee for the Kalispel Tribe and individual Indian allottees of land along the Pend Oreille River, brought a trespass action in federal court against the District with respect to the Box Canyon Project's inundation of reservation lands. The United States eventually prevailed in that and related litigation, and the Federal District Court awarded the United States and the Tribe damages and injunctive relief. In 1997, the District filed an application to amend

²11 FPC 786 (1952).

³ See Public Utility District No. 1 of Pend Oreille County, Washington, 29 FPC 534 (1963). As originally licensed, the project was permitted to operate with a one-foot backwater at the U.S. Army Corps of Engineers upstream Albeni Falls Project. The 1963 amendment allowed for project operation with a two-foot backwater.

⁴ See United States v. Pend Oreille Public Utility District No. 1, 926 F.2d 1502 (9th Cir. 1991), cert. denied, 502 U.S. 956 (1991); United States v. Pend Oreille Public Utility District No. 1, 28 F.3d 1544 (9th Cir. 1994), cert. denied, 514 U.S. 1015 (1995); and United States v. Pend Oreille Public Utility District No. 1, Docket No. C 80-116, E.D. Washington (unreported decision issued July 24, 1995), aff'd, United States v. Public Utility District No. 1 of Pend Oreille County, 135 F.3d 602 (9th Cir. 1998). For a more detailed procedural history and discussion of this litigation through 1996, see Public Utility District No. 1 of Pend Oreille County, 77 FERC ¶ 61,146 at 61,545-47 (1996) (denying the District's petition for a declaratory order that the license authorized the District to occupy the Kalispel Indian Reservation lands, and finding that the public interest requirements of sections 4(e) and 10(a)(1) of the FPA had not been met for the Box Canyon Project).

the license to include in the project boundary the full extent of lands inundated by the project reservoir. The U.S. Department of the Interior (Interior), the Tribe, and other parties opposed the license amendment. In 1998, the parties reached a settlement, and the Commission approved the amendment in 1999.⁵ The amendment resolved the project boundary and related issues for the remainder of the existing license term, but was not intended to prejudge the position of any party with respect to any future relicensing proceeding.

- 5. The District filed its application for a new license on January 21, 2000. The Commission issued public notice of the application on July 14, 2000, and the following entities filed timely motions to intervene: Kalispel Tribe; Interior; Cominco, Ltd; U.S. Department of Agriculture, Forest Service (Forest Service); Washington Department of Fish and Wildlife (Washington DFW); and Washington Department of Ecology (Washington Ecology). The State of Idaho filed a late motion to intervene on October 3, 2000, which was granted. For reasons discussed in more detail below, the Kalispel Tribe intervened in opposition to the new license.
- 6. In July 2001, Commission staff issued a scoping document to determine what issues and alternatives should be addressed in the relicensing proceeding. Public meetings and site visits were held in August 2001, and written comments were received from the Tribe and a number of agencies. Commission staff issued a revised scoping document in November 2001.
- 7. On September 4, 2001, the Commission issued public notice that the application was ready for environmental analysis and solicited comments, recommendations, terms and conditions, and prescriptions. The following entities responded: Kalispel Tribe; Interior; Forest Service; Washington DFW; Idaho Department of Fish and Game (Idaho DFG); Idaho Department of Parks and Recreation; and the U.S. Environmental Protection Agency (EPA). In response to the recommendations and terms and conditions filed by the resource agencies and Tribe, more than 50 letters were filed by retail electricity customers of the District. In addition, the District submitted two filings containing a total of more than 1,000 comments from its customers.

⁵ 86 FERC ¶ 61,200 (1999).

⁶ See unpublished notice dated April 4, 2002.

- 8. On September 20, 2002, Commission staff issued for comment a draft environmental impact statement (draft EIS) evaluating the environmental effects of the District's proposal and alternatives for relicensing the Box Canyon Project. Comments were due within 60 days (by November 19, 2002). Comment letters were received from 22 entities and 31 individuals, and motions to intervene were filed by American Rivers, Ponderay Newsprint Company, and Mr. Rocky Beach. Commission staff considered these comments in preparing the final EIS (EIS), which it issued on October 21, 2004.
- 9. As discussed in the remainder of this order, we have considered the motions to intervene, comments, recommendations, and conditions in determining whether, and on what terms, to issue a new license for the Box Canyon Project.

PROJECT DESCRIPTION

10. The Box Canyon Hydroelectric Project is located on the Pend Oreille River in northeastern Washington and northern Idaho. The Pend Oreille River flows north and is one of the major tributaries of the Columbia River. The project is located downstream of the Army Corps of Engineers' Albeni Falls Hydroelectric Project and discharges directly into the reservoir of Seattle City Light's Boundary Hydroelectric Project No. 2144.

A. Project Facilities

11. As currently licensed, the project includes the Box Canyon dam, a 62-foot-high, 260-foot-long concrete structure with an integral spillway located at river mile (RM) 34.4 (i.e. the distance upstream of the Pend Oreille River's confluence with the Columbia River). The dam impounds about 55 miles of the Pend Oreille River to create Box Canyon reservoir, which crosses into Idaho about two miles below Albeni Falls dam.

⁷ In addition, on October 21 and October 22, 2002, Commission staff held public meetings on the draft EIS in Newport and Spokane, Washington.

⁸ Under section 380.10(a) of the Commission's regulations, 18 C.F.R. § 380.10(a) (2004), motions to intervene that are submitted during the comment period for the draft EIS are deemed to be timely filed under 18 C.F.R. § 385.214.

⁹ For a more detailed description of the procedural history and a description of the entities filing comments, *see* EIS at 3-6.

¹⁰ This site is 13 miles from the Canadian border, 14 miles from the Idaho border, and 90 miles north of Spokane, Washington.

The reservoir's surface area is between 7,000 and 9,000 acres, depending on its elevation, which is determined by flow levels. At a pool elevation of 2,041.0 feet above mean sea level (msl), as measured at the town of Cusick (RM 70.1), it covers about 8,850 acres. In addition to the dam and reservoir, the project includes a 217-foot-long, 35-foot-diameter diversion tunnel; a 1,170-foot-long forebay channel that parallels the river; a powerhouse containing four generating units with a total capacity of 72 MW; an auxiliary spillway located next to the powerhouse; and a switchyard.

B. Project Operation

- 12. Flows from the reservoir enter the diversion tunnel about 400 feet upstream from the dam, and the tunnel carries the water to the 1,170-foot-long forebay channel, from which it enters the powerhouse. From the powerhouse, water is returned to the Pend Oreille River about 550 feet downstream of the dam. When flows exceed the project's turbine capacity (27,400 cfs), water is spilled over the dam through spillway gates to maintain run-of-river operation. The project's switchyard is located 130 feet from the powerhouse and transfers power from the project directly to Bonneville Power Administration's Metaline Falls transmission line and two District-owned transmission lines.¹²
- 13. The District also operates the Calispell Creek pumping plant, located about 30 miles upstream of the dam near the mouth of Calispell Creek, a tributary of the Pend Oreille River. The pumping plant was originally constructed in the early 1900s to prevent flooding of agricultural lands along the Pend Oreille River. The plant pumps water from Calispell Creek over a railroad dike (near the mouth of the creek) into the project reservoir. Operation of the pumping plant (which was not included as a project facility under the original license) allows the District to maintain a higher reservoir elevation for the project and thus produce more power. As discussed below, the District's relicensing application proposes to include the pumping plant as a project facility.

¹¹ This equates to an elevation of 2,030.6 feet msl as measured at the dam.

¹² The transmission lines are not considered project features because they are not primary transmission lines. *See* section 3(11) of the Federal Power Act (FPA), 16 U.S.C. § 796(11).

¹³ The railroad dike is owned by the Diking District No. 2 of Pend Oreille County, while the majority of the pumping plant is located on lands within the Kalispel Indian Reservation.

14. The project operates run of river, such that flows released from the project (through the powerhouse and over the dam) approximate flows released from the upstream Albeni Falls project. However, because of the reservoir's length (55.7 miles), gradient, and volume, flows entering the project at Albeni Falls take an average of 3.5 days to reach Box Canyon dam. Thus, changes in flows from Albeni Falls are not realized at Box Canyon dam immediately. For this reason, following a change to inflow from Albeni Falls, the District may alter its release from actual inflow to ramp up or down, as appropriate, to compensate for the reservoir retention time and the resulting delay in flows. This compensation allows the District to maintain a reservoir surface elevation at or below 2,041 feet msl, as measured at Cusick, thus limiting the backwater effect of the reservoir at the Albeni Falls dam tailwater to two feet or less.

C. Relicensing Proposal

- 15. The District proposes to continue to operate the project in a run-of-river mode. When ramping flows to compensate for the reservoir's retention time, the District proposes to limit the drawdown rate to a maximum of three inches per hour to protect fish and aquatic resources.
- 16. The District plans to replace all four turbines with new high-efficiency ones (two with "fish-friendly," minimum gap turbine runners) ¹⁶ and to rewind the generators. This would increase turbine capacity to 22.5 MW each for a total generating capacity of 90 MW and yield an additional 20,817 megawatt hours (MWh) per year of energy. ¹⁷ In

¹⁴ A 1999 license amendment, 86 FERC ¶ 61,200, approved a change in the project boundary to include all lands below elevation 2,041 feet msl as measured at Cusick.

¹⁵ The 1963 license amendment, 29 FPC 534, approved an increase in the backwater effect at Albeni Falls dam from a one-foot maximum to a two-foot maximum at the base of the Albeni Falls dam. This increased head and generation at the Box Canyon project without impacting generation at the Albeni Falls project.

¹⁶ "Fish-friendly" turbines or runners are designed to reduce blade strikes and limit stress on entrained fish from shear forces or turbulence. These turbines may include elongated runner blades in reduced numbers which allow for larger blade passages, reduced turbine rotational speed, reduced pressure and velocity gradients, and/or minimum gap spaces between the turbine blades, shaft and pressure casing to reduce pinching and blade strikes.

¹⁷ Annual average is calculated using a 30-year license term.

addition, the District proposes to install gates in the auxiliary spillway bypass. These measures should help reduce total dissolved gas (TDG)¹⁸ levels below the project.¹⁹

- 17. The District proposes to include in the project the Calispell Creek pumping plant. The pumping plant consists of two pump stations with six pumps and a total hydraulic capacity of 520 cfs. The pumps are operated under an agreement (Plan E) between the District and Diking District No. 2 of Pend Oreille County. As noted above, the plant's operation allows the District to produce more power by maintaining a higher reservoir elevation for the project without flooding lands along Calispell Creek. Inasmuch as the railroad dike (including the culvert and gates) near the mouth of the creek is needed for this pumping operation, it is an integral component of the project's operation and must also be included in the license.
- 18. Under the current license, the District purchased two parcels of land totaling 700 acres, which it manages for wildlife purposes. ²¹ These wildlife management areas are located at Everett Island (near RM 76) and Tacoma Creek (near RM 66). The District proposes to continue to manage these areas for wildlife under the new license, implementing measures for wetland construction and enhancement, plantings to improve riparian habitat, and fencing to control grazing.

Plan E provides for the plant to be operated in high-flow conditions in a manner that approximates flow conditions in Calispell Creek that existed prior to the construction of Box Canyon dam. This ensures that water levels in Calispell Creek do not exceed water levels in the reservoir under the current backwater constraint at Albeni Falls dam, thus preventing flooding of lands near Calispell Creek.

¹⁸ TDG is a measurement of the atmospheric air that has been dissolved into water. Water flowing over a spillway and entraining air into the spill flow at hydroelectric dams can cause an increase in TDG. High levels of TDG exceed the natural atmospheric pressure and result in the water becoming supersaturated with atmospheric air. The effect of this supersaturation on aquatic organisms is very similar to the bends in humans.

¹⁹ See EIS at 70-75.

²¹ The 1999 amendment required the licensee to acquire land for the protection, mitigation and enhancement of habitats affected by project operations. *See* 86 FERC at 61,709 and 61,719.

19. Further, the District proposes to monitor erosion and water quality, and to develop plans for aquatic plant, recreation, and cultural resource management.

PROJECT BOUNDARY

A. Original License

- 20. The existing project boundary encompasses the dam, powerhouse, diversion tunnel, forebay channel, auxiliary bypass, and the 55-mile-long reservoir, including the lowermost portions of some of the river's tributary creeks in which water is backed up as a result of project operation. The boundary also includes land adjacent to the reservoir, which varies in width from close to the high water line to more than 100 feet from it.
- 21. The project boundary from Box Canyon dam to the town of Ruby (about 24 miles up the reservoir) was established in the 1952 license and is defined by a survey line with metes and bounds. Upstream of Ruby, the boundary, which as discussed earlier was established in 1999, is the 2,041 feet msl contour line, which closely follows the existing shoreline and encompasses the full extent of lands inundated by the project tailwaters. Project lands and waters cover more than 13,000 acres.

B. On Relicensing

22. On relicensing, the District proposes to expand the project boundary to encompass the Calispell Creek pumping plant, which will add an additional 1.03 acres of Kalispel Reservation lands. In addition, as discussed in this order, we are requiring the District to include within the project boundary the pumping plant's associated facilities (railroad dike, culvert, and gate), several recreation areas, and portions of two wildlife management areas, the other parts of which already lie within the project boundary.

SCOPE OF PROJECT

23. The District states that numerous small dikes, pump stations, and gated culverts exist adjacent to or near the project reservoir. As noted in the EIS, many of these non-project facilities were originally installed by local farmers, diking districts, and the U.S. Army Corps of Engineers prior to the construction of the project in order to protect

²² The river's natural high water mark (as measured at the town of Cusick) is 2,028 feet msl, and the project floods lands up to elevation 2,041 feet msl (also measured at Cusick).

adjacent lands from flooding along the Pend Oreille River. The EIS further noted that, after the project was constructed, the District accepted responsibility for the operation and maintenance of many of these facilities.²³

- 24. The District states that, with the exception of the Calispell Creek pumping station and outlet works, these facilities are very small and do not directly increase power generation at the project. Thus, the District concludes, these facilities are not considered to be project works, as defined by the Commission, and are not included in the project boundary.
- 25. Section 3(12) of the FPA defines "project works" as the physical structures of a project.²⁴ FPA section 3(11) defines "project" as:

the complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures including navigation structures, which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith all miscellaneous structures used and useful in connection with said unit or any part thereof, and all waterrights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which is necessary or appropriate in the maintenance and operation of such unit.

26. As noted, the maximum reservoir elevation affected by the project is 2,041 feet msl, as measured at the Cusick gage, which level constitutes the project boundary in the upper half of the reservoir. Despite the District's contention that none of these existing structures should be part of the project, we find that at least some of the existing dikes, pump stations, and gated culverts, such as the Trimble Creek pumps, ²⁵ may impound waters that contribute to the project's generating capability. ²⁶ Therefore,

²⁴ 16 U.S.C. §796(12).

²³ See EIS at 34-35.

²⁵ Although the District maintains that Box Canyon energy generation is not augmented in any way through or by the operation of this very small pump, the fact remains that the presence of the dike culvert and gate allows the District to maintain a reservoir elevation up to its limit at 2,041 feet msl at Cusick without flooding lands along Trimble Creek.

 $^{^{26}}$ See Pacific Gas and Electric Company, 102 FERC \P 61,309 (2003); on reh'g 105 FERC \P 61,133 (2003).

we are requiring the District, in Article 302, to evaluate all existing non-project facilities that hold the reservoir in its present configuration, preventing adjoining lands from being inundated. The District shall perform the evaluation in consultation with the Commission's Portland Regional Office and other appropriate entities, and to file a report documenting the results of this evaluation with recommendations, for Commission approval, to include the appropriate structures as part of the project.

SECTION 4(e) FINDINGS AND CONDITIONS

- 27. Section 4(e) of the FPA²⁷ provides that the Commission may issue a license for a project located on a federal reservation²⁸ only after it finds that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired. In addition, section 4(e) requires that any license for which we make this finding must include conditions prescribed by the Secretary under whose supervision the reservation falls.
- 28. The Box Canyon Project occupies 190.25 acres within the Colville National Forest and 493.03 acres of land within the Kalispel Indian Reservation. The national forest lands are under Forest Service supervision, and the Kalispel Reservation lands are under Interior's supervision.

A. Consistency Findings

1. Colville National Forest

29. The Colville National Forest was established in 1907 by presidential proclamation.²⁹ At that time, the Organic Administration Act of 1897³⁰ stated that all national forest lands were established and administered only for watershed protection and timber production. There is no evidence or allegation in this proceeding that relicensing the Box Canyon Project would interfere with the purposes of the Colville National Forest. We conclude that this license will not interfere or be inconsistent with those purposes.

²⁷ 16 U.S.C. § 797(e)

²⁸ Reservations are defined in section 3(2) of the FPA, 16 U.S.C. § 794(2).

²⁹ See March 1, 1907 Proclamation of President Theodore Roosevelt, 34 Stat. 3288.

³⁰ 16 U.S.C. § 475.

2. Kalispel Indian Reservation

- 30. The Box Canyon Project was originally licensed in 1952. Although the District's original license application stated that the project would affect lands in the Kalispel Indian Reservation, no such lands were included in the project boundary. ³¹ Consequently, the original license was issued without full recognition of its effects on the reservation, without the requisite finding of no interference or inconsistency under FPA section 4(e), and without payment of annual charges under section 10(e). Initially, the project was operated in a manner that allowed the Tribe to continue its seasonal use of the land for growing wild hay. However, in 1963 the license was amended to increase the allowable backwater from one to two feet at Albeni Falls, again without full recognition of flooding effects on the reservation or consideration of the possible applicability of sections 4(e) or 10(e). As a result, the project flooded some 492 acres of land within the Kalispel Reservation, comprising approximately ten percent of the total acreage of the reservation, making them unavailable for the Tribe's use.
- 31. In 1983, a federal district court held that this occupation of reservation lands without an easement or other appropriate authorization constituted a trespass, and this holding was ultimately affirmed by the Ninth Circuit Court of Appeals.³² Following this litigation, the parties developed a settlement agreement regarding the use of reservation lands and submitted this agreement to the Commission. Thus, the project's operation on reservation lands was not authorized until 1999, when the Commission amended the existing license in response to the parties' settlement agreement.³³
- 32. In this proceeding, the Tribe argues that the project has unacceptable impacts on the reservation as a homeland for the Tribe, and urges us to find that the project interferes or is inconsistent with the purpose for which the reservation was created or acquired.³⁴ The Tribe states that the purpose of the reservation was to provide a permanent homeland

³¹ The application further stated that, because the District was not proposing to raise the water level above the existing mean high water level, only the proprietary right to lands owned by the State of Washington in the streambed would be affected.

³² See n.4, supra, and cases there cited.

³³ 86 FERC ¶ 61,200 (1999).

³⁴ See Tribe's memorandum on the purposes of the Kalispel Indian Reservation and the Commission's section 4(e) determination (filed October 29, 2004); See also Tribe's reply memorandum (filed March 2, 2005).

for the Tribe and to allow its members to continue their traditional practices of hunting, gathering, and fishing, as well as to permit use of the land for agricultural purposes. The Tribe explains that the flooded land was traditionally used on a seasonal basis for growing wild hay, and that the year-round flooding attributable to project operation precludes such use.³⁵ The Tribe adds that, because a substantial portion of the Reservation's lands have been rendered useless for any past or potential uses and the project has had negative effects on fish and other resources of importance to the Tribe, the project significantly and adversely impairs the original purposes of the Kalispel Indian Reservation. The Tribe therefore urges that we find the project interferes or is inconsistent with the original purposes of creation of the reservation, and requests that we deny a new license that continues to impair those purposes.

33. The District counters that the primary purpose of the reservation was to protect the farming settlements of the Kalispel Indians, and to provide for the allotment of land to individual Indians for farming and grazing purposes. The District further argues that there was no mention of intent to protect fishing rights or resources in the Executive Order establishing the Kalispel Indian Reservation or other documentation leading up to the establishment of the Reservation. The District states that, in the district court litigation concerning the trespass issue, "the court found that there was no tilling or cultivating of the soil below the 2,041 elevation and that the impact of the Project was limited to inundation of grazing lands of minimal value." The District adds that "the lands inundated by the Project were subject to flooding each spring due to natural causes prior to construction of the Project and remain subject to such natural flooding today." The District therefore urges the Commission to conclude that the new license will not interfere or be inconsistent with the "Indian agricultural purposes" for which the Kalispel Indian Reservation was established.³⁸

³⁵ The Tribe notes that, in the litigation concerning the District's unlawful occupation of the reservation, it was specifically ruled that the Box Canyon Project interferes with agricultural and grazing uses of the Kalispel Indian Reservation. *See U.S. v. Pend Oreille Public Utility District No. 1*, 926 F.2d at 1506-07; *see also* 77 FERC ¶ 61,544 at 61,549.

³⁶ Letter from James B. Vasile, Counsel for District, to Magalie R. Salas, FERC, at 2 (filed April 19, 2005).

³⁷ *Id*.

³⁸ *Id*.

- 34. We agree with the Tribe that the Kalispel Indian Reservation was established not merely for agricultural purposes, but also to provide the Tribe with a permanent homeland where its members could continue to engage in their traditional practices of hunting, gathering, and fishing. The reservation was established in 1914 by Executive Order No. 1904. The order is very brief, and does not discuss the purposes of the reservation other than to state that the described lands in the State of Washington are "withdrawn from settlement, entry, or other disposal, and set aside as a reservation for the Kalispel Indians in that State." However, the specific purposes of an Indian reservation were often 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.⁴⁰ 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. 41 For tribes that historically engaged in hunting, gathering, and fishing, this necessarily includes a reservation of rights to continue those activities on the reserved lands. It also includes an implied reservation of sufficient water to fulfill the purposes of the reservation.⁴²
- 35. The Tribe argues that because the project prevents the use of the inundated reservation lands for tribal purposes, it interferes and is inconsistent with the purposes for which the reservation was created. However, this approach would appear to lead to the conclusion that any interference with a tribe's use of its reservation lands is, by definition, prohibited by FPA section 4(e). If that were the case, section 4(e) would serve no purpose, because any occupation of reservation lands by project works would necessarily interfere or be inconsistent with the tribe's use of those lands for alternate purposes. If this were the intended result, Congress could have flatly prohibited the licensing of project works on Indian reservations. But Congress did not do so. Rather, as the Supreme Court has observed, the FPA "gives every indication that, within its comprehensive plan, Congress intended to include lands owned or occupied by any

³⁹ Executive Order 1904, March 23, 1914.

⁴⁰ See Colville Confederated Tribes v. Walton, 647 F.2d 42, 47-48 (9th Cir. 1981) 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 Kalispel reservation. *Id.* at 47.

⁴¹ *Id*.

⁴² Id. at 46; see United States v. Winters, 207 U.S. 564, 576 (1908).

person or persons, including Indians."⁴³ We therefore conclude that some interference with a tribe's use of the particular lands on which project works are to be situated must be permissible under the FPA, as long as the license will not interfere or be inconsistent with the purposes of the reservation as a whole.

- 36. In this case, the reservation borders the river for approximately 10 river miles. Because project operation expands the river, and creates backwater sloughs in some areas, it interferes with the Tribe's use of the strip of land that hugs the shoreline and is located below elevation 2,041. The record shows that before the project was built, this land hosted wild hay, which grew along the shore of the river and in the slough areas. Prior to project operation, the inundated land was sometimes unavailable because it was subject to seasonal flooding. Thus, its usefulness was primarily for seasonal agriculture.
- 37. We conclude that, while the project interferes with the use of the corridor of land that hugs the river's original shoreline and the backwater sloughs, the rest of the reservation remains available for the Tribe's unrestricted use, and appears adequate to provide a suitable permanent homeland and to allow the tribe to continue its traditional practices of hunting, gathering, and fishing. We therefore find that issuing a new license for the Box Canyon Project will not interfere or be inconsistent with the purposes for which the Kalispel Indian Reservation was created.

B. Mandatory Conditions

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

1. Colville National Forest

39. As noted above, the project occupies 190.25 acres of national forest lands. These lands, which constitute less than two percent of the project, comprise 12 parcels located along the reservoir's shoreline. Nine of the parcels are along the lower half of the reservoir, and the other three are at the reservoir's upper end. Most are undeveloped, but several include recreation facilities.

⁴³ See Escondido Mutual Water Co. v. La Jolla Band of Mission Indians, 466 U.S. 765, 786 (1984), citing FPC v. Tuscarora Indian Nation, 362 U.S. 99 (1960).

- On January 14, 2005, the Forest Service filed 19 mandatory conditions⁴⁴ for 40. the project pursuant to FPA section 4(e). 45 Condition 1 reserves the Forest Service's authority to modify the section 4(e) conditions if the license is for a term longer than 30 years. The remaining conditions require the following: (2) Forest Service approval prior to beginning any habitat- or ground-disturbing activities on Forest Service lands; (3) plan to coordinate and implement license conditions; (4 and 5) tying project boundary to Public Land Survey system and re-establishing Public Land Survey corners; (6) historic properties management plan; (7) recreation plan; (8 and 9) erosion monitoring and control plans; (10) hazardous materials control; (11) sensitive species protection plan; (12) protection and restoration of cottonwoods and riparian shrub habitat; (13) monitoring plan for the bald eagle, osprey, cormorant, and great blue heron; (14) creation or restoration of amphibian habitats; (15) compliance with FPA section 18 fish passage conditions; (16) compliance with water quality certifications issued under section 401 of the Clean Water Act; (17) monitoring and control of Eurasian water milfoil vegetation in the project reservoir; (18) noxious weed control plan; and (19) compliance with established guidelines for use and development of borrow and quarry pits.
- 41. Some of the conditions require the licensee to take actions on national forest system lands "within and adjacent to the Project" (Conditions 5, 7, and 8), "directly or indirectly affected" by project-related activities and operations (Conditions 11 and 18), or "in the project area" (Conditions 11, 12 and 13). Other conditions require actions on licensee-owned or other, non-forest-system lands (Conditions 12 and 14), or at project facilities that do not occupy forest service lands (Condition 15). This license includes the nineteen conditions, but only to the extent the conditions apply to national forest lands within the project boundary or to project facilities located on national forest lands.⁴⁶

⁴⁴ Mandatory here means the Commission's obligation to include such conditions in any license it issues. It does not refer to a licensee's compliance obligation, inasmuch as all license conditions (whatever their source) are mandatory as to the licensee.

⁴⁵ See October 26, 2004 letter to Forest Service from Commission staff confirming January 19, 2005 deadline for submitting 4(e) conditions.

⁴⁶ See Escondido Mutual Water Co. v. La Jolla Band of mission Indians, 466 U.S. 765, 780-81 (1981); and Upper Peninsula Power Co., 110 FERC \P 61,141 at P 9-10 (2005).

42. The conditions are contained in Appendix B and included in this license by ordering paragraph (E). Many of the conditions do not lend themselves to parsing according to what is a mandatory 4(e) and what is not, so the appendix contains verbatim all the conditions submitted by the Forest Service, with the understanding that the Forest Service's section 4(e) conditions apply only to the extent they address forest service lands (or any project works on those lands) occupied by the project.

2. Kalispel Indian Reservation

- 43. As noted above, the project occupies 493.03 acres of the Kalispel Reservation. These lands are comprised of lands on which the Calispell Creek pumping plant is located and submerged lands along the reservoir shoreline.
- On May 21, 2004, Interior filed 18 mandatory conditions for the project pursuant 44. to FPA section 4(e).⁴⁷ The conditions require the following: (1) plan to coordinate and implement license conditions; (2) establishment of resource technical committee; (3) ramping rates, fish stranding studies, erosion monitoring; (4) compliance with water quality certifications issued under section 401 of the Clean Water Act, and water quality monitoring, including for total dissolved gas; (5) compliance with FPA section 18 fish passage conditions; (6) plan and fund for trout assessment and restoration; (7) replacement of wildlife habitat on Kalispel Reservation; (8, 9, 10, and 11) management and monitoring of cultural resources and protection of human remains; (12) funding of ethnobiological study; (13) funding of recreation facilities for Tribe; (14) procedures for notifying Tribe and Interior when required by these conditions; and (15) access to the project by the Tribe and Interior. The remaining conditions contain provisions for Interior's approval of the District's implementation of these 4(e) conditions (Condition 16); the licensee's obligation to comply with the conditions (Condition 17); and a reservation of Interior's authority to modify its conditions (Condition 18).
- 45. As with the conditions submitted by the Forest Service, some of Interior's conditions require the licensee to take actions that fall outside the scope of FPA section 4(e). For example, paragraphs (C)(4)(f) and (D)(3) of Condition 4 require monitoring of water quality in the project's tailrace, some 30 miles downstream of the reservation. Condition 6 requires the District to undertake trout habitat restoration measures in tributary streams that are neither on the reservation nor within the project

⁴⁷ See March 31, 2004 letter from J. Mark Robinson, Director, Office of Energy Projects, granting Interior's request for an extension of the deadline (to May 21, 2004) for submitting its final conditions.

boundary. Condition 7 requires the District to replace wildlife habitat on reservation lands that are outside the project boundary, and Condition 13 requires the funding of tribal recreation facilities, the majority of which are outside the project boundary. While all of Interior's conditions are reprinted in Appendix A, ordering paragraph (D) includes them as mandatory FPA section 4(e) conditions, only to the extent the conditions apply to Kalispel Reservation lands within the project boundary or to project facilities located on the Reservation. However, as discussed elsewhere in this order, we have included some of these conditions in the license to meet our responsibilities under FPA section 10(a) or other statutes.

WATER QUALITY CERTIFICATION

- 46. Under section 401(a)(1) of the Clean Water Act (CWA),⁴⁸ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.⁴⁹
- 47. On January 5, 2002, the District applied to Washington Ecology for water quality certification for the Box Canyon Project in the State of Washington. On December 30, 2002, Washington Ecology issued water quality certification for the project, which it amended on February 21, 2003.⁵⁰ The certification contains conditions relating to total dissolved gas (TDG)⁵¹ abatement to ultimately bring TDG levels into compliance with

⁴⁸ 33 U.S.C. § 1341(a)(1).

⁴⁹ 33 U.S.C. § 1341(d).

⁵⁰ The February 2003 filing revised the deadlines for filing various plans so as to be measured from license issuance rather than from issuance of the certification. Because the original certification contains no reservation of authority for Washington Ecology to amend it in this manner, and the revisions were issued after the one-year deadline for state action, the Commission is not required to accept the revised certification. However, the changes to the certification were requested by the District and are reasonable and in the public interest. Accordingly, we include the revised certification as a condition of this license.

⁵¹ See n.18, supra.

state water quality standards,⁵² aquatic plant management, interim temperature management, and water quality monitoring. The certification conditions are set forth in Appendix D of this order and incorporated into the license by ordering paragraph (G).

48. On January 5, 2002, the District applied to EPA for water quality certification for the project within the Kalipsel Indian Reservation. On January 2, 2003, EPA issued water quality certification for the Calispell Creek pumping plant, which discharges waters from Calispell Creek into Box Canyon reservoir within the Kalispel Indian Reservation. EPA based its certification on established Washington water quality standards, since the Tribe's standards had not yet been approved by EPA.⁵³ EPA's certification requires the District to mitigate for water quality impacts of waters discharged from Calispell Creek into the Kalispel Indian Reservation. The EPA certification conditions are set forth in Appendix E of this order and incorporated into the license by ordering paragraph (H).

SECTION 18 FISHWAY PRESCRIPTIONS

49. Section 18 of the FPA⁵⁴ states that the Commission shall require the construction, maintenance, and operation by a licensee at its own expense of such fishways as may be prescribed by the Secretary of Commerce or Secretary of Interior, as appropriate. Interior provided preliminary fishway prescriptions by letter dated November 5, 2001. In a letter dated May 21, 2004, Interior provided modified section 18 prescriptions.⁵⁵ These prescriptions are attached in Appendix C and made conditions of the license by ordering paragraph (F). Interior's fishway prescription includes measures for upstream and downstream passage of bull trout, westslope cutthroat trout, and mountain whitefish (target species) at Box Canyon dam and at the Calispell Creek pumping plant. The prescription also includes monitoring and effectiveness plans and studies.

⁵² TDG levels in excess of the state standard have been recorded below the project's spillway. *See* EIS at 70.

⁵³EPA subsequently approved Water Quality Standards for Kalispel Indian Community on the Kalispel Indian Reservation on June 24, 2004.

⁵⁴ 16 U.S.C. § 810.

⁵⁵ See n. 47, supra.

A. Fish Passage at Box Canyon Dam

- 50. Interior uses a phased approach for upstream fish passage. The District is to install and operate a temporary trap-and-haul upstream fish passage facility. Upon completion of the proposed turbine upgrade and the installation of the auxiliary spillway bypass gates, or within 10 years of license issuance, whichever occurs first, the temporary trap-and-haul facility shall be replaced by an interim trap-and-haul facility. When at least 97 westslope cutthroat trout or 97 bull trout use the interim facility in any calendar year, Interior will consider the recommendations of resource agencies and the Kalispel Tribe to decide whether to require permanent upstream passage at Box Canyon dam (a fish ladder). Once installed, the permanent fish ladder would be operated for the remainder of the license term. When the permanent fish ladder would be operated for the remainder of the license term.
- 51. Interior also prescribes an interim downstream fish passage facility at Box Canyon dam. This facility is to provide effective downstream passage of target species by a non-turbine method such as an open-channel or non-pressurized pipe. If the District can demonstrate that the interim fishway meets an effectiveness target, then the FWS will designate the interim fishway as permanent. If the fishway cannot meet the target, then, upon completion of the proposed turbine upgrade and the installation of the auxiliary spillway bypass gates, or within ten years of license issuance, whichever occurs first, the interim facility shall be replaced by a permanent one. Like the interim structure, the

⁵⁶ This temporary facility would likely use guidance nets to trap the fish.

⁵⁷ In its comments on the EIS, the District states for the first time, contrary to its application, that it proposes to install only one "fish-friendly" turbine. *See* the District's filing dated November 22, 2004, and filed November 24, 2004, at 37. In the EIS, staff recommended installation of two "fish-friendly" turbines. Two "fish-friendly" turbines would ensure greater likelihood of safe fish passage. In this proceeding we have analyzed the potential environmental impacts of two "fish-friendly" turbines, and fashioned license conditions based on this analysis. If the District wishes to modify its proposal, it will have to seek an amendment to its license.

⁵⁸ The turbine replacements and bypass spillway gates must be completed within nine years of license issuance. *See* Article 405 of this license.

⁵⁹ This interim facility likely would use a structural trapping facility.

⁶⁰ Staff estimates that, based on this criteria, the permanent facility, if installed, would begin operation about 14-17 years after license issuance. *See* EIS at 267.

permanent one will provide non-turbine passage and will have the same effectiveness target. FWS can thereafter require changes to the facility until the effectiveness goal is reached.

B. Fish Passage at Calispell Creek Pumping Plant

- 52. Interior requires that within 7.5 years of license issuance, the District is to begin plans to install and operate an interim trap-and-haul upstream fish passage facility at the pumping plant. ⁶¹ The interim facility must be installed and operational within one year after the FWS approves the design. If warranted by subsequent monitoring, FWS may require changes to the facility or operation. If notified by FWS that at least two streams, tributary to Calispell Creek and upstream of the pumping plant, provide adequate habitat and will allow the unrestricted movement of target species between the designated tributaries and the pumping plant, the District shall design and install a permanent upstream passage facility (e.g., a fish ladder).
- 53. Within five years of license issuance, the District is to begin plans to install and operate a permanent downstream fish passage facility at the pumping plant. After the preliminary designs are approved, the licensee has one year to submit final designs. After those are approved, the District has two years to install and begin operation of the facility.

⁶¹ The District argues that Interior has no authority to establish section 4(e) conditions or prescribe section 18 fishways at the Calispell Creek railroad dike. The District maintains that this is the case because: Interior granted a right-of-way in 1910 authorizing the railroad to cross lands occupied by a member of the Kalispel Tribe, including the bed of Calispell Creek, before the Kalispel Indian Reservation was established; the Reservation was made subject to any existing valid rights or claims; and none of the conditions of the right-of-way involved the protection of fish resources. This argument is not persuasive. As discussed above, we have concluded that the railroad dike and gated culvert across Calispell Creek are necessary to operation of the pumping stations and therefore must be included in the license as project works. As a result, Interior's FPA authority is applicable to those structures.

THREATENED AND ENDANGERED SPECIES

- 54. Section 7(a) of the Endangered Species Act of 1973 (ESA)⁶² requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. When a federal agency determines that a proposed action may affect a threatened or endangered species, it must consult with FWS or NOAA Fisheries and obtain a Biological Opinion on whether the action is likely to result in a violation of the ESA. After the initiation of formal consultation, section 7(d) of the ESA⁶³ prohibits an agency from making any irreversible or irretrievable commitment of resources that would foreclose the formulation or implementation of any reasonable and prudent alternative measures that would not violate section 7(a)(2).
- 55. One federally listed fish species, two federally listed plant species, and four federally listed wildlife species may occur in the project area. Bull trout, grizzly bear Canada lynx, water howellia and Ute ladies'-tresses are listed as threatened. The bald eagle is also listed as threatened, but has been proposed for de-listing because of the success of recovery efforts. The gray wolf is listed as endangered. On September 25, 2002, the Commission initiated formal consultation with the FWS on bull trout as a result of staff's finding that the project was likely to adversely affect bull trout and requested the FWS's concurrence on staff's finding that the project was not likely to adversely affect water howellia, Ute ladies'-tresses, gray wolf, grizzly bear, Canada lynx or bald eagle.
- 56. On February 7, 2005, the FWS filed a draft Biological Opinion for the Box Canyon Project in response to our December 9, 2004 request. On March 30, 2005, staff provided comments to the FWS on its draft Biological Opinion. FWS filed its final Biological Opinion on April 29, 2005.
- 57. The Biological Opinion includes a determination that implementation of the proposed project is not likely to adversely affect the federally listed gray wolf, grizzly bear, bald eagle, Canada lynx, water howellia, and Ute ladies-tresses. The Biological Opinion also determined that the implementation of the proposed project may affect and is likely to adversely affect bull trout and designated bull trout habitat, but is not likely to jeopardize the continued existence of the bull trout or result in the destruction or adverse modification of critical habitat.

⁶² 16 U.S.C. ■ 1536(a).

⁶³ 16 U.S.C. ■ 1536(d).

- 58. FWS concluded that relicensing of the project with Interior's section 18 fishway prescriptions and section 4(e) conditions includes sufficient measures to help minimize and track the level of incidental take associated with relicensing and continued operation of the project on bull trout. FWS further concluded that as long as the Commission issues a new license consistent with the proposed action and the Biological Opinion, no additional reasonable and prudent measures or terms and conditions are necessary at this time. The conditions of this license are consistent with the proposed action evaluated by FWS as part of the consultation process.
- 59. As discussed above, to the extent that Interior's 4(e) conditions wholly or in part require the District to take actions outside of the project's boundary and/or off of the Kalispel Indian reservation lands, we do not consider them to be valid section 4(e) conditions. Interior's Condition 6 (trout habitat restoration in tributary streams) and a portion of Condition 4 (total dissolved gas monitoring in the project's tailrace) are examples of such conditions, and the District is not required to implement them as mandatory conditions under section 4(e). However, the FWS in its Biological Opinion states that it "believes that the proposed Action, the relicensing of the Project including the Department's [Interior's] FPA section 18 fishway prescriptions and section 4(e) conditions, includes sufficient measures to help minimize and track the level of incidental take associated with the Project relicensing and continued operation of the Project." Because Interior's 4(e) Condition 4(C)(4)(f) and Condition 6 are directly related to trout habitat restoration, fish passage, and water quality monitoring, all of which are measures to help protect and enhance bull trout populations, we are requiring the District to comply with these conditions (Article 406).

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

60. Section 10(j)(1) of the FPA,⁶⁴ 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,⁶⁵ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.

⁶⁴ 16 U.S.C. § 803(j)(1).

⁶⁵ 16 U.S.C. §§ 661, et seq.

- In response to the September 4, 2001 public notice that the project was ready 61. for environmental analysis, a total of 37 different recommendations were filed collectively by Interior, Washington DFW, and Idaho DFG.⁶⁶ Five of the recommendations were subsequently withdrawn by the recommending agency. Five others were determined to be outside the scope of section 10(j), and they are discussed in the next section. This license includes conditions consistent with 24 of the remaining 27 recommendations that are within the scope of FPA section 10(j). These include recommendations concerning ramping rates (Article 403); water quality monitoring (Article 401); aquatic habitat restoration (two recommendations) (Article 406); management of riparian habitat including the installation of a staff gage at Trimble Creek (Article 407 and Article 416); wildlife lands (Article 407); waterfowl (Article 407), amphibians (Article 407); cottonwood (Article 407); noxious weeds (Article 410); bald eagle protection (seven recommendations) (Article 407); grizzly bear awareness program (Article 407); monitoring of osprey, great blue heron, and double-crested cormorant (three recommendations) (Article 407); fish passage (two recommendations) (Interior's section 18 prescription); and fish hatchery funding (Article 406).
- 62. If the Commission believes that any section 10(j) recommendation may be inconsistent with the purposes and requirements of Part I of the FPA or other applicable law, section 10(j)(2)⁶⁷ requires the Commission and the agencies to attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If the Commission still does not 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 imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources. Staff found three such circumstances where the agencies' recommendations were determined to fall within the scope of section 10(j) and were not subsequently resolved.
- 63. Commission staff made an initial determination that certain Interior, Washington DFW, and Idaho DFG recommendations may be inconsistent with the comprehensive planning standard of section 10(a)(1), the public interest standard of section 4(e), and the substantial evidence standard of section 313(b) of the FPA. By letters dated October 7, 2002, Commission staff advised the agencies of its preliminary determinations and attempted to resolve the apparent inconsistencies. Interior responded by letter filed

⁶⁶ Interior filed recommendations on November 5, 2001, and Washington DFW and Idaho DFG filed recommendations on November 2, 2001.

⁶⁷ 16 U.S.C. § 803(j)(2).

November 21, 2002, and Washington DFW responded by letter filed November 26, 2002. A meeting was held on June 29, 2004, to attempt to resolve the inconsistencies. Based on the results of the meeting and filing of mandatory licensing conditions, only three inconsistencies remain, as discussed below.

- 64. We do not adopt Interior's recommendation to reconvene the Habitat Evaluation Procedures (HEP) Team (comprised of representatives of the District, Washington DFW, FWS, and the Kalispel Tribe) to analyze and mitigate any habitat losses anticipated to occur during the term of the new license. This measure is estimated to cost about \$108,000 annually. As staff found in the EIS, none of the actions being proposed would substantially alter or degrade wildlife habitat. In fact, required measures would enhance wildlife habitat. The cost of this measure thus would significantly outweigh the expected benefits. We accordingly conclude that this recommendation is inconsistent with the comprehensive planning standard of section 10(a)(1) and the public interest standard of section 4(e) of the FPA. We have, however, included in this license Article 407, which requires a comprehensive wildlife management plan that will provide significant benefits to wildlife.
- 65. We do not adopt Interior's recommendation to install artificial perches or create snags to benefit bald eagle perching at a cost of about \$6,300 per year. As discussed in the EIS, staff found no evidence that the amount of perching habitat is limiting or that additional snags are necessary. Therefore, we find this recommendation inconsistent with the substantial evidence standard of section 313(b) of the FPA. Sufficient measures have been included in this license to protect and enhance the bald eagle as part of a comprehensive wildlife management plan (Article 407), which includes bald eagle nest monitoring and nest surveys, development of bald eagle nest management plans, and bald eagle habitat improvements.
- 66. We do not adopt Idaho DFG's recommendation to seasonally lower reservoir elevations during fall, winter, and spring to improve rainbow and brown trout spawning below Albeni Falls dam. As discussed in the EIS, the cost of this measure would be about \$3 million per year in lost energy but would have only a minor effect on habitat conditions, representing very little benefit to rainbow and brown trout in Box Canyon reservoir over existing conditions. The significant cost of this measure would not be worth the limited benefits. Therefore, we find this recommendation inconsistent with the

⁶⁸ See EIS at 151.

⁶⁹ *Id.* at 318.

comprehensive planning standard of section 10(a)(1) and the public interest standard of section 4(e) of the FPA. While this license does not include specific measures for resident and brown trout, it does include measures to enhance other resident salmonid populations, including implementation of the trout assessment and restoration plan (Article 406).

67. For the above reasons, we conclude, in accordance with FPA section 10(j)(2)(A), that Interior's recommendation regarding the HEP Team and Idaho DFG's recommendation for lower reservoir elevations are inconsistent with the comprehensive planning standard of sections 4(e) and 10(a) of the FPA, and Interior's recommendation to install artificial perches and snags is inconsistent with the substantial evidence standard of section 313(b) of the FPA. In accordance with section 10(j)(2)(B) of the FPA, 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 this project.

RECOMMENDATIONS UNDER SECTION 10(a)(1) OF THE FPA

A. Federal and State Fish and Wildlife Agencies' Recommendations

68. Interior, Washington DFW, and Idaho DFG made six recommendations that are not specific measures to protect, mitigate damages to, or enhance fish and wildlife or were untimely filed. Consequently, we do not consider these recommendations under section 10(j) of the FPA. Instead, we have considered these recommendations under the broad public interest standard of FPA section 10(a)(1).⁷⁰ The license contains conditions consistent with five of the recommendations: compliance with water quality standards (two recommendations) (Washington Ecology's water quality certification); modeling to upgrade gas abatement technology (Washington Ecology's water quality certification and Interior's section 4(e) Condition 4); coordination of the Albeni Falls and the Box Canyon projects (Article 306); and establishment of a technical committee to deal with environmental issues (Interior's section 4(e) Condition 2).

⁷⁰ 16 U.S.C. § 803(a)(1).

69. In the remaining recommendation, Washington DFW recommends that the District provide funding for the revitalization of the Usk fish hatchery (\$100,000) and annual funding (\$75,000) for the production of native salmonids. We recognize the need for the rearing of native salmonids to be used in restoration activities. Interior's trout assessment and restoration plan required by Article 406 of the license allows for funds to be used for supplementation of native trout populations through conservation aquaculture. Therefore, we do not find it necessary to provide additional, hatchery-specific funding for the propagation of native salmonids.

B. Kalispel Tribe's Recommendations

The Tribe made nineteen recommendations (letter filed December 11, 2001) that 70. we have evaluated under section 10(a)(1). The license contains conditions consistent with fifteen of the recommendations: reservoir drawdown limitations and other stabilization measures (Interior 4(e) Condition 3); water quality remediation and monitoring plan (Interior 4(e) Condition 4); fish passage at Box Canyon dam and Calispell Creek pumping plant (Interior section 18 prescription); fish assessment and remediation plan (Article 406); installation of "fish-friendly" turbines (Article 405); monitoring and management of ospreys, native amphibians, grazing, and cottonwoods (Article 407 plan); vegetation management (Washington Ecology Water Quality Certification Condition IID); cultural resource management plan (Article 413); cultural resources monitoring (Interior 4(e) Condition 9); management of remains and records recovered from trust lands (Interior 4(e) Condition 10); ethnobiological study (Interior 4(e) Condition 12); and establishment of a technical committee (Interior 4(e) Condition 2). In addition, except as discussed below, the license contains conditions largely consistent with the other four recommendations: monitoring and management of bald eagles, great blue herons, double-crested cormorants, and waterfowl (Article 407).

⁷¹ This funding would be in addition to the \$25,000 annual funding of the Colville hatchery that Washington DFW recommended under section 10(j). The requirements of license Article 406 are consistent with the section 10(j) recommendation. Washington DFW submitted the recommendation for additional funding long after the deadline for submitting 10(j) recommendations, and we therefore consider it under section 10(a).

⁷² By its terms, section 10(j) does not apply to recommendations by Indian Tribes. Thus, we consider tribal recommendations under section 10(a).

- 71. We do not adopt the Tribe's recommendation that the District purchase or manage 70 acres of deciduous forest for the great blue heron. As discussed in the EIS, because the fairly recent abandonment of two colonies near the Box Canyon reservoir appears to have been related to timber harvest rather than project operation, staff did not find a connection to project effects. We anticipate that enhancement of at least 87 acres of deciduous and mixed forest within the project's two wildlife management areas, cottonwood plantings at other locations around the reservoir, and measures to help control shoreline erosion and disturbance at sensitive sites, will meet habitat objectives for this species.
- 72. The Tribe recommends that the District purchase 100 acres of habitat for waterfowl and restore 40 acres of riparian forest in addition to the enhancements to be undertaken in the wildlife management areas. As discussed in the EIS, the wildlife management areas (Article 407) contain over 400 acres of emergent grassland habitat, plus riparian tree and shrub habitats along sloughs and shorelines. With enhancement measures in place, these areas should provide high-quality habitat for ground-nesting waterfowl. Therefore, we believe that purchase of additional lands is not warranted.
- 73. We do not require that the predatory bird monitoring plan provisions of the comprehensive wildlife management plan (Article 407) include measures to offset impacts if monitoring indicates that double-crested cormorants appear to be competing with other species for nest/perch sites or for other habitat components. As discussed in the EIS, we believe that cormorants are not likely to compete with bald eagles, osprey, or great blue herons for fish. We also do not require the construction of artificial perch sites for bald eagles as discussed above. The state of the construction of artificial perch sites for bald eagles as discussed above.

C. Forest Service Recommendations

74. Although Forest Service Condition 14 was submitted under FPA section 4(e), it is not accorded section 4(e) status inasmuch as it requires the District to create or restore at least 60 acres of amphibian habitat on licensee-controlled lands (such as the wildlife management areas). Moreover, we do not think it is necessary to include this condition

⁷³ See EIS at 159.

⁷⁴ *Id.* at 315.

⁷⁵ *Id.* at 158.

⁷⁶ See P 68, supra.

in the license under section 10(a). The District's draft wildlife management plans for Everett Island and Tacoma Creek contain measures to protect and enhance 416 acres of emergent grasslands. Implementation of these plans (required by Article 407) would provide adequate protection and enhancement for wildlife found in emergent grassland habitats, including native frogs such as the northern leopard frog, if present, and other amphibian species. It would also improve emergent grassland habitat for big game, small mammals, bats, furbearers, songbirds, wading birds, waterfowl, and raptors.⁷⁷

- 75. The Forest Service also submitted five recommendations under section 10(a), and the license contains conditions consistent with four of them: shoreline management plan (Article 409); plan to educate landowners on the importance of riparian habitat and preventing riverbank erosion (Article 408); native fish restoration plan (Article 406); and if feasible, use of prairie cordgrass in erosion control measures (Article 408).
- 76. In addition, the Forest Service recommends that the District improve trails, interpretative signing, and overlook facilities at the existing Box Canyon viewpoint and develop a comprehensive information and education package explaining recreational opportunities. While the recreation plan required by Article 412 of the license requires trail and signing improvements, we are not aware of any recreation demand data that indicate a need to develop such an information and education package or improve facilities at the viewpoint. Several existing and planned information and education facilities are already located in the project area. The Forest Service did not provide any support for the need for improvements at the Box Canyon viewpoint. Existing facilities appear adequate to meet current recreational needs. Moreover, the recreation plan will provide the opportunity to address changing recreational needs during the term of the license.

OTHER ISSUES

A. Request for Trial-Type Hearing

77. On December 10, 2004, the District filed a motion for an expedited trial-type hearing to resolve certain issues regarding mandatory conditions filed by Interior in this relicensing proceeding. The District also conditionally requested that the trial-type hearing address the Commission staff's socio-economic analysis in the final EIS. Interior and the Tribe filed answers in opposition to the motion.

⁷⁷ For the same reason, we decline to adopt under section 10(a) Interior's Condition 7, which is not accorded Section 4(e) status to the extent it applies to non-project lands.

- 78. Specifically, the District raised the following issues it stated are disputed material facts that cannot be resolved on the written record: (1) whether the Box Canyon Project has changed the essential nature of the Pend Oreille River; (2) whether river temperatures have increased significantly; (3) whether river velocities have significantly changed; (4) whether fish habitats have been significantly altered; (5) whether fish populations have been significantly affected; and (6) whether the mandatory conditions inappropriately require mitigation for non-project impacts.
- 79. We believe that the extensive written record in this proceeding contains sufficient evidence regarding these science-based issues and that there is no need for a trial-type hearing for us to analyze those matters. Although certain parties in this proceeding have differing interpretations of the factual record, we can resolve them based on the pleadings and the thorough EIS. Under the FPA and the Commission's regulations, hydroelectric proceedings are normally conducted using notice-and-comment hearings. The decision whether to conduct a trial-type hearing is in the Commission's discretion. Accordingly, we deny the request for an evidentiary trial-type hearing.

B. Tribal Environmental Issues

- 80. As discussed earlier in this order, the Tribe challenges the legality of the original license because it did not demonstrate the project's consistency with the purposes of the Kalispel reservation. As a result, the Tribe maintains that the Commission's environmental analysis must begin with pre-project conditions (before 1952) as an environmental baseline.
- 81. We previously acknowledged that the 1952 and 1963 licensing orders did not comply with FPA section 4(e). This does not mean, however, that the Commission must attempt to establish a pre-project baseline for conducting its environmental analysis. Rather, it is our longstanding and judicially-approved policy to use the existing environment as a starting point for our environmental review. Project works that are

⁷⁹ See Central Nebraska Public Power and Irrigation District, 51 FERC &61,257 at 61,741 (1990) (citing Amador Stage Lines, Inc. v. United States, 685 F.2d 333, 335 (9th Cir. 1982)).

⁷⁸ See 18 C.F.R. ■ 4.34.

⁸⁰ See 77 FERC ¶ 61,146 at 61,548-49.

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

already in existence are considered as part of the existing environment, whether or not they were previously licensed. However, we also take into account a project's past environmental effects in determining what measures are appropriate to protect, mitigate, and enhance natural resources for the new license term. We find no basis for departing from our baseline policy in this case.

82. The Tribe also argues that decommissioning should be included as an alternative to continued operation of the Box Canyon Project because the project is inconsistent with the purposes of the reservation. The EIS includes a discussion of the effects of project retirement, both positive and negative, and concludes that it is not a reasonable alternative. This analysis, although brief, is sufficient to provide a general understanding of the environmental and other effects that would occur if the Commission were to determine that a new license should not be issued. A more detailed environmental analysis would then be required in connection with the licensee's proposal for project retirement. As discussed earlier, we conclude that relicensing the project would not interfere or be inconsistent with the purposes for which the reservation was created. We therefore find that a more detailed analysis of decommissioning as an alternative is not required.

C. Annual Charges for Use of Reservation Lands

83. Under FPA section 10(e), when a license is issued 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. Commission regulations provide that annual charges for projects using tribal lands within Indian reservations will be determined on a case-by-case basis. The Commission has used a variety of procedures to satisfy its section 10(e) obligation to

⁸² See 18 C.F.R. § 11.4(a) (2004). Annual charges for the other federal lands used by the project are calculated under 18 C.F.R. §11.2(b)(2004).

determine annual land use charges for the few projects occupying tribal reservation lands. ⁸³ 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. ⁸⁴

84. Article 201 of the license allows a six-month period for negotiation of an annual charge for the use of Kalispel Indian Reservation lands. If no agreement is reached by such time, the Commission will determine the annual charge. Article 201 also specifies that annual charges must be paid effective as of the first day of the month in which the license is issued.

D. Other Environmental Measures

- 85. As explained in the EIS, shoreline erosion is occurring in various locations and to varying degrees throughout the project reservoir. There are a number of factors that can contribute to this erosion, including project operations, natural flood events and landslides, shoreline development, wave action, and natural flowing water. Past monitoring efforts have been unable to establish the degree to which project operations contribute to this shoreline erosion.⁸⁵
- 86. The District proposes to develop a plan to monitor shoreline erosion at representative points throughout the reservoir to determine the rate, location, and causes of such erosion, including its relationship to project operations. Article 408 requires such a monitoring plan and, in addition, requires the District to develop and implement a two-phase erosion control plan. These measures should clarify the site-specific causes of this erosion and the degree to which project operations contribute to the problem, and should also provide increased erosion control.

⁸³ 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).

⁸⁴ See, e.g., 77 FERC ¶ 61,146 at 61,553; Wisconsin Power & Light Co., 79 FERC ¶ 61,181 at 61,855 (1997); Minnesota Power & Light Co., 75 FERC ¶ 61,131 (1996).

⁸⁵ See EIS at 30.

87. The EIS concluded that certain additional measures would be necessary to protect, mitigate damages to, or enhance the project's environmental resources. These measures, which are to be implemented on project lands owned or managed by the District, are reflected in the Articles 410 (integrated weed management) and 411 (rare plant/sensitive species management).

E. Payment to the U.S. Army Corps of Engineers

88. In October 1952, the licensee and the Corps of Engineers entered into an agreement to compensate the United States for the tailwater encroachment on the Albeni Falls Dam Project resulting from the operation of the Box Canyon Project. The agreement provides that, from the power produced at Box Canyon dam, the licensee will deliver into the federally-owned regional power system, electrical energy at no cost or expense to the government, equal to the electrical energy which cannot be generated or is lost at the Albeni Falls dam because of the permitted tailwater encroachment. Power losses are computed and repayments made in kilowatt-hour units. The existing contract allows the District to back up water to a level not to exceed two feet. This backup decreases the ability of Albeni Falls to generate electricity. The District currently provides monthly energy payments to the Corps. Accordingly, Article 306 requires that the District continue this payment to the United States.

F. Recreation

89. To ensure that the project meets the area's existing and future public recreational needs, Article 412 requires the District to develop and implement a recreation plan for the project that includes provisions for the continued operation and maintenance of the District's Campbell Park, visitor center, and scenic overlook. In the EIS, staff concluded that most of the District's proposed recreation measures would contribute to meeting the recreation needs in the project area. Therefore, Article 412 also requires

⁸⁶ See EIS at 145-48.

⁸⁷ The District owns less than three percent of the lands within the project boundary.

⁸⁸ Article 29 of the original license required that the licensee enter into an agreement with the Chief of Engineers, Department of the Army, to compensate the United States for encroachment of the Albeni Falls Project resulting from operation of the Box Canyon Project.

⁸⁹ See EIS at 320.

implementation of these measures. They include the installation of additional picnic tables at Campbell Park; redevelopment, operation and maintenance of a public boat launch site (Ponderay Shores); the improvement, operation and maintenance of the Town of Cusick's boat launch facility; the operation and maintenance of the Town of Ione's existing park; deeding or granting an easement of a 1.8-acre parcel of District-owned land to the town of Oldtown for recreational vehicle camping; and signage to enhance public access and use of public recreation sites. Finally, the required plan also includes provisions for monitoring recreation through the license term, periodically updating the recreation plan, and providing additional facilities if monitoring indicates such facilities are needed.

- 90. We are not including in the license the District's proposal to provide funding and other assistance to the Heritage Scenic Byways Program for the North Pend Oreille Scenic Byways Program, including improvements to a trail located five miles downstream of the project dam. The Heritage Scenic Byways Program is not specifically tied to the project's recreation facilities or project purposes. 191
- 91. We note that some of the recreation facilities required for project purposes are not included within the current or proposed project boundary. Specifically, the District's existing Campbell Park, the proposed boat launch site at Ponderay Shores, the town of Cusick's existing boat launch site, the town of Ione's existing park, the Forest Service's Pioneer Park campground, and the 1.8-acre parcel of District land located adjacent to the town of Oldtown's Riverside Park are all located outside the project boundary. It is our

⁹⁰ The Heritage Scenic Byways Program highlights Washington's natural, recreation, scenic, and cultural qualities by designating special points of interest along a series of byway routes throughout the state. The North Pend Oreille Scenic Byways program pertains to a 27-mile-long scenic byway along State Route 31 in northeast Washington and highlights numerous points of interest along the route, including the recreation facilities at the Box Canyon dam. The vast majority of these points of interest are located north of the project area.

⁹¹ See EIS at 213.

policy that, if lands are needed for project purposes, they should be brought within the project boundary. ⁹² Therefore, we are requiring the District, under Article 202, to submit for Commission approval, exhibit G drawings adding the above lands/sites fully within the project boundary.

- 92. Interior section 4(e) Condition 13 specifies, among other things, that the District provide funding for the construction of Kalispel Tribe's Pow Wow campgrounds, and the Manresa Grotto Beach site, located on Kalispel Indian Reservation lands but outside the project boundary. As previously noted, to the extent that Interior's 4(e) conditions wholly or in part require the District to take actions outside of the project's boundary and/or off of the Kalispel Indian reservation lands, we do not consider them to be valid section 4(e) conditions. Consequently, we consider the condition under FPA section 10(a).
- 93. FPA Section 10(a) requires that enhancements contained in licenses issued by the Commission must address beneficial public uses, including recreational purposes. In the EIS, staff found that public access to the Pow Wow Grounds and the Manresa Grotto Beach site is either very limited or prohibited.⁹³ Therefore, given that public access to the Kalispel Tribe's recreation facilities is either very limited or prohibited, we find that this condition is not consistent with comprehensive planning standard of FPA section 10(a).

G. Wildlife Management Areas

94. The District has developed draft wildlife management plans for the Everett Island and Tacoma Creek wildlife management areas that include measures for wetland construction and enhancement, plantings to improve riparian habitat, and fencing to control grazing. The primary habitat objective for the two wildlife management areas is to restore, protect, and enhance existing farmland and pasture to improve riparian and

⁹² See, e.g., Kennebec Water Power Company, 102 FERC ¶ 61,259 at 61,798 (2003) ("Lands dedicated to project purposes must be included in the project boundary..."). The fact that the lands in question are to be within the project boundary does not, however, mean that the District must acquire title to them; rather, it must have sufficient interests to carry out project purposes. See Wisconsin Public Service Corporation, 104 FERC ¶ 61,295 at n. 16.

⁹³ See EIS at 321.

wet-meadow habitats. Over time, these wildlife management areas would provide high-quality habitat for big game, muskrat and beaver, waterfowl, wading birds, bald eagle, osprey, native amphibians, and a variety of songbirds.

95. The filed Exhibit G (project boundary) drawings indicate that a small portion of each of the two wildlife areas is not within the project boundary. To ensure that the licensee is able to carry out its responsibilities with respect to the wildlife management areas through the term of the license we require, by Article 202, the addition of these lands to the project boundary.

PACIFIC NORTHWEST ELECTRIC POWER PLANNING AND CONSERVATION ACT

- 96. In 1980, Congress enacted the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act). This act created the Northwest Power Planning Council (now known as the Northwest Planning and Conservation Council) and directed it to develop a Columbia River Basin Fish and Wildlife Program. The purpose of the Program is to protect, mitigate damages to, and enhance fish and wildlife resources affected by the development and operation of hydroelectric projects on the Columbia River and its tributaries, while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply. Section 4(h)(11)(A) of the Northwest Power Act provides that federal agencies operating or regulating hydroelectric projects within the Columbia River Basin shall exercise their responsibilities to provide equitable treatment for fish and wildlife resources with other purposes for which the river system is utilized and shall take the Council's Program into account "at each relevant stage of decision making processes to the fullest extent practicable." Specific provisions affecting non-federal hydropower projects are outlined in Appendix B of the Program.
- 97. Our requirements in this license are consistent with applicable provisions of the Program. 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

^{94 16} U.S.C. § 839(b) et seq.

⁹⁵ 16 U.S.C. § 839b(h)(5).

⁹⁶ 16 U.S.C. § 839(h)(11)(A).

Appendix B of the Program. Further, Article 414 reserves to the Commission the 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.

NATIONAL HISTORIC PRESERVATION ACT

- 98. The National Historic Preservation Act (NHPA)⁹⁷ requires federal agencies to manage cultural resources under their jurisdiction and authorizes the Secretary of Interior to maintain the National Register. Section 106 of the NHPA and its implementing regulations⁹⁸ require federal agencies to take into account the effect of any proposed undertaking on properties listed or included for listing in the National Register (defined as historic properties). If an agency official determines that an undertaking may have adverse effects on historic properties, the agency official must afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking.
- 99. To satisfy these responsibilities, the Commission executed a Programmatic Agreement (PA) with the Washington and Idaho State Historic Preservation Officers and the Kalispel Tribe, and invited the District, Interior's Bureau of Indian Affairs, and the Forest Service to concur with the stipulations of the PA. The Bureau of Indian Affairs and the Forest Service concurred. The District declined. The PA requires the licensee to implement prepare and implement an Historic Properties Management Plan (HPMP) for the term of any new license issued for this project. Execution of the PA and implementation of the HPMP demonstrate the Commission's compliance with section 106 of the NHPA. Article 413 requires the licensee to implement the PA and requires that the District develop and file its HPMP with the Commission within one year of license issuance.

⁹⁷ 16 U.S.C. § 470 et seq.

⁹⁸ 36 C.F.R. Part 800 (2004).

⁹⁹ See letter (dated and filed March 14, 2005) from the District to the Commission's Secretary.

STATE AND FEDERAL COMPREHENSIVE PLANS

100. Section 10(a)(2) of the FPA requires the Commission to consider the extent to which a project is consistent with comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. Consistency with comprehensive plans is one of several factors considered in our licensing decision. Under section 10(a)(2), federal and state agencies have filed 113 qualifying comprehensive plans, of which we identified 30 Washington/Idaho plans and 12 federal plans to be potentially applicable. We did not find any inconsistencies.

101. Four other plans, which do not qualify as comprehensive plans within the meaning of section 2.19 of the regulations, ¹⁰¹ were filed by the Kalispel Tribe. ¹⁰² Nevertheless, we have considered those plans and found no conflicts. ¹⁰³

APPLICANT'S PLANS AND CAPABILITIES

102. In accordance with sections 10(a)(2)(c)and 15(a) of the FPA, we have evaluated the District's record as a licensee with respect to the following: (A) conservation efforts; (B) compliance history and ability to comply with the new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission service; (G) cost effectiveness of plans; and (H) actions affecting the public. We accept staff's findings in each of the following areas.

¹⁰⁰ See EIS at B-1 through B-4.

¹⁰¹ Section 2.19 of the regulations, 18 C.F.R. § 2.19, defines a qualifying plan as one that is prepared by an authorized federal or state agency; is a comprehensive study of one or more beneficial uses of a waterway; describes the standards, data, and methodology employed; and is filed with the Commission's Secretary. The Tribe is not an authorized agency.

¹⁰² See EIS at 335.

¹⁰³ See 18 C.F.R. §2.1c(k)(2004).

A. Conservation Efforts

103. FPA section 10(a)(2)(C) requires the Commission to consider the extent of electric consumption efficiency programs for license applicants primarily engaged in the generation or sale of electric power. The District is such an applicant. The District has programs to promote cost-effective conservation for its residential, commercial, industrial, and agricultural customers. Through these programs, District is making satisfactory efforts to conserve electricity and reduce peak hour demands.

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

104. FPA section 15(a)(3)(A) requires the Commission to "take into consideration . . . the existing licensee's record of compliance with the terms and conditions of the existing license." The Tribe argues that the Box Canyon Project "presents a case of longstanding noncompliance with both § 4(e) and §10(e) [of the FPA], repeated resistance to efforts by the Commission to clarify Project boundaries in regard to Kalispel Reservation lands, and repeated efforts to relitigate matters previously decided against it." In light of this history, the Tribe argues that the Commission should find the project inconsistent with the purposes of the reservation under FPA section 4(e) and deny the District's application for a new license. As discussed in more detail above, we decline to do so, and find that a new license should be issued with Interior's mandatory conditions to protect the reservation under section 4(e) and a requirement that the District pay the Tribe a reasonable annual charge under section 10(e) for the use of reservation lands. We further find that the District's history of compliance with regard to this issue does not require us to deny its relicense application.

105. In our 1996 order on the District's petition for a declaratory order and Interior's complaint, we declined to make a finding that the District was in violation of its license by flooding reservation lands without authority to do so. We noted that the existing license did not grant authority to flood the lands, but neither did it require the District to obtain the necessary authority. We added that, because the court proceedings had already resulted in a judicial finding of trespass and resulted in remedial action, we viewed the issue of remedial action in our proceeding as moot. We observed that the amendment application would permit us to deal with the deficiencies found in the earlier action taken

¹⁰⁴ 16 U.S.C. § 808(a)(3)(A).

¹⁰⁵ Tribe's response to District's April 21, 2005 filing at 6 (filed May 17, 2005).

under FPA sections 4(e) and 10(e), as well as to establish the proper boundary for the project. We subsequently amended the license in 1999 in response to the parties' settlement agreement, thus resolving these issues for the remainder of the existing license term ¹⁰⁷

106. While the District's actions were found by the courts to have been improper, they do not constitute an extensive pattern of non-compliance that causes us to doubt that the District will meet the terms of its new license. Apart from these matters, we find that the District's overall record of making timely filings and compliance with its license is satisfactory.

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

107. We reviewed the District's management, operation, and maintenance of the Box Canyon Project pursuant to the requirements of 18 C.F.R. Part 12 and the Commission's Engineering Guidelines and periodic Independent Consultant's Safety Inspection Reports. We conclude that the dam and other project works are safe, and there is no reason to believe that the District cannot continue to safely manage, operate, and maintain these facilities under a new license.

D. Ability to Provide Efficient and Reliable Electric Service

108. We reviewed the District's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. We find that the District has been operating the project in an efficient manner within the constraints of the existing license and is likely to continue to do so under a new license.

E. Need for Power

109. The Box Canyon Project is estimated to generate an average of 452,000 MWh per year under current conditions. The District blends the energy it generates with energy obtained from other sources, and distributes it to various commercial and residential users. The District also obtains power from Seattle City Light's Boundary dam, Avista Corporation, and Bonneville Power Administration (BPA). The District sells this energy to meet its obligations for retail power sales to residential, commercial, and industrial users and to meet various contractual power sales agreements. A portion, for example, is sold to Seattle City Light under the terms of a power sales agreement executed in 1955.

¹⁰⁶ 77 FERC ¶ 61,146 at 61,553.

¹⁰⁷ 86 FERC ¶ 61,200 at 61,708.

A large part of the energy distributed by the District within Pend Oreille County is used by the Ponderay Newsprint Company. This large industrial use offsets most of the Box Canyon operating costs, allowing the District to maintain a policy of distributing its lowest-cost energy to residential ratepayers first.

- 110. Although the District does not have any plans to change operation of the Box Canyon Project, it does propose to upgrade the turbines, increase the hydraulic capacity of the project, and rewind the generators. These measures affect energy generation, resulting in an 18 MW increase in generation or 20,817 additional MWh per year of regionally available energy.
- 111. In the Western Electricity Coordinating Council (WECC) reliability region where the Box Canyon Project is located, the capacity mix includes a proportionately large amount of hydropower relative to other parts of the region. To consider regional power needs, we reviewed a recent demand forecast and other information from the Northwest Power Planning Council (NPPC) and other energy planning entities, including the BPA and WECC. In 1998, the NPPC adopted a Revised Fourth Northwest Conservation and Electric Power Plan, which also includes a 20-year demand forecast (NPPC, 1998). The plan shows that a need for more power is likely to exist in the Pacific Northwest during the 20-year planning horizon (1995 to 2015). Recent electricity demand forecasts project growth rates between 0.7 and 1.9 percent per year (NPPC, 1998). More recent forecasts from WECC suggest that peak demand and annual energy will grow in the Northwest Power Pool Area at annual compound rates of 1.6 percent and 1.7 percent, respectively, over the period 2003 through 2012.
- 112. The western states as a whole are more constrained with respect to capacity during the summer months; however, because of the colder northwest climate, the winter peak is more critical for the Northwest Power Pool. Summer peak load in the Northwest Power Pool is forecast to rise from 48,704 MW in 2003 to 56,461 MW in 2012. Generation additions totaling 11,863 MW are forecast to come on-line over the same ten-year period. Winter peak load is estimated to increase from 57,499 MW in winter 2003–04 to 66,071 MW in winter 2012-13 (WECC, 2003). BPA is forecasting a potential for winter

¹⁰⁸ Northwest Power Planning Council Revised Fourth Northwest Conservation and Electric Power Plan-1998. Northwest Power Planning Council, Portland, Oregon.

¹⁰⁹ Western Electricity Coordinating Council (WECC). Ten-Year Coordinated Plan Summary, Planning and Operation for Electric System Reliability. December 2003.

capacity deficits in the Pacific Northwest. For January (a peak demand month for the region), total regional firm load is projected to be 39,477 MW in 2013 and total net power resources are expected to be 33,423 MW. The colder winter months are most susceptible to deficits, and deficits could also occur in late April and May (BPA, 2003). 111

113. Continuing to operate the existing project would provide both firm energy and dependable capacity that would be useful in meeting part of the projected short and long term needs of the District and the region. Based on the above projections, the power from the Box Canyon Project would continue to be useful in meeting local as well as part of the regional power needs. The project would continue to displace some of the fossil fueled electric power generation the regional utilities now use, thereby conserving nonrenewable resources and reducing the emission of noxious byproducts caused by the combustion of fossil fuels.

F. Transmission Services

114. The project's transmission facilities that are required to be licensed include the generator leads, station transformers, buses and switchyard located at the powerhouse. The District proposes no changes that would affect transmission facilities.

G. Cost Effectiveness of Plans

115. The District's past record as a licensee indicates it is likely to carry out these plans in a cost-effective manner.

H. Actions Affecting the Public

116. In its license application, the District cited numerous examples of actions it has taken that positively affect the public including acquiring land for park and recreation development, fish stocking, and providing funding for recreation facilities and programs.

¹¹⁰The BPA Pacific Northwest region is smaller than the WECC Northwest Power Pool area because it does not include Alberta or British Columbia, and only includes Montana west of the Continental Divide and those portions of Nevada, Utah, and Wyoming within the Columbia River drainage basin.

¹¹¹Pacific Northwest Loads and Resources Study. Bonneville Power Administration, Portland, Oregon. December 2002.

PROJECT ECONOMICS

- 117. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*, ¹¹² the Commission uses current costs to compare the costs of the project and likely alternative power, with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.
- 118. In applying this analysis to the Box Canyon Project, we have considered three options: no action, the applicant's proposal, and the project as licensed in this order. Under the no-action alternative, the levelized annual cost of operating the Box Canyon project is \$5,710,000, or \$12.6 per megawatt hour (MWh). The project now generates an estimated average of 452,000 MWh annually. When we multiply our estimate of average generation by the alternative power cost of \$36/MWh, ¹¹³ we get a total value of the project's power of \$16,272,000 in 2004 dollars. To determine whether the project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power. ¹¹⁴ Therefore, in the first year of a new license, the project would cost \$10,561,900, or \$23.4/MWh, less than the likely alternative cost of power.
- 119. Under the District's proposal (four upgraded turbines and three-inch-per-hour drawdown constraint), the levelized annual cost of operating the project would be about \$8,218,300, or \$17.4/MWh. Based on an estimated average annual generation of 472,817 MWh, the project would produce power valued at \$17,026,400 when multiplied

113 Staff estimates the value of energy and capacity to be \$36/MWh. This value is consistent with recent FERC western region EISs in which we applied a \$40/MWh value for investor-owned utilities (IOUs). Because municipal utilities have lower financing costs, the rate would be somewhat less than for an IOU. The value also compares favorably with the BPA 2005 priority firm exchange program rate.

¹¹² 72 FERC ¶ 61,027 (1995).

Details of staff's economic analysis for the project as licensed in this order and for various alternatives are included in the EIS.

by the \$36.0/MWh value of the project's power. Therefore, in the first year of the new license, the power would cost \$8,808,100, or \$18.6/MWh, less than the likely cost of alternative power.

- 120. As licensed in this order, with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$10,506,300 or \$23.0/MWh. Based on an estimated average annual generation of 456,091 MWh¹¹⁵ as licensed, the project would produce power valued at \$15,965,300 when multiplied by the \$36.0/MWh value of the project's power. Therefore, in the first year of the new license, project power would cost \$5,459,000, or \$12.0/MWh, less than the likely cost of alternative power.
- 121. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout.
- 122. The Commission received numerous comments from the District's retail electric customers, expressing concern that relicensing the project with environmental conditions in addition to those proposed by the District would result in increased retail electric rates that could adversely affect the District's customers. Pend Oreille County currently has the second lowest electricity rates in the United States. The project as licensed in this order would likely result in increased electric rates to the District's customers. Its

¹¹⁵ This estimate of the project's average annual generation accounts for the District's plans to modify the project's turbines.

Ponderay Newsprint Company is the largest private employer in the county, with more than 200 employees. In 2001, the company purchased about 80 percent of the power produced at the Box Canyon project. *See* EIS at 235-36.

¹¹⁷ See EIS at 235.

¹¹⁸ The EIS contains an extensive discussion and a detailed analysis of the economic effects of changes in electricity rates. *See* EIS at 233-55.

However, a licensed project encompasses a variety of beneficial purposes in addition to the generation of power; and in determining whether, or under what conditions to issue a license, the Commission must strike an appropriate balance of these competing purposes.

COMPREHENSIVE DEVELOPMENT

- 123. Sections 4(e) and 10(a)(1) of the FPA¹¹⁹ require the Commission, in acting on license applications, to give equal consideration to the developmental and environmental uses of the waterway on which a project is located. 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.
- 124. The EIS for the Box Canyon 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.
- 125. Based on our independent review and evaluation of the Box Canyon Project, recommendations from the resource agencies and other interested entities, and analysis of the proposed action and alternatives as documented in the EIS, we have selected the proposed project, with the mandatory agency terms and conditions and staff-recommended measures, as the preferred alternative.
- 126. Issuance of a new license will serve to maintain a beneficial and dependable source of electric energy. The required environmental measures will improve water quality, protect and enhance fish and wildlife resources, improve public use of recreation facilities and resources, improve multiple use and management of project lands, and maintain and protect historic and archeological resources within the area affected by project operation. The electric energy generated from a renewable resource will continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution. For all these reasons, we find that relicensing the Box Canyon Project as described in this order is best adapted to a comprehensive plan for improving or developing the Pend Oreille River.

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

LICENSE TERM

- 127. Pursuant to section 15(e) of the FPA,¹²⁰ relicense terms shall not be less than 30 years nor more than 50 years from the date on which the license is issued. Our general policy is to establish 30, 40, and 50-year terms for projects with, respectively, little, moderate, or extensive redevelopment, new construction, new capacity, or additional environmental measures.¹²¹
- 128. This license requires upgrading all four project turbines with new high-efficiency runners and rewinding generators. The District also will install "fish-friendly" runners on two of the turbines and auxiliary spillway gates, and implement an extensive amount of additional environmental measures. Therefore, the license term will be 50 years, effective on the first day of the month in which this order is issued.

The Commission orders:

- (A) This license is issued to the Public Utility District No. 1 of Pend Oreille County, Washington (licensee) for a period of 50 years, effective on the first day of the month in which this license is issued, to operate the Box Canyon Hydroelectric Project Canyon. This license is subject to the terms and conditions of the Federal Power Act (FPA), which are incorporated as part of this license, and to the regulations the Commission issues under the provisions of the FPA.
 - (B) The project consists of:
- (1) All lands enclosed by the project boundary shown by Exhibit G filed January 21, 2000:

Exhibit G:

Drawing G-1	FERC No. 2042-1001	Showing Project Boundary & Location Map
G-2	2042-1002	Project Boundary & Location Map
G-3	2042-1003	Project Boundary & Location Map

¹²⁰ 16 U.S.C. ■ 808(e).

¹²¹ See Consumers Power Company, 68 FERC **&**61,077 at 61,383-84 (1994).

2042-1004	Project Boundary & Location Map
2042-1005	Project Boundary & Location Map
2042-1006	Project Boundary & Location Map
2042-1007	Project Boundary & Location Map
2042-1008	Project Boundary & Location Map
2042-1009	Project Boundary & Location Map
2042-1010	Project Boundary & Location Map
2042-1011	Project Boundary & Location Map
2042-1012	Project Boundary & Location Map
2042-1013	Project Boundary & Location Map
2042-1014	Project Boundary & Location Map
2042-1015	Project Boundary & Location Map
2042-1016	Project Boundary & Location Map
2042-1017	Project Boundary & Location Map
2042-1018	Project Boundary & Location Map
2042-1019	Project Boundary & Location Map
2042-1020	Project Boundary & Location Map
2042-1021	Project Boundary & Location Map
2042-1022	Project Boundary & Location Map
2042-1023	Project Boundary & Location Map
	2042-1005 2042-1006 2042-1007 2042-1008 2042-1010 2042-1011 2042-1012 2042-1013 2042-1014 2042-1015 2042-1016 2042-1017 2042-1018 2042-1019 2042-1020 2042-1021

G-24	2042-1024	Project Boundary & Location Map
G-25	2042-1025	Project Boundary & Location Map
G-26	2042-1026	Project Boundary & Location Map
G-27	2042-1027	Project Boundary & Location Map
G-28	2042-1028	Project Boundary & Location Map
G-29	2042-1029	Project Boundary & Location Map

(2) The development consists of: (a) a 62-foot-high, 260-foot-long reinforced concrete dam with integral spillway; (b) a 217-foot-long, 35-foot-diameter diversion tunnel; (c) a 1,170-foot-long forebay channel; (d) an auxiliary spillway with gates; (e) a powerhouse containing four generating units (four upgraded turbines and four rewound generators) with a combined capacity of 90 MW; (f) an 8,850-acre reservoir at a maximum operating pool elevation of 2,030.6 feet above mean sea level, as measured at the dam; (g) the Calispell Creek pumping plant, including two pumping stations, outlet works, gates, culverts, and the railroad dike; and (h) a switchyard with four rewound main transformers, circuit breakers, and transmission line connectors.

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 sections of exhibit A filed on June 28, 2001:

Pages A-2 to Page A-14

Exhibit F: The following sections of exhibit F filed on June 28, 2001:

Drawing F-1	FERC No. 2042-1030	Showing General Plan and Elevation
F-2	2042-1031	Typical Sections, Water Conductors
F-3	2042-1032	Spillway, Plan and Sections
F-4	2042-1033	Powerhouse, Plans and Transverse Sections
F-5	2042-1034	Powerhouse, Roof Plan and Longitudinal Section

F-6	2042-1035	One Line Diagram
F-7	2042-1036	Calispell Creek Pump House No.1and No. 2, Plan and Sections

- (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 and other rights that are necessary or appropriate in the operation or maintenance of the project.
- (C) The Exhibits A, F, and G¹²² described above are approved and made part of the license.
- (D) This license is subject to the conditions submitted by the U.S. Department of the Interior under section 4(e) of the Federal Power Act, to the extent that those conditions apply to reservation lands or waters within the project boundary, as those conditions are set forth in Appendix A to this order.
- (E) This license is subject to the conditions submitted by the U.S. Department of Agriculture under section 4(e) of the Federal Power Act, to the extent that those conditions apply to reservation lands or waters within the project boundary, as those conditions are set forth in Appendix B to this order.
- (F) This license is subject to the conditions submitted by the U.S. Department of the Interior under section 18 of the Federal Power Act, as those conditions are set forth in Appendix C to this order.
- (G) This license is subject to the conditions of the water quality certification issued by the Washington Department of Ecology pursuant to section 401(a) of the Clean Water Act, as those conditions are set forth in Appendix D to this order.

¹²² The Exhibit G drawings filed do not meet the Commission's current standards for maps and drawings as set forth in Article 202. Specifically, the maps are not stamped by a registered surveyor and are not positionally accurate to the National Map Accuracy Standards for maps at 1:24,000 scale.

- (H) This license is subject to the conditions of the water quality certification issued by the U.S. Environmental Protection Agency pursuant to section 401(a) of the Clean Water Act, as those conditions are set forth in Appendix E to this order.
- (I) This license is subject to the articles set forth in Form L-5 (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States," 54 FPC 1792, 1832 (October 1975), and the following additional articles:
- Article 201. Annual Charges. (a) The licensee shall pay the United States the following annual charges, effective as of the first day of the month in which this license is issued, and as determined in accordance with provisions of the Commission's regulations in effect from time to time, for the purposes of:
- (1) reimbursing the United States for the cost of administration of Part I of the FPA. The authorized installed capacity for that purpose is 72 megawatts until the date of commencement of operation of each increment of new capacity authorized by this license, after which time the authorized installed capacity shall include such new capacity up to the maximum authorized installed capacity of 90 megawatts; and
- (2) recompensing the United States for the use, occupancy and enjoyment of 223.57 acres of lands, other than for the use of transmission lines.
- (b) For the purpose of reimbursing the Kalispel Tribe of Indians for the use, occupancy, and enjoyment of 493.03 acres of its lands within the Kalispel Indian Reservation, the licensee shall, subject to approval by the Commission, negotiate with the Kalispel Indian Tribe a reasonable annual charge for the use of tribal lands. Such payment agreement shall be filed with the Commission within six months of the date of issuance of the license. In the event that no agreement is reached by such time, the Commission will take appropriate action to establish the annual charge, after notice and opportunity for hearing.
- Article 202. Exhibit F and G Drawings. Within 90 days of the date of issuance of the license, the licensee shall file exhibit drawings F and G described in ordering paragraph (C) in aperture card and electronic formats that meet the requirements of 18 C.F.R. §4.39 and 4.41(h). The Exhibit F drawings shall also include outlet works, gates, culverts and the railroad dike of the Calispell Creek pumping plant and the outlet works, gate, culverts, dike and the pumps of the Trimble Creek pumping plant. The Exhibit G drawings shall also include the licensee's Tacoma Creek and Everett Island wildlife management areas, and the following recreation facilities: Campbell Park, the town of Cusick's boat launch facility; the town of Ione's Ione City Park; the U.S. Forest

Service's Pioneer Park campground site, the licensee proposed boat launch site at Ponderay Shores, and the 1.8-acre parcel of licensee-owned land located adjacent to the town of Oldtown's existing park.

(a) Four sets of the 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 Drawing Number (e.g., P-1234-1001 through P-1234-###) 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 (e.g., F-1, G-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 along with form FERC-587 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. The remaining set of aperture cards and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

State Director
Bureau of Land Management
Land Services Section (ID-943-A)
1387 S. Vinnell Way
Boise, ID 83709-1657
ATTN: FERC Withdrawal Recordation

(b) The licensee shall file two separate sets of exhibit drawings in electronic 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 critical energy infrastructure information (CEII) material (defined in 18 CFR § 388.113(c)). Exhibit G drawings must be identified as non-internet public information (NIP) material under 18 C.F.R. § 388.112. 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 [e.g., P-1234-###, F-1, General Plan and Elevation, 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

Each Exhibit G drawing that includes the project boundary must contain a <u>minimum</u> of three known reference points, arranged in a triangular format. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing.

(c) The licensee shall file three separate sets of the project boundary data in a georeferenced vector electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1234, boundary vector data, MM-DD-YYYY. SHP]. 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. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1234, project boundary metadata, MM-DD-YYYY.TXT].

In addition, for those projects that occupy federal lands, a separate geo-referenced vector (or polygon) file(s) is required that identifies transmission line acreage and non-transmission line acreage affecting federal lands for the purpose of meeting the requirements of 18 CFR §11.2. The file(s) must also identify each federal owner and federal acreage affected by the project boundary. Depending on the geo-referenced electronic file format, the vector (or polygon), point, and federal lands data can be included in a single file with multiple layers.

Article 203. 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. Revised Exhibits. Within 90 days of completion of construction of the facilities authorized by this license, the licensee shall file for Commission approval, revised exhibits A, F, and G, as applicable, to describe and show those project facilities as built. A courtesy copy shall be filed with the Commission's Portland Regional Office, the Commission's Director, Division of Dam Safety and Inspections, and the Director, Division of Hydropower Administration and Compliance.

Article 302. Evaluation of Structures. The licensee shall conduct an evaluation of existing dikes, gated culverts, levees, and pump stations and other structures located throughout the reservoir and identify which of these structures impound waters that constitute a project structure.

Within one year from the date of issuance of the license, the licensee shall file a report documenting the results of this evaluation. The report shall include, for each identified structure: (a) a description of its type, size, location, ownership, and entity or entities responsible for operation and maintenance; (b) a finding as to whether it impounds water up to elevation 2,041 feet msl, as measured at the Cusick gage; and (c) a recommendation, for Commission approval, as to whether it should be included as a project work in the license supported by site-specific information.

The licensee shall conduct the evaluation and prepare the report in consultation with the Commission's Portland Regional Office and the owners of each of the existing structures to be evaluated. The licensee shall include with the report documentation of consultation, copies of comments and recommendations on the report after it has been prepared and provided to the consulted entities, and specific descriptions of how the entities' comments are accommodated by the report. 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 Commission reserves the right to require the licensee to file the necessary revised exhibits to include the appropriate structures as part of the project. Upon a Commission determination that additional structures shall be included in the license, the licensee shall file the necessary revised exhibits, including any changes required by the Commission.

Article 303. 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 cofferdams and deep excavations is 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 Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Commission's Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 304. Contract Plans and Specifications. At least 60 days prior to the start of any construction, the licensee shall submit one copy of its plans and specifications the Commission's Portland Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections). The licensee may not begin construction until the Regional Engineer has approved in writing the plans and specifications and determined that all preconstruction requirements have been satisfied. The submittal to the Regional Engineer must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan.

Article 305. Communication and Coordination Protocol for Project Operations. Within 180 days of the date of issuance of the license, the licensee shall develop and file with the Commission a communication and coordination protocol to be developed in consultation with the U.S. Army Corps of Engineers (Corps). The protocol shall describe how the licensee will communicate with the Corps and coordinate project operations with the Corps' operation of the Corps' Albeni Falls project to prevent unanticipated reservoir elevation changes in the Box Canyon reservoir and maintain run-of-river operations at the Box Canyon project.

Article 306. Compensation Agreement. The licensee shall compensate the United States for encroachment, not to exceed two feet, on the Albeni Falls project resulting from operation of the Box Canyon project. Pursuant to the agreement dated October 15, 1952, (refiled June 14, 2005) between the licensee and the Chief of Engineers, Department of the Army, the licensee shall deliver power into the federally-owned regional power system at no cost or expense to the government, in an amount equal to the electrical energy that cannot be generated or is lost at the Albeni Falls dam because of the tailwater encroachment authorized by this license. Power losses shall be computed and repayments shall be made in kilowatt-hour units.

Article 401. Mandatory Plans for Commission Approval. Various conditions of this license found in the U.S. Department of the Interior's (Interior) section 4(e) conditions (Appendix A) and section 18 prescriptions (Appendix C), the U.S. Forest Service's (Forest Service) section 4(e) conditions (Appendix B), the Washington Department of Ecology's (Ecology) water quality certification conditions (Appendix D) and the U.S. Environmental Protection Agency's (EPA) water quality certification (Appendix E) require the licensee to prepare plans and reports in consultation with other entities for approval by Interior, the Forest Service, Ecology or EPA. Upon agency approval, the plans are to be submitted to the Commission and specific measures implemented without prior Commission approval. Each such plan and report shall also be submitted to the Commission for approval. These plans are listed below.

(a) U.S. Department of the Interior FPA Section 4(e) Conditions

CONDITION NO.	PLAN NAME	DUE DATE
		(from license
		issuance)
(1) 1.A.	Implementation &	1 year
	Monitoring Plan	
(2) 3. D.	Fish Stranding Study	1 year
	Plan	
(3) 3. E.	Geotechnical Study	1 year
	Plan	
(4) 3. F.	Erosion Monitoring	1 year
	Plan	
(5) 8. E.	Cultural Resource	1 year
	Mgmt. Plan	

(b) U.S. Forest Service FPA Section 4(e) Conditions

(1)	3.	Resource Coordination	2 years
		and Monitoring	
		Implementation Plan	
(2)	6.	Heritage Properties	1 year
		Management Plan	
(3)	7.	Recreation Resource	1 year
		Management Plan	
(4)	8.	Erosion Monitoring	1 year
		Plan	
(5)	9.	Erosion Control,	3 years
		Prevention, and	

	Remediation Plan	
(6) 10.	Spill Prevention and	1 year
	Control, and	
	Hazardous Materials	
	Management Plan	
(7) 11.	Sensitive Species	1 year
	Consultation Plan	
(8) 12.	Site-Specific	3years
	Cottonwood and	
	Riparian Habitat	
	Management Plan	
(9) 13.	Bald Eagle, Osprey,	1 year
	Cormorant, & Heron	
	Monitoring Plan	
(10) 17.	Aquatic Plant	1 year
	Management Plan	
(11) 18.	Integrated Weed	1 year
	Management Plan	

(c) Washington Department of Ecology Water Quality Certification Conditions

(1)	II C.	TDG Abatement Plan	180 days
(2)	II D.	Aquatic Plant	180 days
		Management Plan	
(3)	II E.	Interim Temperature	180 days
		Management Plan	
(4)	III. A.	Water Quality	180 days
		Monitoring and	
		Quality Assurance	
		Project Plan	

(d) Environmental Protection Agency Water Quality Certification Conditions

(1)	14.	Plan for Pump	180 days
		Operations	
(2)	17.1	Water Quality	180 days
		Monitoring and	
		Quality Assurance	
		Project Plan for	
		Calispell Creek	

(e) U.S. Department of the Interior Fishway Prescription

Box Canyon Dam Temporary Upstream Fishway				
(1)	1.2.1.1	Temporary Trap &	180 days	
		Haul Upstream		
		Fishway Installation		
		Plan		
(2)	1.2.1.2	O & M Plan	180 days	
(3)	1.2.1.3	Monitoring Plan	180 days	
(4)	1.2.1.4	Post-Installation	180 days	
		Effectiveness		
		Evaluation Plan		
	Box Canyon	Dam Interim Upstream	Fishway	
(5)	1.2.2.2	Conceptual Design	10 years	
		Plan for Interim		
		Upstream Fishway		
(6)	1.2.2.3	Final Design Plan	12 years	
(7)	1.2.2.4	O & M Plan	12 years	
(8)	1.2.2.5	Monitoring and	12 years	
		Reporting Plan		
(9)	1.2.2.6	Post Installation	12 years	
		Effectiveness		
		Evaluation Plan		
	Box Canyon I	Dam Interim Downstrean	n Fishway	
(10)	1.3.1.1	Plan for Completing	180 days	
		Design investigations		
		for Interim		
		Downstream Fishway		
(11)	1.3.1.2	Preliminary Design	2.5 years	
		Plan		
(12)	1.3.1.2	Final Design Plan	3 years	
(13)	1.3.1.3	O & M Plan	3 years	
(14)	1.3.1.4	Monitoring and	3 years	
		Reporting Plan		
(15)	1.3.1.5	Post-Installation	3 years	
		Effectiveness		
		Evaluation Plan		

	Calispell Creek Interim Upstream Fishway				
(16)	1.5.1.1	Conceptual Design	7.5 years		
		Plan for Pumping Plant			
		Interim Upstream			
		Fishway			
(17)	1.5.1.2	Final Design Plan	8.5 years		
(18)	1.5.1.3	O & M Plan	8.5 years		
(19)	1.5.1.4	Monitoring and	8.5 years		
		Reporting Plan			
(20)	1.5.1.5	Post Installation and	8.5 years		
		Effectiveness Plan			
	Calispell Cree	k Permanent Downstream	n Fishway		
(21)	1.6.1	Preliminary Design	5 years		
		Plan for Pumping Plant			
		Permanent			
		Downstream Fishway			
(22)	1.6.2	Final Design Plan	6 years		
(23)	1.6.3	O & M Plan	6 years		
(24)	1.6.4	Monitoring and	6 years		
		Reporting Plan			
(25)	1.6.5	Installation and	6 years		
		Effectiveness			
		Evaluation Plan			

The licensee shall submit to the Commission documentation of its consultation, copies of comments and recommendations made in connection with the plans, 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.

Article 402. Schedule for Permanent Fish Passage. Within 60 days of the licensee's receipt of a letter from the U.S. Fish and Wildlife Service (FWS), requesting the construction of permanent, upstream and/or downstream fish passage facilities at Box Canyon dam and/or the Calispell Creek Pumping Plant, the licensee shall file the letter and, for Commission approval, a schedule for filing plans to construct the requested

fish passage facilities in accordance with Conditions 1.2.3.2 through 1.2.3.7, 1.3.2.2 through 1.3.2.4, and 1.5.2.1 through 1.5.2.6 of Appendix C of this order. The licensee shall file the schedule after consultation with the FWS, the Forest Service, and the Washington Department Fish and Wildlife.

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

Article 403. Run-of-River Operation. The licensee shall at all times operate the project in a run-of-river mode. The licensee shall minimize the fluctuation of the Box Canyon reservoir surface elevation by maintaining a discharge from the project so that flows, as measured immediately downstream of the project tailrace, approximate the sum of inflows to the project reservoir. The licensee shall not exceed a maximum reservoir elevation of 2,041 feet mean sea level at Cusick (river mile 70.1) and shall limit the backwater effect in the Albeni Fall's tailrace to two feet or less. The licensee, in an effort to minimize the fluctuation of the Box Canyon reservoir surface elevation, shall not change the surface elevation by a rate that exceeds three-inch-per-hour as measured at Box Canyon Dam.

Run-of-river operations may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods, upon mutual agreement among the licensee, Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, and the U.S. Fish and Wildlife Service. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but not later than 10 days after each such incident.

Article 404. Pumping Plant Operations – Plan E. The licensee shall operate the Calispell Creek Pumping Plant in coordination with the project, subject to the Public Utility District of Pend Oreille County's agreement with Diking District No. 2 of Usk, Washington (Plan E, dated September 26, 2000), which is attached as Appendix F to this order.

Article 405. Turbine Upgrade and Installation of Auxiliary Spillway Bypass. Within one year of the date of issuance of the license, the licensee shall submit a schedule for: (a) replacement of the each of the project's existing four turbines (18 MW capacity) with turbines having a greater hydraulic capacity (22.5 MW capacity); and (b) installation

of an auxiliary spillway bypass. The first turbine upgrade shall commence no later than three years from license issuance, and the last turbine upgrade shall be completed not later than seven years from license issuance. Additionally, the first two turbines to be replaced shall incorporate "fish-friendly" runners. Installation of the auxiliary spillway bypass shall be completed within nine years of license issuance.

Article 406. Bull Trout Protection. For the protection of bull trout, the licensee shall comply with the Department of the Interior's (Interior) Conditions 4(C)(4)(f), 4(D)(3) and 6, which are contained in Appendix A of this order. Condition 6 requires that licensee develop a Trout Assessment and Restoration Plan (TARP) in consultation with the Department of the Interior, the Kalispel Indian Tribe, the U.S. Forest Service and the Washington Department of Fish and Wildlife. This plan shall be submitted to the Commission for approval within one year of the date of issuance of the license. The licensee shall submit to the Commission documentation of its consultation, copies of comments and recommendations made in connection with the plans, 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.

Article 407. Comprehensive Wildlife Management Plan. Within one year of the date of issuance of the license, the licensee shall file, for Commission approval, a comprehensive wildlife management plan. The licensee shall include the enhancement, monitoring, and evaluation provisions contained in the draft wildlife management plans for the Tacoma Creek and Everett Island Management Areas, filed with the Commission on June 28, 2001. In addition, the plan shall include, for each of the categories listed below, the following: (a) objectives; (b) a schedule and budget for implementation of the measures; (c) provisions for monitoring and maintenance; and (d) provisions for review and reporting.

Cottonwood Enhancement: measures to enhance cottonwood habitat outside the wildlife management areas, including: (1) provisions to investigate the causes of impaired cottonwood recruitment; (2) identification of areas and a schedule for cottonwood planting within two years of license issuance; and (3) measures to provide assistance to other private landowners around the reservoir who may wish to improve cottonwood habitat on their property.

Grazing Management: provisions to eliminate livestock grazing on licensee-owned lands within the project boundary.

Wetland Creation and Enhancement in Wildlife Management Areas: (1) detailed design drawings of the wetland creation and enhancement sites, including topographic information; (2) hydrologic information and design drawings showing the water control features; (3) provisions for drawdowns to impair bullfrog production in the ponds; (4) proposed vegetation plantings in plan view and cross-section; and (5) provisions to monitor other existing wetland habitats in the Everett and Tacoma Creek Wildlife Management Areas, with the variables described in the draft wildlife management plans.

Waterfowl Management: (1) provisions for habitat protection and enhancement on lands owned by the licensee within the project boundary; (2) provisions to support the efforts of local conservation groups, school groups, or landowners to improve waterfowl nesting habitat; (3) measures to construct and install artificial nest structures within the wildlife management areas.

Grizzly Bear Awareness: (1) measures to improve grizzly bear awareness; (2) provisions for posting signs and/or providing educational pamphlets at each of its recreation facilities to inform visitors of steps they can take to prevent conflicts with grizzly bears (e.g., proper sanitation and food storage); and (3) measures to include the resupply of informational materials, such as posters and pamphlets, into the regular maintenance program.

Bald Eagle Management:

- (1) measures to consult with the agencies and tribes and affected landowners in developing individual nest site management plans for established nest stands, preferred perches, winter roosts, and foraging areas for bald eagle pairs that nest on lands within the project boundary and for pairs that nest nearby, but that rely on the Box Canyon reservoir as a foraging areas;
- (2) provisions to develop cooperative management plans and identify which entities are responsible for managing various aspects of disturbance (e.g., the licensee, the Army Corps of Engineers, Washington Department of Fish and Wildlife, Pend Oreille County or Bonner County);
- (3) measures to complete two years of survey at each known nest site within the project boundary to provide data needed to develop nest site management plans;
- (4) measures to complete annual surveys during the breeding season to monitor both nesting and nest productivity; annual surveys in winter to document winter use; and surveys to investigate establishment of new nests;

- (5) provisions to produce and distribute annual reports to track changes in bald eagle populations and productivity;
- (6) protocols to compare results with survey information collected on osprey, great blue heron, and double-crested cormorant populations, identify areas of resource conflict, and define any necessary changes in management;
- (7) documentation of how the bald eagle protection measures would be coordinated with the licensee's routine operation and maintenance and with the shoreline management plan, the recreation management plan, and the erosion control plan;
- (8) provisions for providing information about bald eagle protection (e.g., signage and brochures) at licensee-operated recreational sites; and
- (9) provisions for silvicultural treatments to improve potential bald eagle nesting habitat along the reservoir between river mile 47 and river mile 90.

Fish-eating Bird Monitoring: (1) provisions to monitor population trends of osprey and great blue heron within the project area; (2) measures to conduct annual nesting and population surveys for osprey and great blue heron until a threshold is reached, with an appropriate threshold to be determined as part of plan development (e.g., less than 10 percent change over a three-year period); and (3) provisions for reporting and regular meetings with the agencies and the Kalispel Tribe of Indians to review monitoring results and determine whether additional study or management action is needed.

The comprehensive wildlife management plan shall be prepared after consultation with the U.S. Fish and Wildlife Service, Forest Service, Kalispel Tribe of Indians, Washington Department of Fish and Wildlife, and Idaho Department of Fish and Game. 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 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 entities to comment and to make recommendations prior to filing the plan with the Commission for approval. 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. No land-disturbing or land-clearing actions associated with plan activities shall 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.

Article 408. Erosion Control and Monitoring. (a) Erosion Monitoring. Within six months of the date of issuance of the license, the licensee shall file for Commission approval, a plan to monitor shoreline erosion throughout the project reservoir. The purpose of the plan is to determine the location and rate of shoreline erosion that is occurring at various points throughout the reservoir and the degree to which project operations contribute to such erosion. The plan shall include, a minimum of 29 monitoring stations throughout the project reservoir including a reasonable number of monitoring stations on Kalispel Indian Reservation and national forest lands within the project boundary.

The monitoring plan shall include: (1) provisions to continue monitoring shoreline erosion at nine existing monitoring stations at the project included in Appendix E8-2 of the license application, including identification of the specific monitoring stations selected and a description of all past monitoring results for the nine existing sites; (2) a listing and maps depicting 20 new monitoring stations throughout the reservoir, including site conditions, and existing erosion rate category; (3) a description of the monitoring methodology and maintenance program for all the monitoring stations; and (4) a schedule for filing the annual monitoring reports with the Commission.

Following Commission approval, the licensee shall monitor erosion at each monitoring site twice a year for the term of the license. In addition to twice-yearly monitoring, monitoring shall also be performed after floods with a 20-year or greater recurrence interval and after drawdown rates in excess of three inches per hour.

The licensee shall file annual reports identifying erosion monitoring results after it has consulted with the Forest Service, U.S. Department of the Interior, Washington Department of Fish and Wildlife, and Kalispel Indian Tribe on the results. The annual reports shall include: (1) a comparison of data and observations from the twice-yearly monitoring; (2) assessments categorizing erosion rates into low, moderate, and high; the processes causing erosion at the various monitoring sites; and whether, and to what extent, erosion can be attributed to project operation; and (3) identification of significant new or recurring erosion areas.

(b) *Erosion Control and Prevention*. Within two years of the date of issuance of the license, the licensee shall file for Commission approval, a plan to provide erosion control, protection, and restoration of areas around the project reservoir with high, moderate, low, and non-active erosion rate categories. The plan shall be developed based on information on areas where erosion can be clearly attributed to project operations in (a) above.

The plan shall: (1) identify areas of high, moderate, low, and non-active erosion categories; (2) identify the degree to which the project causes or exacerbates erosion; (3) include a plan and schedule for implementing necessary measures to control, prevent, and repair identified erosion areas, with emphasis on addressing high and moderate erosion areas in the short-term; (4) investigate the feasibility of incorporating prairie cordgrass for erosion control; and (5) include an erosion education program to educate the public on erosion prevention, control, and remediation, including, but not limited to, measures to assist Pend Oreille Conservation District in educating the public on the causes of erosion, bank protection and stabilization techniques, and related issues..

The licensee shall prepare the plans required under (a) and (b) after consultation with the Forest Service, Washington Department of Fish and Wildlife, Department of the Interior, and Kalispel Indian Tribe.

The licensee shall include with the plans 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 plans. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations prior to filing the plans with the Commission for approval. 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 plans. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 409. Shoreline Management Plan. Within one year of the date of issuance of the license, the licensee shall file, for Commission approval, a management plan for the use of the shoreline around the project reservoir. The plan, at a minimum, shall include: (1) a detailed description of proposed shoreline use and development requirements, guidelines, or permitting programs; (2) a description of the licensee's proposed cooperation or coordination with jurisdictional entities in its management of the shoreline; (3) appropriate maps showing proposed shoreline development and uses; and (4) provisions to provide comprehensive land use maps to Pend Oreille County and other interested entities.

The licensee shall prepare the plan after consultation with the Forest Service, the Washington Department of Fish and Wildlife, U.S. Department of the Interior, the Kalispel Indian Tribe, Pend Oreille County, and other local municipalities.

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 prior to 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. Upon Commission notification, the Licensee shall implement the plan, including any changes required by the Commission.

Article 410. Integrated Weed Management Plan. Within one year of the date of issuance of the license, the licensee shall file for Commission approval, a final integrated weed management plan to be implemented within two years of license issuance. The plan shall include the measures contained in the licensee's integrated weed management plan filed January 21, 2000, and June 28 and July 18, 2001.

In addition, the plan, at a minimum, shall include: (a) measures to survey, monitor, and manage noxious weeds on all licensee-owned and managed project lands, project campgrounds, and at reservoir boat launches within the project boundary; (b) provisions for educational programs and/or brochures to raise public awareness of noxious weed issues; (c) provisions to coordinate with the Pend Oreille County Noxious Weed Control Board and its efforts to eradicate purple loosestrife and leafy spurge; (d) measures to incorporate noxious weed monitoring into other programs the licensee will be implementing; and (e) a schedule for implementation.

The licensee shall prepare the plan after consultation with, the U.S. Fish and Wildlife Service, Forest Service, Kalispel Tribe of Indians, Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, and Pend Oreille County Noxious Weed Control Board. 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 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 entities to comment and to make recommendations prior to 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. No land-disturbing or land-clearing actions associated with plan activities shall 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.

Article 411. Rare Plant/Sensitive Species Management Plan. Within one year of the date of issuance of the license, the licensee shall file, for Commission approval, a rare plant/sensitive species management plan. The plan shall include measures to protect Forest Service sensitive and rare plants, including the rare plant *Hedeoma*, growing on licensee-owned or licensee-managed land within the project boundary.

The licensee shall prepare the plan after consultation with the Forest Service, the U.S. Fish and Wildlife Service, Washington National Heritage Program, and Idaho Department of Fish and Game. 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 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 entities to comment and to make recommendations prior to filing the plan with the Commission for approval. 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. No land-disturbing or land-clearing activities associated with this plan shall 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.

- <u>Article 412</u>. *Recreation Plan*. Within one year of the date of issuance of the license, the licensee shall file, for Commission approval, a plan to manage and develop the project's recreation resources. The plan shall provide for the following:
- (a) The measures identified in the licensee's June 29, 2001, supplement to its license application for the town of Ione's City Park; the town of Cusick's boat launch facility; and for deeding or granting an easement to the town of Oldtown for a 1.8-acre parcel of licensee-owned land, located adjacent to the town of Oldtown's existing park, for the development of recreational vehicle camping.
- (b) operation and maintenance of (1) Campbell Park; (2) the visitor center; and (3) the scenic overlook located in the vicinity of the project dam.

- (c) appropriate drawings and schedules for constructing, operating, and maintaining: (1) three additional picnic tables at Campbell Park; (2) signs on Highways 31 and 20 and LeClerc Road to identify public recreation facilities and boat launches; (3) Ponderay Shores Primitive public boat launch, to include additional parking, a paved boat launch and day-use facilities; and (4) signs at all public boat launches around the reservoir addressing Eurasian water milfoil.
- (d) provisions for monitoring (to begin within five years of license issuance) of recreation use in the project area to ensure that existing facilities are meeting public recreation needs, filing monitoring results every six years, in conjunction with the filing date (April 1) of the project's Form 80 report.

Monitoring reports shall include: (1) annual recreation use figures; (2) a discussion of the adequacy of recreation facilities at the project site to meet recreation demand; (3) a description of the methodology used to collect all study data; (4) if there is a need for additional facilities, a revised plan and schedule proposed by the licensee to accommodate recreation needs in the project area; (5) documentation of agency consultation with and agency comments on the revised plan after it has been prepared and provided to the agencies; and (6) specific descriptions of how the agencies' comments are accommodated by the revised plan.

The licensee shall prepare the plan and monitoring reports after consultation with the Forest Service; the U.S. Department of the Interior; the Kalispel Indian Tribe; the Washington Department of Fish and Wildlife; Pend Oreille County, Washington; and the towns of Ione, Cusick, and Oldtown.

The licensee shall include with the plan and monitoring reports documentation of consultation, and copies of comments and recommendations after the plan and reports have been prepared and provided to the entities, and specific descriptions of how the entities' comments are accommodated. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations prior to filing the plan and monitoring reports with the Commission.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan.

Article 413. Programmatic Agreement and Historic Properties Management Plan. The licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission and the Washington and Idaho Historic Preservation Officers and the Kalispel Tribe of Indians for Managing Historic Properties that May be Affected by a License Issuing to Public Utilities District No. 1 of Pend Oreille County for

the Continued Operation of the Box Canyon Hydroelectric Project in Pend Oreille County, Washington and Bonner County, Idaho (FERC No. 2042-013)," filed on June 15, 2005, and including but not limited to the Historic Properties Management Plan (HPMP) for the project. Pursuant to the requirements of this Programmatic Agreement, the licensee will file for the Commission's approval an 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 Commission approval of the HPMP, the licensee shall obtain approval from the Commission and the Washington State and the Idaho State Historic Preservation Officers, 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 414. 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 415. Staff Gage Plan. Within six months from the date of issuance of the license, the licensee shall file with the Commission, for approval, a plan to install a staff gage in Trimble Creek within the Cusick Unit of the Little Pend Oreille National Wildlife Refuge to monitor water levels in Trimble Creek and correlate those levels with water levels in the Box Canyon reservoir.

The plan shall include: (1) a description of the type, design, and location of the staff gage; and (2) a schedule for installation of the staff gage; providing periodic monitoring data to the U.S. Fish and Wildlife Service; and repairing or replacing the gage if it becomes damaged.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, U.S. Geological Survey, and the Washington Department of Fish and Wildlife. 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 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 entities to comment and to make recommendations prior to filing the plan with the Commission for approval. 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. No land-disturbing or land-clearing activities associated with this plan shall 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.

Article 416. *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 permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee 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 reservoir 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 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; (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.
- (J) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(K) This order is final unless a request for rehearing is filed within 30 days of the date of its issuance, as provided in section 313 of the FPA. 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. Chairman Wood concurring with a separate statement attached. Commissioner Kelliher dissenting with a separate statement (SEAL) attached.

Linda Mitry, Deputy Secretary.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Pend Oreille County

Project No. 2042-013

(Issued July 11, 2005)

WOOD, Chairman, concurring:

Section 4(e) of the Federal Power Act (FPA) requires that Commission licenses for projects located within federal reservations "shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate projection and utilization of such reservation." Moreover, Section 18 of the FPA states that the Commission shall require the construction, maintenance, and operation by a license at its own expense of fishways, as may be prescribed by the Secretary of Commerce or the Secretary of the Interior.

While I support this Order, I am concerned with the decision by the Interior Department to mandate prescriptions for fish passage at this project. I do not believe that there is sufficient evidence to support these prescriptions. In fact, our Environmental Impact Statement (EIS) concluded that fish passage at the project has not been established because of the lack of data indicating that substantial numbers of target species are attempting to migrate past Box Canyon dam and the low numbers of these fish found below the dam. For these reasons, I do not believe that the results of our EIS warrant the construction and operation of expensive fish passage facilities at this project.

Ultimately though, I recognize that the Interior Department's prescriptions are mandatory and the license incorporates them accordingly. It is up to a court, not the Commission, to determine whether those prescriptions are warranted by the facts.

Pat Wood, III Chairman

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Pend Oreille County

Project No. 2042-013

(Issued July 11, 2005)

KELLIHER, Commissioner, dissenting in part:

I am dissenting in part from this order, not because of what it says, but because of what it does not say.

It is settled that the Commission in issuing a license for a hydroelectric project must include certain fishway prescriptions prescribed by the Secretary of Commerce or the Secretary of Interior. The Commission does not have the discretion to reject these conditions, known as mandatory conditions, even if they are unsupported by the record or are otherwise inappropriate in the context of the broader licensing action taken by the Commission.

In this case, involving an application for a new license for the continued operation of the Box Canyon Hydroelectric Project, Interior mandated that measures be taken to ensure upstream and downstream fish passage at project facilities. The environmental impact statement (EIS) prepared by the Commission to analyze the environmental impacts of the proposed new license concluded that the need for fish passage at the facilities has not been demonstrated or supported.

Specifically, the EIS concluded that the need for upstream fish passage at Box Canyon dam has not been established because of the lack of data indicating that substantial numbers of target species are attempting to migrate past Box Canyon dam and the low numbers of these fish found below the dam. ¹ Therefore, the EIS recommended that the licensee undertake a fish movement analysis to determine the need for fish passage before constructing fishways. Should it be determined that upstream fish passage is warranted, the EIS recommended a less expensive two phase approach. ²

The EIS likewise found that the need for downstream fish passage has not been demonstrated. ³ It determined that there are no data indicating that substantial numbers

¹ EIS at 306.

² *Id.* at 306-07.

³ *Id*.

of target species are attempting to migrate downsteam past Box Canyon dam, and low numbers of these fish are found within the Box Canyon reservoir. ⁴ Also, providing downstream fish passage immediately after license issuance is premature because the license that is being issued for this project requires the licensee to install two fish friendly turbines. If these turbines prove to be effective at passing fish downstream without harm, the licensee could replace all four turbines with the fish friendly turbines and negate the need for a downstream fish passage structure. Finally, should it be determined that the downstream fish passage is warranted, the EIS recommended constructing a permanent downstream fish passage facility, thus avoiding Interior's more expensive interim step. ⁵

The purpose of an EIS is to ensure that an agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audiences that may also play a role in both the decisionmaking process and the implementation of that decision. ⁶ That purpose has been accomplished here.

However, the Commission's responsibility for determining whether to issue a license does not stop with the preparation and distribution of an EIS. The Commission is required to analyze a wide range of issues to determine whether a project is in the public interest. The Commission must reflect its weighing of the public interest in an order that lays out for public scrutiny the factors that enter into its decision. This obligation is grounded in law and in good government practices. Without such a discussion, it is impossible for the public and for courts to determine if the Commission, and in this case a sister agency, has acted appropriately in reaching its decision.

In short, I believe that the Commission has an obligation to provide its views on the actions taken in its order, including mandatory conditions required by other agencies. For this reason, I would have included in this order a discussion of the conclusions in the EIS regarding the validity of the conditions imposed by Interior.

⁴ *Id.* at 87.

⁵ *Id.* at 307-08.

⁶ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

When an agency with mandatory conditioning authority attaches a condition that is unsupported by facts, the only recourse left a licensee is to seek judicial review. By not making plain to a Commission licensee any disagreements with Interior, we have made it more difficult for the licensee to mount an effective challenge. That strikes me as fundamentally unfair.

Joseph T. Kelliher