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UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman; William L. Massey, Linda Breathitt, and Curt Hébert, Jr.

Avista Corporation

Project No. 2058-014

ORDER ISSUING NEW LICENSE

(Issued February 23, 2000)

On February 17, 1999, Avista Corporation (Avista)¹ filed an application for a new license pursuant to Sections 15 and 4(e) of the Federal Power Act (FPA),² for the continued operation and maintenance of the Noxon Rapids Hydroelectric Project No. 2075 and Cabinet Gorge Hydroelectric Project No. 2058. The projects are located on the Clark Fork River in Bonner County, Idaho, and Sanders County, Montana.³ The Noxon Rapids Project occupies 913 acres of Unites States land within the Idaho Panhandle, Lolo, and Kootenai National Forests. The Cabinet Gorge Project occupies 356 acres of United States land within the Idaho Panhandle and Kootenai National Forests. Although the projects have been operated under separate licenses, Avista is seeking a single new license that would encompass both projects, and has renamed the two as the Clark Fork Project.

¹Avista changed its name from the Washington Water Power Company effective January 1, 1999.

²16 U.S.C. §§ 791(e), 808.

³The Clark Fork is a navigable water of the United States at least from Pend Oreille Lake in Idaho to the mouth of the Jocko River in Montana. <u>See</u> Montana Power Company, 8 FPC 751,753.

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BACKGROUND

The original licenses for the Cabinet Gorge Project and the Noxon Rapids Project were issued on January 9, 1951, and May 12, 1955, respectively,⁴ and will both expire on February 28, 2001.⁵ With its new license application, Avista filed a collaboratively-prepared draft environmental assessment, a Settlement Agreement, five resource management plans and supporting data. The Settlement Agreement is described below.

Notice of the application was published, and comments were received. Timely motions to intervene in this proceeding were filed by the State of Montana (Montana), U.S. Department of Agriculture's Forest Service, and U.S. Department of the Interior. The State of Idaho filed an untimely motion to intervene on May 12, 1999.⁶ None of the motions filed are in opposition to issuing a new license. However, Bob and Betsy Best and Charlton Mills (legal counsel representing eight owners of private lands in the lower Clark Fork River downstream of the Cabinet Gorge Dam) filed protests. The concerns of the protestors are discussed below.

Commission staff issued a Draft Environmental Impact Statement (EIS) that evaluated the potential impacts of the two projects. Numerous comments on the Draft EIS were filed, and the Commission staff considered these comments in preparing the Final EIS, which was issued in February 2000.⁷ We have fully considered the motions and comments received from interested agencies and individuals in determining whether, and under what conditions, to issue this license.

⁴10 FPC 657; 14 FPC 731.

⁵On February 7, 1995, Avista filed a request to accelerate the expiration date of the license for the Noxon Rapids Project from April 30, 2005, to February 28, 2001. The Commission issued an order on June 2, 1995, accelerating the expiration date to February 28, 2001. Under the Commission's regulations, 18 CFR 16.4(a)(2), this request for acceleration of the expiration date was deemed to be the Notice of Intent to file for a new license for the Noxon Rapids Project.

⁶A notice granting late intervention was issued August 12, 1999.

⁷References in this order to the EIS are to the Final EIS unless otherwise specified. Comments on the Draft EIS were received from the Montana State Historic Preservation Office, the U.S. Environmental Protection Agency, Idaho Department of Fish and Game, U.S. Department of the Interior, Montana Department of Environmental Quality, U.S. Forest Service, Calvin H. Ryder, River Care, and Avista Corporation.

PROJECT DESCRIPTION

The project includes two developments which adjoin one another over a distance of 58 miles on the Clark Fork River. Flows from the Noxon Rapids development immediately enter the Cabinet Gorge reservoir. The Noxon Rapids development, which is the upstream development, consists of a 6,195-foot-long, 260-foot-high dam with an earthen embankment section, a concrete gravity spillway section and a powerhouse section that is integral with the dam; a 7,940-acre reservoir with a gross storage capacity of 400,000 acre-feet at full pool; five 26-foot-diameter, 170-foot-long steel penstocks built into the intake section of the dam; five Francis turbine generators with a total operating capacity at full turbine flow and full pool of 466 megawatts (MW); a 900-footlong transmission line; and appurtenant facilities.

The facilities at the Cabinet Gorge development consist of a 395-foot-long, 208foot-high concrete gravity arch dam; a 75-foot-long, 12-foot-high concrete saddle dam, located in a depression near the south abutment; a 3,200-acre reservoir with a gross storage capacity of 105,000 ac-ft at full pool; four 27-foot-diameter, concrete-lined penstocks ranging in length from 447 feet to 564 feet; a 355-foot-long by 106-foot-wide semi-outdoor powerhouse, containing three fixed-blade propeller turbine generators and one Kaplan turbine generator with a total operating capacity at full turbine flow and full pool of 231 MW; and appurtenant facilities.

The Clark Fork Project, with a total capacity of 697 MW, is operated by Avista to help meet the daily peak electrical loads of its customers and the connected grid.

WATER QUALITY CERTIFICATION

Under Section 401(a)(1) of the Clean Water Act (CWA),⁸ the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency has issued a water quality certification for the project or has waived certification. Section 401(d) of the CWA provides that state certification shall become a condition on any federal license or permit that is issued.⁹ Only a reviewing court can revise or delete these conditions.¹⁰ The Idaho Department of Environmental Quality (IDEQ) and the Montana Department of Environmental Quality (MDEQ) issued Section 401 water

⁹33 U.S.C. § 1341(d).

¹⁰ See American Rivers v. FERC, 129 F.3d 99 (D.C. Cir. 1997).

⁸33 U.S.C. § 1341(a)(1).

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quality certifications for the Clark Fork Project, subject to certain conditions, on August 20, 1999, and April 27, 1999, respectively.

IDEQ's water quality certification includes nine conditions, and MDEQ's certification includes six conditions, which are attached to this order as Appendix A and are conditions of this license. The substantive provisions are summarized below.

Condition 1 of both IDEQ's and MDEQ's water quality certifications requires the licensee to comply with the terms and conditions of the Settlement Agreement and incorporates several of the PM&E measures into the water quality certifications by reference.

Condition 2 of MDEQ's certification requires the licensee to notify MDEQ in writing not less than two weeks prior to commencing any construction activity under authority of the certification which may result in the discharge of pollutants to state waters. The licensee shall notify the state within seven days after completion of the construction activity resulting in a discharge of pollutants.

Conditions 3 and 4 of IDEQ's certification require that the project not cause or contribute to violations of the state's surface water quality criteria, and that nonpoint source activities associated with the projects be controlled through best management practices to minimize adverse water quality impacts. Additionally, IDEQ has reserved authority to require plans, corrective actions, and monitoring necessary to correct water quality violations that may develop as a result of operation, maintenance, or construction associated with the project, and as a result of any failure by the licensee to comply with the terms of the Settlement Agreement.

SECTION 4(e) OF THE FPA

Portions of the Noxon Rapids Project are located within the Idaho Panhandle, Lolo, and Kootenai National Forests, and portions of the Cabinet Gorge Project are located within the Idaho Panhandle and Kootenai National Forests. All three of these National Forests are under the supervision of the U.S. Forest Service.

Section 4(e) of the FPA¹¹ states the Commission may issue a license for a project on a reservation only if it finds that the license will not interfere or be inconsistent with

¹¹16 U.S.C. § 797(e).

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the purpose for which the reservation was created or acquired. Section 3(2) of the FPA¹² defines reservations as including national forests. We find that this license will not interfere or be inconsistent with the purposes for which the Idaho Panhandle, Lolo, and Kootenai National Forests were created.¹³

FPA Section 4(e) also requires that a Commission license for a project located on United States reservations must include all conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of such reservation.¹⁴ Pursuant to Section 4(e), the Forest Service, by letter dated April 29, 1999, submitted terms and conditions, which are set forth in Appendix B of this order and incorporated into the license.

The Forest Service's 4(e) conditions require Avista to: (1) comply with all the terms of the Settlement Agreement; (2) obtain prior written approval of the Forest Service for all final design plans for project components which the Forest Service deems as affecting or potentially affecting National Forest System lands and resources; (3) obtain written approval of the Forest Service prior to making any changes in the location of any project facilities or in the uses of project lands and waters that may affect National Forest System lands or resources; and develop and implement a (4) public notification plan, (5) solid waste and waste water plan; (6) hazardous substances plan; (7) noxious weeds plan; and (8) pesticide and herbicide use plan.

COLLABORATIVE LICENSING PROCESS, SETTLEMENT AGREEMENT, AND ADAPTIVE MANAGEMENT PROPOSAL

A. Description

In 1993, Avista Corporation began a process to relicense the Noxon Rapids and Cabinet Gorge Projects. In mid-1996, stakeholders were invited to meet with a neutral facilitator to develop a process for participating in the relicensing of these projects. There

¹²16 U.S.C. § 796(2).

¹³The national forests within which the Clark Fork Project is located were created between 1906 and 1911 by presidential proclamations. At the time, the Organic Administration Act of 1897, 16 U.S.C. § 475, stipulated that all national forest lands were established and administered only for watershed protection and timber production.

¹⁴Escondido Mutual Water Co. v. LaJolla Band of Mission Indians, 466 U.S. 765 (1984).

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evolved a Clark Fork Relicensing Team, which included representatives from nearly 40 organizations, including federal and state agencies, five Indian tribes, special interest groups, conservation groups, property owners, and Avista Corporation. The Relicensing Team established five technical working groups, covering fisheries; water resources; wildlife, botanical, and wetlands; land use, recreation, and aesthetics; and cultural resources management. In April 1997, the Relicensing Team agreed that the licensee would seek permission to file a collaboratively-prepared draft Environmental Assessment (EA) as part of the license application.¹⁵ The preliminary draft EA filed was accepted in lieu of Exhibit E.¹⁶ The team developed protection, mitigation, and enhancement (PM&E) measures that were the basis for the uncontested comprehensive Settlement Agreement that was filed with the license application. The Settlement Agreement filed by the 27 parties¹⁷ establishes processes and includes measures for resolving a wide range of complex and conflicting areas of interest to the various parties, and is the product of several years of collaboration among these parties. Under the Settlement, the licensee

¹⁶The Draft EIS was based on the preliminary draft EA filed by Avista and the Clark Fork Relicensing Team, in consultation with Commission staff during the period prior to the filing of the license application.

¹⁷The parties signatory to the Settlement Agreement are: (1) Avista Corporation; (2) Confederated Salish and Kootenai Tribes; (3) Kootenai Tribe of Idaho; (4) U.S. Department of Agriculture, Forest Service; (5) Idaho Department of Fish and Game; (6) Montana Department of Environmental Quality; (7) Montana Department of Natural Resources Conservation; (8) Coeur D'Alene Tribe; (9) Kalispel Tribe; (10) U.S. Fish and Wildlife Service; (11) Idaho Department of Environmental Quality; (12) Idaho Department of Parks and Recreation; (13) Montana Department of Fish, Wildlife and Parks; (14) Montana State Historic Preservation Officer; (15) Idaho State Historic Preservation Officer; (16) Montana B.A.S.S. Federation; (17) Noxon-Cabinet Shoreline Coalition; (18) Cabinet Resource Group; (19) Rock Creek Alliance; (20) Lake Pend Oreille Idaho Club; (21) Alliance for the Wild Rockies; (22) Sanders County, Montana; (23) Trout Unlimited; (24) Green Mountain Conservation District; (25) Idaho Rivers United; (26) Elk Creek Watershed Council; and (27) Tri-State Implementation Council.

¹⁵Avista filed a request, on July 23, 1997, to waive certain relicensing regulations and requested preparation of an applicant-prepared EA. On September 18, 1997, the Acting Director of the Office of Hydropower Licensing granted the request for waiver. Sections 4.51(f) and 16.8(f), 18 CFR 4.51(f), 16.8(f) (1999) of our regulations requires that an application for relicense include an Exhibit E (environmental report). The applicant-prepared preliminary draft environmental assessment (APEA) was to substitute for the Exhibit E.

will work with a Management Committee, comprised of one representative of each of the 27 parties to the Agreement, to implement the PM&E measures.

The licensee will monitor, and develop measures to mitigate, shoreline erosion caused by project operations. To reduce project-related effects on water quality, the licensee will, for example: (1) develop a gas supersaturation control program for reducing total dissolved gas levels within the Clark Fork River Basin; (2) monitor nutrients, heavy metals, thermal stratification, and dissolved oxygen; and (3) develop plans for waste and wastewater, pesticides, and hazardous substances.

On behalf of fisheries, the licensee will release a 5,000-cubic-feet-per-second minimum flow from Cabinet Gorge Dam. In addition, the licensee will implement a native salmonid restoration plan to: (1) mitigate the operational effects of the project on native fish populations, primarily bull trout and westslope cutthroat trout, in the lower Clark Fork River, its tributaries, and Lake Pend Oreille; (2) improve the long-term viability of native fish populations through improved fish movements and genetic exchange among native salmonid sub-populations, or through hatchery supplementation; (3) restore and protect fish habitat in tributaries to the lower Clark Fork River and in the project reservoirs; (4) implement a bull trout protection program; and (5) conduct a bass fishery enhancement evaluation.

In the areas of terrestrial, riparian and wildlife resources, the licensee will implement measures to protect and enhance black cottonwood habitats, specified forested tracts, wetlands, and wildlife habitat of the reservoir islands. In addition, the licensee will implement measures to protect bald eagles, peregrine falcons, and common loons from project-related human disturbance and operations.

In the area of aesthetics and recreation, the licensee will: (1) screen the Highway 200 substation at Cabinet Gorge and remove billboards; (2) implement an Historic Properties Management Plan (associated with the Clark Fork Heritage Resources Program); (3) implement measures to protect sensitive resources on project lands and the existing character of the reservoir shoreline; (4) provide for public and private recreation access to project lands and waters; (5) repair and improve existing recreation sites and facilities, and develop new recreation facilities; and (6) maintain seven recreation areas.

The parties will work together to address issues relating to the PM&E measures as such issues arise over the term of the new license. Under this adaptive management approach, the participants will provide the Commission with information regarding PM&E measures associated with the continued operation of the project. Such an approach allows for appropriate changes in implementation strategies as additional

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information is gathered, new technologies develop, and societal and environmental needs change. As the Settlement recognizes, the PM&E measures will be implemented subject to the Commission's approval.¹⁸ The adaptive management approach incorporated into the license would initially implement those PM&E measures developed through the collaborative effort that are most likely to succeed. The success of these initial measures would be evaluated by the Management Committee and the technical advisory committees, using the monitoring programs established through the Settlement Agreement. Based on the results of these evaluations, the PM&E measures would be fine-tuned or replaced, after Commission approval.

B. Discussion

The settlement is also a condition of the water quality certifications issued for the project under Section 401 of the Clean Water Act, as well as the mandatory conditions the U.S. Forest Service filed pursuant to Section 4(e) of the FPA. In addition, the Department of the Interior filed mandatory fishway prescriptions under Section 18 of the FPA. With exceptions not pertinent here, all these conditions must be included in any new license the Commission issues for the project. Consequently, it is our responsibility, giving equal consideration to developmental and environmental values,¹⁹ to determine whether Avista's project proposal, as conditioned by these mandatory conditions, is best adapted to a comprehensive plan for improving or developing a waterway for beneficial public purposes.

We congratulate the parties for their extensive and ultimately successful efforts to reach consensus on so many significant aspects of operation of the Clark Fork Project over the term of a new license. We also commend our staff for their assistance to the parties in developing a sound framework for a continuing collaborative approach to the management of the project in the public interest. Because the "comprehensive development" standard of FPA Section 10(a)(1) continues to govern regulation of a project throughout the term of its license,²⁰ it is the Commission's responsibility to approve, through appropriate license amendments, all material changes to the project and

¹⁸See, e.g., Settlement Agreement at Sections 4, 14, 25, and 26.

¹⁹See Section 4(e) of the FPA, 16 U.S.C. § 797(e).

²⁰See, e.g., S.D. Warren Co., 68 FERC ¶ 61,213 at p. 62,022 (1994).

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its maintenance and operation.²¹ We read the Settlement Agreement as entirely consistent with this fundamental principle.²² In addition, it would be an unacceptable constraint on our Section 10(a)(1) responsibilities, were we not to retain (as we do in this license) the authority to initiate, on our own or anyone else's motion, proceedings to amend the project license as we determine is required by the public interest, after public notice and opportunity for a hearing.²³

We make one further general observation. Because, as noted, the terms of the Agreement become mandatory license conditions upon issuance of this order, we are unable to delete from the license those provisions of the settlement that are beyond our jurisdiction, in part or in total, to enforce.²⁴ The parties should understand, however, that they cannot bestow on the Commission jurisdiction it does not otherwise have.²⁵

²³See, e.g., Southern California Edison Co., 77 FERC ¶ 61,313 at p. 62,428 n. 46 (1997).

 24 Our policy in approving settlement agreements in hydroelectric licensing proceedings was most recently set forth in Erie Boulevard Hydropower, L.P., 88 FERC ¶ 61,176 (1999). The policy is based on the unsurprising principle that the Commission can only enforce those matters that fall within its jurisdiction.

²⁵Thus, for example, the Commission will not enforce Settlement Agreement provisions concerning the operations of the Management Committee and its technical advisory subcommittees (Sections 28-30, 32-35) or the implementation of its provisions in the current license. If the parties decide they need clarification regarding the Commission's authority to enforce other provisions of the Settlement, they can submit such inquiries to us.

²¹The Commission's regulations, as well as the terms of the license and basic due process principles, govern what types of alterations require what sorts of submittals or public notice.

²²Section 14 of the Settlement Agreement provides that "[n]othing in this Agreement shall be construed... to diminish the authority of any... governmental agency over the Clark Fork Projects, including but not limited to any provisions of the FPA." Section 26 of the Agreement states that the "Management Committee shall have the authority, subject to such FERC approvals as may be necessary in appropriate cases," to exercise various roles in the management of the project.

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SECTION 18 FISHWAY PRESCRIPTIONS

Section 18 of the FPA²⁶ states that the Commission shall require construction, maintenance, and operation by a licensee of such fishways as the Secretaries of the U.S. Departments of Commerce and of the Interior may prescribe. By letter filed May 3, 1999, Interior submitted its Section 18 fishway prescriptions, which are attached as Appendix C. With the exception of timing and scheduling, these prescriptions are also in the Settlement Agreement.

By letter dated June 16, 1999, Avista states that Interior's Section 18 prescriptions ask the Commission to require Avista to develop studies and plans to build a fishway in accordance with the Native Salmonid Restoration Plan. Avista indicates that, while the Native Salmonid Restoration Plan contemplates the possible future construction of fishways, presently there is no fishway that can be described. Avista further asserts that a prescription of a study is not a fishway prescription.

Avista also argues that Interior's prescriptions are confusing from the standpoint of timing and compliance. In points out that Interior's prescriptions would have the Commission's compliance schedule begin with the effective date of the Settlement Agreement, which is March 1, 1999, whereas the new license will not become effective until March 1, 2001. Avista also states that the schedules prescribed by Interior would restrict the role of the Management Committee and may encumber or eliminate the adaptive management approach set forth in the Settlement Agreement.

By letter filed June 9, 1999, Idaho Department of Fish and Game (IDFG) also expressed concern about the time lines for completion of certain tasks required by the Section 18 prescription. IDFG is concerned that Interior's time lines may not allow adequate analysis of alternatives prior to proceeding on measures such as fish passage. IDFG also argues that the proposal to initiate an experimental fish trap and truck program within one year of the Settlement Agreement is premature, due to risks of depleting the donor stocks, risks to adults returning downstream, or other factors. The Commission does not have the authority to revise or delete Section 18 prescriptions.²⁷

²⁶16 U.S.C. § 811.

²⁷See American Rivers v. FERC, 187 F.3d 1007 (9th Cir. 1999).

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RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Section 10(j)(1) of the FPA²⁸ requires the Commission, when issuing a license, to include conditions based upon recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,²⁹ to "adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat)" affected by the project.

The Idaho Department of Fish and Game (IDFG), Montana Department of Fish, Wildlife, and Parks (MDFWP), and Interior filed a number of recommendations pursuant to Section 10(j). Except as described below, the recommendations provided by IDFG, MDFWP, and Interior are also provisions of the Settlement.

Some of Interior's recommendations contain task-completion schedules that could potentially be inconsistent with the terms of the Settlement Agreement. The Agreement provides for the creation of a Management Committee, of which Interior would be a voting member, to establish schedules and deadlines. To the extent any conflict were to arise, the schedules developed under the Settlement Agreement govern, since the Agreement is a mandatory condition under both the water quality certifications and Section 4(e). We therefore decline to adopt as license conditions the schedules proposed by Interior.³⁰

THREATENED AND ENDANGERED SPECIES

Section 7(a) of the Endangered Species Act of 1973 (ESA)³¹ 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. Federally listed species that are known to occur in the project area include the threatened bald eagle, grizzly bear and bull trout, and

²⁸16 U.S.C. § 803(j)(1).

²⁹16 U.S.C. § 661 et seq.

 30 In its letter submitting Section 10(j) recommendations Interior stated that the recommendations were intended to accurately reflect the terms of the Agreement.

³¹16 U.S.C. § 1536(a).

the endangered peregrine falcon and gray wolf. Canada lynx, proposed for listing as threatened, may occur in the project area.

On March 5, 1999, Commission staff submitted a biological assessment (BA) to Interior requesting formal consultation under Section 7 of the ESA. The BA concluded that the continued operation of the project as proposed would not likely adversely affect grizzly bear, gray wolf, bald eagle, or peregrine falcon, and that it would not likely jeopardize the continued existence of the Canada lynx. However, the BA concluded that the project would likely adversely affect the bull trout.

By letter dated August 5, 1999, Interior filed its biological opinion with the Commission concurring that the project as proposed would likely adversely affect bull trout, but concluding that the project would not likely jeopardize the continued existence of the Columbia River distinct population segment of bull trout. Interior included an incidental take statement with reasonable and prudent measures and terms and conditions to minimize incidental take as part of its biological opinion.³² The EIS concludes that the measures specified in the incidental take statement are consistent with the terms of the Settlement Agreement. We list below the reasonable and prudent measures and the license articles that reflect these measures.

1. Identify adult bull trout attempting to travel upstream of the dams and in a timely manner, agreed to by Interior, provide fish passage in accordance with the Native Salmonid Restoration Plan, to facilitate their spawning migrations from Lake Pend Oreille in order to reduce or eliminate incidental take from dam blockage of migrants (Article 406);

2. Identify juvenile bull trout attempting to travel downstream and provide safe fish passage, in accordance with the Native Salmonid Restoration Plan, to facilitate their migration to Lake Pend Oreille in order to minimize incidental take related to dam effects on juvenile fish from moving through or over the dams (Article 406);

3. Develop and implement a dissolved gas supersaturation control, mitigation, and monitoring program, in accordance with the timing and other provisions agreed to in the Settlement Agreement, to reduce incidental take of bull trout by effects of gas bubble disease (Article 413);

³²The August 5, 1999 letter from Interior concluded formal consultation on this action.

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4. Increase the minimum dam discharge downstream of Cabinet Gorge dam in order to reduce incidental take of bull trout related to effects of power peaking operations on river level changes that increase the susceptibility of downstream migrating juvenile bull trout to predation (Article 429);

5. Implement provisions of the Native Salmonid Restoration Plan and Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Plan that call for evaluating, monitoring, and controlling exotic fishes in order to reduce incidental take of juvenile and sub-adult bull trout through predation and competition in the reservoirs (Articles 405, 406);

6. Identify juvenile bull trout attempting to travel downstream from tributary streams through the reservoirs to Lake Pend Oreille and provide safe passage, in accordance with the Native Salmonid Restoration Plan, to facilitate their migration to Lake Pend Oreille in order to minimize incidental take related to reservoir effects on migration patterns (Article 406);

7. Monitor ongoing bull trout prey species studies and bull trout population trends in Lake Pend Oreille and, when and if appropriate, provide safe fish passage at the dams for prey species (or other mitigation measures) in order to reduce indirect take of bull trout through species interactions related to inadequate prey base (Article 406);

8. Implement reporting and consultation requirements as outlined in the terms and conditions of the take statement in order to minimize take of bull trout related to implementation of the Native Salmonid Restoration Plan and other fisheries management activities (Article 406); and

9. Investigate and develop a plan, and implement the plan if determined appropriate by Interior, to preserve the genetic variability of the Lake Pend Oreille bull trout as represented by migratory stocks present in the Clark Fork River upstream of Cabinet Gorge dam (Article 406).

Interior included 26 terms and conditions to implement each of these reasonable and prudent measures. The terms and conditions are attached as Appendix D to this order. A number of the terms and conditions require the licensee to take actions that are not specifically required by the settlement, although any of those actions might ultimately result from other actions that the licensee agreed to take in consultation with the Management Committee, pursuant to the terms of the settlement. While we acknowledge that these conditions, in that sense, go beyond the settlement terms, Section 7(b)(4) of the ESA provides that terms and conditions of an incidental take statement "must be

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complied with by the Federal agency or applicant (if any), or both, to implement the [reasonable and prudent] measures." Further, Section 7(0)(2) of the ESA provides that "any taking that is in compliance with the terms and conditions specified in [an incidental take statement] shall not be considered to be a prohibited taking of the species concerned." Therefore, in order to ensure that any incidental taking of bull trout will not be considered prohibited, we will include these terms and conditions as license conditions.

OTHER ISSUES

A. Shoreline Erosion

Several private individuals, collectively referred to herein as the Cabinet Gorge Downstream Landowners (CGDL), filed letters³³ with the Commission claiming that shoreline property they own along the Clark Fork River downstream of Cabinet Gorge Dam is being damaged by erosion associated with Avista's operations at the dam. Bob and Betsy Best and Charlton Mills oppose the issuance of a new license for the dam until the issue of shoreline erosion is resolved to the satisfaction of the property owners.

As part of the Settlement Agreement, Avista would implement an erosion fund and shoreline stabilization guidelines program, which is included in this license as Article 428. The goal of this program is to protect important resources where it is determined that they are adversely affected or threatened by project-related erosion. As part of this program, the selection of erosion sites and treatments for protection or restoration would be directed by the Management Committee and accomplished through adaptive management. It is possible that through this program, the cause of shoreline erosion to the property of the CGDL members would be identified and restoration measures would be implemented. However, since the members of the CGDL are not parties to the Settlement Agreement, nor the Management Committee, there is no assurance that their concerns regarding damage to their property would be addressed through the measures provided by the Settlement Agreement.

³³Letters were received from Bob and Betsy Best on April 6,1999; Charlton Mills, legal counsel representing 8 unidentified private land owners, on April 29,1999; Scott W. Reed on April 12, 1999; H.T. Sallmon on May 4, 1999; and Lowell V. Ruen on May 6, 1999.

In the EIS, Commission staff presented data prepared by Avista³⁴ estimating that approximately 10 to 30 percent of the shoreline erosion in the lower Clark Fork River is caused by the daily flow cycling operations at Cabinet Gorge dam. The members of the CDGL filed information³⁵ suggesting that 65 to 80 percent of the shoreline erosion in this area is attributable to the operations of the Cabinet Gorge Project. Currently there is no long-term, site-specific data available to accurately estimate shoreline erosion rates in the lower Clark Fork River; therefore, the accuracy of the claims by Avista and CGDL cannot be determined. The EIS suggests that Avista should conduct seasonal, sitespecific monitoring studies of shoreline erosion rates in the lower Clark Fork River. The results of these studies could be used to validate the estimates presented in the EIS or create new estimates of the amount of project-related shoreline erosion occurring in the lower Clark Fork River. Based on the information filed with the Commission, we conclude that there is sufficient evidence to support the need for site-specific monitoring. Therefore, we are requiring Avista to conduct seasonal, site-specific monitoring of streambank profiles in the lower Clark Fork River, particularly between river miles 144 and 147, after consultation with the Management Committee and the CGDL (Article 434). The results would be used by the Commission to identify rates of erosion and order implementation of corrective actions, if appropriate.

B. Additional Water Quality Measures

The Forest Service 4(e) conditions require Avista to develop plans that address the disposal of solid waste and waste water, the storage and spill prevention of hazardous substances, and the use of pesticides and herbicides on National Forest System lands. Based on the EIS, we are requiring development and implementation of plans to manage these potential pollutants on all project lands and waters (Articles 435, 436, and 437). Each of these plans shall be filed within one year of the effective date of the license and will establish steps to be taken to minimize the potential for these substances to enter project waters.

³⁴Parametrix. 1998. Phase I Report: Assessment of Geomorphic Processes. Washington Water Power, Spokane, WA.

³⁵Rosgen, D. 1998. A Review of Parametrix Phase I Report: Assessment of Geomorphic Processes. Letter dated October 15, 1998, to David Lewis.

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C. Existing Water User Protection Agreement

In a matter separate from the Settlement Agreement discussed above, Avista and the State of Montana entered into an agreement, executed on June 11, 1999, that establishes procedures under which the two parties will work to resolve issues concerning the development of waters upstream of the Clark Fork Project, for much of which Avista apparently holds senior rights.³⁶ By the terms of the agreement, the parties ask the Commission to "approve" the agreement and make it a license condition.

While we appreciate that this agreement may have constituted an important aspect of the overall negotiations involving the Clark Fork Project relicense, we have no jurisdiction to "approve" the agreement, just as and we have no jurisdiction over water rights, which are a matter of state law.³⁷ We therefore will not make the agreement a license condition.

COMPREHENSIVE PLANS

Section 10(a)(2)(A) of the FPA³⁸ requires the Commission to consider the extent to which a hydroelectric project is consistent with federal and state comprehensive plans for improving, developing, or conserving waterways affected by the project.³⁹ Under Section 10(a)(2)(A), federal and state agencies filed 74 comprehensive plans that address various resources in Idaho and Montana. Of these, we identified and reviewed 26 plans

³⁸16 U.S.C. § 803(a)(2)(A).

³⁶Avista filed the agreement with the Commission on June 16, 1999.

³⁷The Commission can, however, require, as a condition to a license, that the licensee use his water rights in part for other beneficial public purposes. <u>See</u> California v. Federal Power Commission, 345 F.2d 917, 923-24 (9th Cir. 1965).

³⁹Comprehensive plans for this purpose are defined at 18 CFR 2.19 (1999).

relevant to the Clark Fork Project.⁴⁰ In addition to the plans filed pursuant to Section 10(a)(2)(A), we considered 11 other plans.⁴¹ No inconsistencies were found.

⁴⁰(1) Forest Plan – Idaho Panhandle National Forests, 1987; (2) Idaho Fisheries Management Plan, 1986-1990, 1986; (3) Pacific Northwest Rivers Study, 1986; (4) Idaho Water Quality Standards and Wastewater Treatment Requirements, 1985; (5) Idaho Outdoor Recreation Plan, 1986; (6) State Water Plan, 1986; (7) Columbia River Basin Fish and Wildlife Program, 1984; (8) Northwest Conservation and Electric Power Plan, 1986; (9) Columbia River Basin Fish and Wildlife Program, 1987; (10) Protected Areas Amendments and Response to Comments, 1988; (11) Columbia River Basin Fish and Wildlife Program, 1994; (12) The Lolo National Forest Plan, 1986; (13) Kootenai National Forest Plan, 1987; (14) Order of the Board of Natural Resources Establishing Water Reservations, Undated; (15) Montana Statewide Comprehensive Outdoor Recreation Plan, 1983; (16) Montana Department of Fish, Wildlife and Parks Water Rights filings under S.B.76, 1993; (17) Montana Water Quality 1992: Montana's 305 (b) Report, 1992; (18) Montana Water Plan Management, Section. Instream Flow Protection, 1989; (19) Montana Water Plan Management Section. Federal Hydropower Licensing and State Water Rights, 1989; (20) Montana Water Plan: Water Storage, 1990; (21) Montana Water Plan: Drought Management, 1990; (22) Montana Water Plan: Integrated Water Quality and Quantity Management, 1992; (23) North American Waterfowl Management Plan, 1986; (24) North American Waterfowl Management Plan, 1990; (25) Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service, Undated; (26) The Nationwide Rivers Inventory, 1982.

⁴¹ (1) Idaho Comprehensive Outdoor Recreation and Tourism Plan (1997SCORP), 1997; (2) Governor Philip E. Batt's State of Idaho Bull Trout Conservation Plan, 1997; (3) List of Water Bodies in need of Total Maximum Daily Load Development, 1998; (4) Montana Warm Water Fisheries Management Plan, 1997; (5) Upper Clark Fork Basin Water Management Plan, 1994; (6) Draft Restoration Plan for Bull Trout in the Clark Fork River Basin and Kootenai River Basin, Montana, 1998; (7) Lower Clark Fork River Drainage Bull Trout Status Report, 1996; (8) Middle Clark Fork River Drainage Bull Trout Status Report, 1996; (9) Upper Clark Fork River Drainage Bull Trout Status Report, 1995; (10) Flathead River Drainage Bull Trout Status Report, 1995; (11) Bitterroot River Drainage Bull Trout Status Report, 1995.

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APPLICANT'S PLANS AND CAPABILITIES

In accordance with Sections 10(a)(2)(C) and 15(a) of the FPA,⁴² we have evaluated Avista's record as a licensee with respect to the following: (A) consumption improvement program; (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 services; (G) cost effectiveness of plans; (H) actions affecting the public; and (I) ancillary services.

A. Consumption Improvement Program

Avista has a history of effective demand-side energy management initiatives dating back to 1978 and resulting in total annual electricity savings of 387 gigawatthours (Gwh) through 1995. In 1995, Avista implemented a special tariff designed to continue funding for demand-side management programs into the future. We expect these programs to result in continued improvement in the efficiency of electricity consumption by Avista's customers well into the future.

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

We have reviewed Avista's compliance with the terms and conditions of the existing licenses. We find that Avista's overall record of making timely filings and compliance with its license is satisfactory.

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

We have reviewed Avista's record of management, operation, and maintenance of the Clark Fork Project pursuant to project safety. We conclude that the dam and other project works are safe and that the licensee's record of managing, operating, and maintaining these facilities supports the decision to issue a license.

D. Ability to Provide Efficient and Reliable Service

Avista operates the Clark Fork Project under the terms of the Pacific Northwest Coordination Agreement, which coordinates the operation of the Columbia River system hydroelectric resources to provide efficient use of the available storage and generation

⁴²16 U.S.C. §§ 803 and 808.

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facilities. Since 1992 there have been only two incidences of unscheduled plant outages resulting in down times of relatively short duration. We conclude that Avista should be able to continue to serve its customers efficiently and reliably over the term of a new license.

E. Need for Power

The Clark Fork Project is located in the Northwest Power Planning Council (NPPC) region, and contributes to meeting both Avista's need and the regional need for power. Noxon Rapids and Cabinet Gorge operate in tandem, and the power generated helps meet the daily peak and weekly load demands of Avista customers and other utilities in Idaho and Washington. The Clark Fork Project generates an average of 2,836,300 MWh of electricity, annually.

Both Avista and Bonneville Power Administration (BPA) transmission lines connect the project to the northwest transmission grid. In 1998, the company's peak electric requirement was estimated to be 2,657 MW. Avista owns 1,578 MW of generating capacity and has 687 MW of long-term hydro contracts and other purchases. With a total capacity of 697 MW, the Clark Fork Project represents about 44 percent of Avista's owned capacity. Avista also uses demand-side management and conservation programs and power purchases in the "electric wholesale market" of the western United States and Canada to meet its electric power demands.

Every two years the company prepares an "Integrated Resource Plan" for the Idaho Public Utilities Commission (PUC) and the Washington Utilities and Transportation Commission (WUTC) to address the need to balance energy resource availability with future demand. The 1997 Integrated Resource Plan assumes license renewal of the Clark Fork Project and calls for future customer need to be met by continuing energy conservation programs and renewal of its mid-Columbia hydro contracts. Avista projects about a 1.4-percent annual growth in its electricity demand through the year 2017.

The Pacific Northwest Coordination Agreement (PNCA) sets the framework for coordinating the operation of the Clark Fork and other Columbia River Basin projects to help meet the regional power demands. Regional forecasters project more than a onepercent annual electrical load growth for the region through the next decade. The Clark Fork project provides the regional power supply system with needed capacity and load following capability and helps maintain system reliability. The monthly operation of both projects is coordinated with other projects in the region via the PNCA. The Clark Fork Project is party to other coordination agreements to facilitate operation of the western interconnected grid.

Besides the need for the projects' power, the operation of the Clark Fork Project helps support the Northwest electrical system during emergency conditions or unusual weather events. The ability of the Clark Fork Project to respond quickly (within minutes) to outages at other generating stations makes the project especially useful during emergency situations. Without the Clark Fork Project, additional coal, oil or natural gasfired turbines might have to be constructed to meet local and regional load and reliability requirements.

By producing hydroelectricity, the Clark Fork Project displaces the need for other power plants to operate, thereby avoiding some power plant emissions and creating an environmental benefit. Consequently, continued operation of the Clark Fork Project would likely reduce annual carbon emissions in the region. The amount of greenhouse gases (GHG) emissions that are avoided depends on the type of power displaced, which is region-specific.⁴³ In the Western States Coordinating Council (WSCC) reliability region where the Clark Fork Project is located, the capacity mix includes a proportionately large amount of hydropower, relative to other parts of the country.

F. Transmission Services

Avista's 230-kilovolt transmission system delivers project power to loads in the Spokane area and into the regional transmission grid which feeds the West Coast. The existing system was designed to efficiently handle the full range of project loads from zero to full load. No changes are proposed by Avista or recommended by staff that would affect the capability of the transmission grid to continue to serve either the project or other transmission purposes in the region.

We conclude that Avista's transmission service is sufficient for the project and that no changes are necessary at this time.

G. Cost Effectiveness of Plans

Avista is not proposing any capacity expansion of the Clark Fork Project. The annual average flow of the Clark Fork River exceeds the installed hydraulic capacity of the project about 13 percent of the time. Based on this available flow, we would not expect additional capacity to be cost effective at this site. We conclude that the project, as presently configured and as operated according to this order, is consistent with

⁴³EIS at p. 1-6.

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environmental considerations, and fully develops the economical hydropower potential of the site in a cost-effective manner.

H. Actions Affecting the Public

The protection, mitigation and enhancement measures and recreation improvements included in the license will significantly improve environmental quality, particularly in aquatic and terrestrial resources, and will have a beneficial effect on public use of project facilities for recreational purposes. The project will continue to provide economical electric power for Avista's customers.

I. Ancillary Services

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 loadfollowing 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.

Ancillary services are now mostly priced at rates that recover only the cost of providing the electric service at issue, which do not resemble the prices that would occur in competitive markets. As competitive markets for ancillary services begin to develop, the ability of hydro projects to provide ancillary services to the system will increase the benefits of the projects.

ECONOMIC BENEFITS OF PROJECT POWER

In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, 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 <u>Mead Corp.</u>,⁴⁴ the Commission employs an analysis that 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

⁴⁴ 72 FERC ¶ 61,027 (1995).

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 reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In making its decision, the Commission considers the project power benefits both with the applicant's proposed mitigation and enhancement measures and with the Commission's modifications and additions to the applicant's proposal.

As proposed by Avista, and taking into account the estimated costs of the mandatory settlement terms, the project would produce an average of 2,836 gigawatt-hours (GWh) of energy annually at an annual cost of about \$33 million or about 12 mills per kilowatt-hour (mills/kWh). Based on the cost of replacing the project power with natural gas fueled combustion turbines, which the Commission staff considers to be the most likely alternative power source for this project, the staff determined that the current annual value of the project's power would be about \$80 million (about 28 mills/kWh). To determine whether the proposed project is currently economically beneficial, we subtract the project's cost from the value of the project's power. Thus, based on current costs, the project would have economic benefits over the new license term, costing about \$47 million (16 mills/kWh) less than the current cost of alternative power.

As licensed, the project will produce the same amount of energy at about the same cost as the proposed project. The four additional environmental measures recommended by Commission staff in the EIS and required by this license would cost about \$25,000. This additional cost does not significantly change the average annual cost or power benefits of the project as proposed by Avista.

Based on our review of the agency and public comments, and our evaluation of the environmental and economic effects of the proposed project and its alternatives pursuant to Section 10(a)(1), we find that the Clark Fork Project, with the conditions attached thereto, will be best adapted to the comprehensive development of the Clark Fork River for all beneficial public uses.

LICENSE TERM

Pursuant to Section 15(e) of the FPA,⁴⁵ relicense terms shall be not be less than 30 years nor more than 50 years from the date on which the license issued. The Settlement Agreement, which is a condition of the water quality certifications, provides for a 45-year license term. The Commission's options are to issue the license as conditioned under the

⁴⁵16 U.S.C. § 808(e).

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various mandatory conditioning authorities, or to deny the license application.⁴⁶ As discussed above, we conclude that we will issue the license.

SUMMARY OF FINDINGS

The EIS includes background information, analysis of impacts, discussion of enhancement measures, and support for related license articles. The project will not result in any major, long-term adverse environmental impacts.

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license.

Based on our review of the agency and public comments, and our evaluation of the environmental and economic effects of the proposed project and its alternatives pursuant to Section 10(a)(1), we find that the Clark Fork Project, with the conditions attached thereto, will be best adapted to the comprehensive development of the Clark Fork River for beneficial public uses.

The Commission orders:

(A) This license is issued to Avista Corporation (Licensee) for a period of 45 years, effective March 1, 2001, to operate and maintain the Clark Fork Project No. 2058. The existing licenses for Project Nos. 2058 and 2075 expire on February 28, 2001. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G:

⁴⁶See American Rivers, Inc. v. FERC, 129 F.3d 99, 111 (2d Cir. 1997).

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Exhibit	FERC No. 2058-	Title
G-1	1028	Map of Project Area, Cabinet Gorge Development, Sheet 1 of 4
G-2	1029	Map of Project Area, Cabinet Gorge Development, Sheet 2 of 4
G-3	1030	Map of Project Area, Cabinet Gorge Development, Sheet 3 of 4
G-4	1031	Map of Project Area, Cabinet Gorge Development, Sheet 4 of 4
G-5	1032	Map of Project Area, Noxon Rapids Development, Sheet 1 of 8
G-6	1033	Map of Project Area, Noxon Rapids Development, Sheet 2 of 8
G-7	1034	Map of Project Area, Noxon Rapids Development, Sheet 3 of 8
G-8	1035	Map of Project Area, Noxon Rapids Development, Sheet 4 of 8
G-9	1036	Map of Project Area, Noxon Rapids Development, Sheet 5 of 8
G-10	1037	Map of Project Area, Noxon Rapids Development, Sheet 6 of 8
G-11	1038	Map of Project Area, Noxon Rapids Development, Sheet 7 of 8
G-12	1039	Map of Project Area, Noxon Rapids Development, Sheet 8 of 8

(2) Project works consisting of two developments. The Noxon Rapids development, consisting of:

A 6,195-foot-long dam consisting of a 5,326-foot-long, 260-foot-high earthen embankment section; a 384-foot-long, 180-foot-high concrete gravity spillway section with turbine intakes and penstocks; and a 485-foot-long, 190-foot-high

powerhouse section that is integral with the dam; a 7,940-acre reservoir with a gross storage capacity of 400,000 acre-feet (ac-ft) at full pool elevation of 2,331 feet, and an active storage capacity of 230,700 ac-ft in the top 36 feet of the reservoir; five 26-foot-diameter, 170-foot-long steel penstocks built into the intake section of the dam; a semi-outdoor concrete powerhouse integral with the dam and containing five Francis turbines, four rated at 130,800 horsepower (hp) each and one rated at 167,500 hp, and generators producing a total of about 466 megawatts (MW) at full turbine capacity and full pool; a 900-foot-long transmission line; and appurtenant facilities.

Appurtenant facilities include an operations and maintenance warehouse, office buildings, communications lines, storage areas, access roads, and recreational facilities.

and the Cabinet Gorge development, consisting of:

A 395-foot-long, 208-foot-high concrete gravity arch dam; a saddle dam, located in a depression near the south abutment, consisting of a 75-foot-long, 12-foot-high concrete gravity section, buttressed by earth fill on the downstream face; a 3,200acre reservoir with a gross storage capacity of 105,000 ac-ft at full pool elevation of 2,175 feet, and an active storage capacity of 42,780 ac-ft in the top 15 feet of the reservoir (no minimum reservoir elevation is established); four 27-foot-diameter, concrete-lined penstocks ranging in length from 447 feet to 564 feet with the last 110 to 155 feet steel-lined; a 355-foot-long by 106-foot-wide semi-outdoor powerhouse, containing three fixed-blade propeller turbines rated at 70,500 hp each, and one Kaplan turbine runner rated at 86,290 hp, and generators producing a total of about 231 MW at full turbine capacity and full pool; and appurtenant facilities.

Appurtenant facilities include an operations and maintenance warehouse, office buildings, communications lines, storage areas, access roads, and recreational facilities.

The project works generally described above are more specifically described in Exhibit A, sections A.1 through A.5, of the application and the following Exhibit F drawings:

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<u>Exhibit</u>	FERC No.2058-	<u>Title</u>
F-1	1001	Cabinet Gorge, General Development
F-2	1002	Cabinet Gorge, Powerhouse - Penstocks
F-3	1003	Cabinet Gorge, Powerhouse - Longitudinal Section and Downstream Elevation
F-4	1004	Cabinet Gorge, Powerhouse - Cross Section
F-5	1005	Cabinet Gorge, Powerhouse - Plan of Pipe Gallery and at Centerline of Distributor
F-6	1006	Cabinet Gorge, Powerhouse - Roof Plan and Operating Floor Plan
F-7	1007	Cabinet Gorge, Powerhouse - Intake Plan & Sections
F-8	1008	Cabinet Gorge, Dam - Arch Design Data & Stresses
F - 9	1009	Cabinet Gorge, Dam - Plan & Profile
F-10	1010	Cabinet Gorge, Dam - Arch Rings & Sections
F-11	1011	Cabinet Gorge, Dam - Apron & Protective Works
F-12	1012	Cabinet Gorge, General Plan & Sections
F-13	1013	Cabinet Gorge, Powerhouse - Longitudinal Section and Elevation
F-14	1014	Cabinet Gorge, One-Line Diagram
F-15	1015	Cabinet Gorge, Drill Hole Logs & Geological Cross Sections
F-16	1016	Cabinet Gorge, Hydrographs
F-17	1017	Cabinet Gorge, Saddle Dam & Saddle Dam Extension Plan
F-18	1018	Noxon Rapids, General Plan
F-19	1019	Noxon Rapids, Profile & Sections

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<u>Exhibit</u>	FERC No.2058-	<u>Title</u>
F-20	1020	Noxon Rapids, Powerhouse and Intake Dam Cross Section
F-21	1021	Noxon Rapids, Powerhouse Plans
F-22	1022	Noxon Rapids, One-Line Diagram
F-23	1023	Noxon Rapids, Plan of North East Embankment
F-24	1024	Noxon Rapids, Sections of Northeast Embankment
F-25	1025	Noxon Rapids, Plan & Sections of Southwest Embankment
F-26	1026	Noxon Rapids, Plan & Sections of Southwest Embankment
F-27	1027	Noxon Rapids, Plan of Clay Stratum and Blanketed Areas

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

(C) Exhibits A, F and G listed above are approved and made part of the license subject to the following revisions, required by Article 204:

- (1) Exhibit G shall be revised to reflect the current licensee name, combined project name and number, and boundary changes approved by this order;
- (2) Exhibit F drawings shall be revised to reflect the current licensee name and the combined project name and number approved by this order.

(D) This license is subject to the conditions submitted by the State of Montana Department of Environmental Quality and the State of Idaho Division of Environmental Quality under Section 401 of the Clean Water Act, as those conditions are set forth in Appendix A to this order.

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

(F) This license is subject to the conditions submitted by the U.S. Department of the Interior under Section 18 of the FPA, as those conditions are set forth in Appendix C to this order.

(G) 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" and the following additional articles:

<u>Article 201</u>. The Licensee shall pay the United States an annual charge, effective March 1, 2001, for the purposes of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 697,000 kilowatts.

For the purpose of recompensing the United States for the use, occupancy and enjoyment of 1,269 acres of its lands, the Licensee shall pay a reasonable annual charge as determined by the Commission in accordance with its regulations in effect from time to time.

<u>Article 202</u>. Pursuant to Section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The Licensee shall set aside in a project amortization reserve account at the end of each fiscal year one-half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the Licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The Licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The Licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts.

The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus 4 percentage points (400 basis points).

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<u>Article 203</u>. If the Licensee's project was directly benefitted 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.

<u>Article 204.</u> Within 60 days of the effective date of this license, the Licensee shall file for approval revised Exhibit G and Exhibit F drawings. Exhibit G shall be revised to reflect the current licensee name (Avista Corporation), combined project name and number (Clark Fork Project, FERC No. 2058), and boundary changes approved by this order. Exhibit F drawings shall be revised to reflect the current licensee name and the combined project name and number approved by this order.

Article 205. Within 45 days of the effective date of the license, the Licensee shall file three original sets of aperture cards of the approved drawings. The drawings must be reproduced on silver or gelatin 35 mm microfilm. All microfilm must be mounted on type D $(3-1/4" \times 7-3/8")$ aperture cards. The Licensee shall submit one copy of Form FERC-587 with the aperture cards.

Prior to microfilming, the FERC Drawing Number shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number must 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 must be typed on the upper left corner of each aperture card.

Two sets of the aperture cards shall be filed with the Secretary of the Commission, ATTN: OHL/Division of Licensing and Compliance. The third set of aperture cards shall be filed with Commission's Portland Regional Office.

<u>Article 401</u>. The Licensee shall comply with the terms and conditions of this license in accordance with the Clark Fork Settlement Agreement (License Application

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Volume III) entered into January 28, 1999, in addition to the articles set forth below in this license.

Article 402. The Licensee shall develop, in consultation with the Management Committee, which is comprised of one representative of each of the 27 parties to the Settlement,⁴⁷ an Administrative Plan and Annual Report (Annual Report) to be filed for Commission approval on or before April 15 of each year, addressing all the resource Protection, Mitigation and Enhancement (PM&E) measures in license Articles 404 through 430 that are proposed to be implemented, and describing any changes from the filed PM&E measures. The Annual Report will provide a summary of the PM&E measures implemented, funds expended, and assess resource benefits gained in the previous calendar year. The Annual Report will also include annual implementation plans for each PM&E measure proposed for implementation. Each implementation plan will include a summary of the projected annual budget, as well as key actions, tasks, and decisions to be undertaken in the current calendar year. In the event the Management Committee identifies any unresolved issue with regard to the implementation of the Settlement Agreement, the Annual Report will include an explanation of such issues. The Commission reserves the right to make changes to the Annual Report and the implementation plans.

Article 403. In the case of any PM&E measure that establishes a fund or an amount of money to be made available by the Licensee on an annual basis, the funds shall be adjusted for inflation using the Gross Domestic Product-Implicit Price Deflator, as reported by the Bureau of Economic Analysis, U.S. Department of Commerce, and described in Paragraph 23 of the Settlement Agreement. Unexpended funds shall be carried over annually for expenditure in following years and the amount of any unexpended funds carried forward shall, at the end of the year in question and each year thereafter, be increased by the yield in percent per year, compounded daily, on U.S. Treasury securities at a constant maturity of one year, as reported in the Federal Reserve Statistical Release H-15 (Daily Update on Selected Interest Rates for January 1), or the most recent reporting date prior to January 1 of the given year.

<u>Article 404</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Idaho Tributary Habitat Acquisition and Fishery Enhancement Program (Appendix A of the Settlement Agreement) to mitigate continuing losses of fish and fish habitat due to the operation of the project. In the Annual Report

⁴⁷See n. 18, supra, for a list of the parties.

required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 405</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program (Appendix B of the Settlement Agreement) to mitigate losses of fish, habitat, and recreational fisheries due to continued operation of the project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 406</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Native Salmonid Restoration Plan (License Application Volume IV.A in accordance with the Settlement Agreement and Appendix C thereof) to mitigate the continuing effects of the project as obstructions to fish passage, and to achieve the goal of increasing the long term population viability of native salmonids in the Lake Pend Oreille - lower Clark Fork River system. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 407</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Bull Trout Protection and Public Education Project (Appendix D of the Settlement Agreement) for the purpose of increasing the viability of bull trout populations by reducing poaching, accidental harvest, and habitat loss thereby mitigating impact to these species caused by the continued operation of the project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 408</u>. The Licensee shall develop and implement, in consultation with the Management Committee, the Watershed Councils Program (Appendix E of the Settlement Agreement) to improve conditions for aquatic life inhabiting those streams, including macroinvertebrates and native fish species such as bull trout, westslope cutthroat trout, and mountain whitefish. The associated protection and enhancement of tributary streams and the aquatic life inhabiting them will serve as mitigation and resource enhancements to offset impacts to aquatic life due to continued power peaking operations of the project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 409</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Support of the Tri-State Implementation Council Water Quality Monitoring Program (Appendix F1 of the Settlement Agreement) to provide a

systematic, long-term monitoring of nutrients and metals to monitor and determine the role of the project as nutrient and/or retention sinks. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

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<u>Article 410</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals PM&E (Appendix F2 of the Settlement Agreement) to provide for monitoring of Noxon Reservoir during periods when reservoir stratification is possible and if temperature and dissolved oxygen (DO) benchmarks as identified in the PM&E are met, to initiate more intensive monitoring of nutrient and metals levels. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E.

<u>Article 411</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Aquatic Tissue Analysis PM&E (Appendix F3 of the Settlement Agreement) to analyze aquatic organism tissues for the presence of heavy metals and other toxic substances. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 412. The Licensee shall fund and implement, in consultation with the Management Committee, the Water Quality Protection and Monitoring Plan for Maintenance, Construction, and Emergency Activities (Appendix F4 of the Settlement Agreement) to provide for the development and implementation of a plan to minimize or eliminate the impact of project related maintenance, construction, and emergency activities to water quality and associated resources of the Clark Fork River and Lake Pend Oreille. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 413</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Dissolved Gas Supersaturation Control, Mitigation, and Monitoring PM&E (Appendix F5 of the Settlement Agreement) to provide for the study, control, mitigation, and monitoring of gas supersaturation and the associated biological resource impacts in the Clark Fork-Pend Oreille system related to spill at the Clark Fork Project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 414</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Land Use Management Plan (License Application Volume IV.B), in accordance with the Settlement Agreement and Appendix G thereof, to ensure that project lands can reasonably satisfy a variety of competing resource demands and for

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the purpose of ensuring the implementation of a land use classification system, a land and reservoir use permitting system, and appropriate monitoring and enforcement mechanisms. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 415</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Recreation Resources Management Plan (License Application Volume IV.C), in accordance with the Settlement Agreement and Appendix H thereof, to maintain and manage appropriate recreational facilities at the project and to develop new recreational facilities in the vicinity of the project to effectively meet recreation demand during the term of the new license. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 416</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Aesthetics Management Plan (License Application Volume IV.D), in accordance with the Settlement Agreement and Appendix I thereof, to provide for the protection and enhancement of aesthetic resources associated with the project and to mitigate for project-related impacts to those resources. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 417. The Licensee shall fund and implement the Wildlife, Botanical, and Wetland Management Plan (License Application Volume IV.E), in accordance with the Settlement Agreement and Appendix J thereof, to provide organization and presentation of the various wildlife, botanical, and wetland PM&E measures within a single, comprehensive management plan. Initially these measures include: (a) wildlife habitat acquisition, enhancement and management (Article 418); (b) black cottonwood habitat protection and enhancement (Article 419); (c) wetlands protection and enhancement (Article 420); (d) bald eagle monitoring and protection (Article 421); (e) peregrine falcon monitoring and protection (Article 422); (f) common loon monitoring and protection (Article 423); (g) Clark Fork Delta habitat protection and mitigation (Article 424); (h) forest habitat protection and enhancement (Article 425); and, (i) reservoir islands protection (Article 426). In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for these PM&E measures.

<u>Article 418</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Wildlife Habitat Acquisition, Enhancement, and Management Program (Appendix K of the Settlement Agreement) to mitigate for the potential effects to wildlife resources and habitat due to the continued operation of the

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project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 419</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Black Cottonwood Habitat Protection and Enhancement PM&E (Appendix L of the Settlement Agreement) to provide for the protection and enhancement of black cottonwood trees and stands on Licensee-owned project lands. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 420</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Wetlands Enhancement Program PM&E (Appendix M of the Settlement Agreement) to provide for the protection and enhancement of wetland areas within the project boundary. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 421</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Bald Eagle Monitoring and Protection PM&E (Appendix N1 of the Settlement Agreement) to provide for the monitoring and protection of bald eagle occurrence and nest sites, which could be negatively affected by project operations or project related human activities associated with recreation or other land use activities. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 422</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Peregrine Falcon Monitoring and Protection PM&E (Appendix N2 of the Settlement Agreement) to provide for the monitoring of peregrine falcon occurrence and nesting activity and the protection of nest sites which might be negatively affected by the project related human activities associated with recreation or other land use activities. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 423. The Licensee shall fund and implement, in consultation with the Management Committee, the Common Loon Monitoring and Protection Program PM&E (Appendix N3 of the Settlement Agreement) to provide for the monitoring of common loon occurrence and nesting activity and the protection of nest sites which might be negatively affected by project operations or project related human activities related to recreation or other land use activities. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

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<u>Article 424</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Clark Fork Delta Habitat Protection and Mitigation Program PM&E (Appendix O of the Settlement Agreement) to prevent the loss of wildlife habitat in the Clark Fork Delta, or mitigate for that loss, to an extent comparable to the estimated loss of habitat that would occur from the continued operation of the project. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 425</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Forest Habitat Protection and Enhancement PM&E (Appendix P of the Settlement Agreement) to provide for the protection and enhancement of specific parcels of Licensee-owned land along the reservoirs which have been identified as having significant wildlife habitat value. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 426</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Reservoir Islands Protection PM&E (Appendix Q of the Settlement Agreement) to provide for the protection of islands owned by the Licensee in the project areas to maintain the unique and high quality wildlife habitat functions and values of these islands. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 427. The Licensee shall fund and implement the Programmatic Agreement Among the Kootenai Tribe of Idaho, Confederated Salish and Kootenai Tribes of the Flathead Reservation, Coeur d'Alene Tribe, Kalispel Tribe, Federal Energy Regulatory Commission, Forest Service, Avista Corporation, Advisory Council on Historic Preservation, Idaho State Historic Preservation Office, and Montana State Historic Preservation Office for the Clark Fork Heritage Resource Program executed on December 30, 1998 (Appendix R of the Settlement Agreement).

<u>Article 428</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Erosion Fund and Shoreline Stabilization Guidelines Program PM&E (Appendix S of the Settlement Agreement) to design and implement effective erosion control measures to protect important resource values on lands affected by project induced erosion. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 429. The Licensee shall fund and implement, in consultation with the Management Committee, the Project Operations Package (Appendix T of the Settlement Agreement) to mitigate the effects of the project. The Licensee shall maintain the

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following operational limits in accordance with the terms of the Settlement Agreement and Appendix T thereof:

1. (a) General operating limits for the Noxon Rapids development:

Maximum Forebay Elevation	2,331.0 feet
Minimum Forebay Elevation	2,327.0 feet (May 15-Sept 30)
Minimum Forebay Elevation	2,321.0 feet (October 1 - May 14)
Maximum Forebay Draft Rate	2 feet per day (net), 5 feet per week (net) ⁴⁸

(b) General operating limits for the Cabinet Gorge development:

Maximum Forebay Elevation	2,175.0 feet
Minimum Forebay Elevation	2,168.0 feet
Minimum Total Project Discharge	5,000 cfs

In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

<u>Article 430</u>. The Licensee shall fund and implement, in consultation with the Management Committee, the Additional Operations Mitigation Program (Appendix T of the Settlement Agreement) to mitigate the effects of the project. The Licensee shall fund and implement a broader ecosystem approach to achieving fishery goals, in lieu of changing project operations. In the Annual Report required by Article 402, the Licensee shall include the annual implementation plan for this PM&E measure.

Article 431. The Licensee shall comply with the terms of the Letter Agreement dated January 7, 1999, between Avista Corporation and the U. S. Army Corps of Engineers regarding the coordination of the operations of the Cabinet Gorge development with the operations of the Albeni Falls Project (Volume I License Application, Appendix B).

⁴⁸Net draft is the decrease in elevation as measured between two times, at the beginning and end of the period.

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In accordance with the Letter Agreement, the Licensee shall:

(1) provide to the Albeni Falls Operator by 9:30 a.m. each day estimates of the Cabinet Gorge average discharge for the next calendar day and for the current calendar day. The Licensee shall strive to cause the actual discharge to be within the range of an agreed upon Accuracy Standard for each day's forecast. The Accuracy Standard for the next calendar day forecast will be \pm 6,000 cfs, when the daily river flow at Cabinet Gorge is less than 54,000 cfs. The Accuracy Standard for the current calendar day shall be \pm 4,000 cfs when the daily river flow at Cabinet Gorge is less than 54,000 cfs. The Accuracy Standard for the current calendar day shall be \pm 4,000 cfs when the daily river flow at Cabinet Gorge is less than 54,000 cfs. When the daily river flow is greater than 54,000 cfs, the Licensee shall continue to provide estimates, as described above, absent the Accuracy Standard;

(2) promptly advise the Albeni Falls Project of any changes to the forecast that may occur. It may be desirable to revise either or both of the calendar day estimates. The Licensee shall consult with the Albeni Falls Operator concerning the proposed revision and the Albeni Falls Operator shall strive to accommodate the revision. If the revision cannot be accommodated due to project restrictions, the Licensee shall honor the previous estimate, and the Albeni Falls Operator shall provide information concerning the reasons for non-accommodation;

(3) initiate a discussion at least once a year with personnel from the Licensee and the Albeni Falls Project to meet to review the forecasting performance and discuss any amendments or changes to the process.

In the event that there are any modifications made to the Letter Agreement, the Licensee shall file for Commission approval the modifications as agreed to by the U.S. Army Corps of Engineers and the Licensee within 30 days of execution. The Commission reserves the right to require changes to the Letter Agreement.

<u>Article 432</u>. Within one year of the effective date of the license and on, or before, April 15 of each year, the Licensee shall file for Commission approval, a Threatened and Endangered Species Plan and Annual Report. The plan shall address the Licensee's compliance with the terms and conditions of the incidental take statement filed by the U.S. Fish and Wildlife Service on August 23, 1999, and attached to this order as Appendix D.

The Licensee shall prepare the Threatened and Endangered Species Plan and Annual Report after consultation with the Management Committee. The plan shall include, at a minimum, any modifications to project facilities or operations proposed to minimize take of the bull trout. 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 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 make any changes to the plan.

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<u>Article 433</u>. Within one year of the effective date of the license and on, or before, April 15 of each year, the Licensee shall file for Commission approval, a Fishway Plan and Annual Report. The plan shall address the Licensee's compliance with the fishway prescriptions contained in Appendix C to this order.

The Licensee shall prepare the Fishway Plan and Annual Report after consultation with the Management Committee. The plan shall include, at a minimum, a detailed description of any fish passage devices or measures, including experimental truck and trap programs, and any proposed modifications to project facilities or operations. 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 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 make any changes to the plan.

<u>Article 434</u>. Within six months of the effective date of the license, the Licensee shall file for Commission approval, a plan to conduct seasonal, site-specific monitoring of bank profiles in the lower Clark Fork River, particularly between river miles 144 and 147, to provide estimates of the rates of erosion and the relationship of these rates to flow cycling at the Cabinet Gorge development. The monitoring results shall be used to determine the rates of erosion and any appropriate corrective actions.

The Licensee shall prepare the bank profile monitoring plan after consultation with the Management Committee and the Cabinet Gorge Downstream Landowners (CGDL) group. 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 for approval. If the Licensee does not adopt a recommendation, the filing

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shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to require changes to the plan.

<u>Article 435</u>. Within one year of the effective date of the license, the Licensee shall file for Commission approval, a plan to develop and implement a solid waste and waste water plan. The plan, at a minimum, shall incorporate the plan developed under the U.S. Forest Service 4(e) Condition 7 (Appendix B of this order) addressing the treatment and disposal of solid waste and waste water generated during the construction and operation of the project and ancillary facilities on project lands. The plan shall not be limited to Forest Service lands.

The Licensee shall prepare the solid waste and waste water plan after consultation with the Management Committee. 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 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.

<u>Article 436</u>. Within one year of the effective date of the license, the Licensee shall file for Commission approval, a plan to develop and implement an oil and hazardous substances plan. The plan, at a minimum, shall incorporate the plan developed under the U.S. Forest Service 4(e) Condition 8 (Appendix B of this order) addressing hazardous substances storage, spill prevention and cleanup on project lands. The plan shall not be limited to Forest Service lands.

The Licensee shall prepare the hazardous substances plan after consultation with the Management Committee. 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 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.

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<u>Article 437</u>. Within one year of the effective date of the license, the Licensee shall file for Commission approval, a plan to develop and implement a pesticide and herbicide use plan. The plan, at a minimum, shall incorporate the plan developed under the U.S. Forest Service 4(e) Condition 10 (Appendix B of this order) addressing pesticide or herbicide applications on project lands. The plan shall not be limited to Forest Service lands.

The Licensee shall prepare the pesticide and herbicide plan after consultation with the Management Committee. 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 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.

<u>Article 438</u>. Whenever a dispute arises under Paragraph 29 of the Settlement Agreement that is resolved without referral to the Commission, the Licensee shall, within 30 days, file with the Commission a report containing an explanation of the dispute and the nature of the resolution.

Whenever a dispute arises under Paragraph 29 of the Settlement Agreement and no resolution is reached during the informal process, the Licensee shall, within 30 days of the Management Committee's decision to refer the dispute to the Commission, inform the Commission that the dispute will or will not be referred to the Commission for formal dispute resolution.

<u>Article 439</u>. The Licensee shall give timely notice to the Parties, pursuant to Paragraph 40 of the Settlement Agreement, and to the Commission, within 30 days, of any request for access across project lands for the purpose of installing any outfall or discharge facility in connection with the development of the proposed Rock Creek copper and silver mine located in Sanders County, Montana downstream of the Noxon Rapids dam.

<u>Article 440</u>. Whenever the Licensee acquires lands or interests in lands for the purpose of implementing any of the PM&Es, the Licensee shall at the time such lands are acquired, pursuant to Paragraph 25 of the Settlement Agreement, take such actions as may be necessary and appropriate to ensure that the PM&E lands are protected in perpetuity from uses which are inconsistent with the purposes for which the lands are being acquired. The Licensee shall file for Commission approval, within 30 days of acquisition of

additional project lands, a revised Exhibit G, showing the extent of the Licensee's interests in these lands.

<u>Article 441</u>. 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 Planning 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 442. (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 water 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 watercraft 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 watercraft 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 Hydropower Licensing, 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 or K 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 interest at the end of that period.

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

- (1) Before conveying the interest, the Licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.
- (2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved exhibit R or approved report on recreational resources of an exhibit E; or, if the project does not have an approved exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.
- (3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.
- (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.

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(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 or K 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 or K 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 public lands and reservations of the United States included within the project boundary.

(H) 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.

(I) 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.

(SEAL)

Davy J. Rolins

Secretary.

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APPENDIX A

MONTANA WATER QUALITY CERTIFICATION CONDITIONS

On April 27, 1999, the State of Montana Department of Environmental Quality granted water quality certification under §401 of the Federal Clean Water Act to Avista Corporation for the Clark Fork Project with the following conditions:

(1) The Department's certification is conditioned upon compliance by Avista with all of the terms and conditions of the Settlement Agreement relating to water quality and to the protection, maintenance, or enhancement of the designated beneficial uses of the waters of the Clark Fork River including, but not limited to, the following:

Appendix B:	Montana Tributary Habitat Acquisition and Recreational Fishery
	Enhancement Program
Appendix C:	Fish Passage/Native Salmonid Restoration Plan
Appendix E:	Watershed Council Program
Appendix F1:	Support of Tri-State Implementation Council Water Quality
	Monitoring Program
Appendix F2:	Mobilization of Sediment Trapped Nutrients or Heavy Metals
Appendix F3:	Aquatic Organism Tissue Analysis
Appendix F4:	Water Quality Protection and Monitoring Plan for Maintenance,
	Construction, and Emergency Activities
Appendix F5:	Gas Supersaturation Control, Mitigation, and Monitoring
Appendix G:	Implementation of Land Use Management Plan
Appendix H:	Implementation of Recreation Resource Management Plan
Appendix J:	Implementation of the Wildlife, Botanical, and Wetland Management
	Plan
Appendix M:	Wetlands Protection and Enhancement Program
Appendix T:	Project Operations Package

The Clark Fork Settlement Agreement is hereby incorporated into this certification by reference.

(2) In addition to the monitoring requirements contained in the terms and conditions of the Settlement Agreement, Avista shall notify the Department in writing not less than two (2) weeks prior to commencing any construction activity under authority of this certificate which may result in a discharge of pollutants to state waters. Avista shall notify the Department within seven (7) days after the completion of any construction activity

resulting in a discharge of pollutants. Avista shall allow the Department reasonable entry and access to the discharge site in order to inspect the discharge for compliance with the conditions of this certification.

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(3) Avista shall obtain all permits, authorizations and certifications required by federal, state, or local laws, regulations or ordinances prior to commencement of any activity that could violate Montana's water quality standards.

(4) This approval is limited to and includes the proposal and plans contained in the application and supporting documents submitted and affirmed to by Avista. Any variances from the plans and proposals contained in the application and supporting documents are subject to the review and approval by the Department prior to implementation.

(5) Should the project be found, at any time, not to be in compliance with any of the conditions of this certification, or should the permittee construct or operate this project in any way other than as specified in the application or supporting documents, as modified by the conditions of this certification, then the terms of this certification shall be considered to have been violated.

(6) This certification shall expire upon the assignment or transfer of the property covered by this certification unless the new owner submits to the Department a written consent to all the terms and conditions of this certification.

IDAHO WATER QUALITY CERTIFICATION CONDITIONS

On August 20, 1999, the State of Idaho Division of Environmental Quality (DEQ) granted water quality certification under §401 of the Federal Clean Water Act to Avista Corporation for the Clark Fork Project with the following conditions:

1. Avista shall comply with the terms and conditions of the Settlement Agreement. The following PM&E measures identified as appendices to the Settlement Agreement are hereby incorporated into this certification by reference:

Appendix A:	Idaho Tributary Habitat Acquisition and Fishery Enhancement
	Program;
Appendix C:	Fish Passage/Native Salmonid Restoration Plan;
Appendix D:	Bull Trout Protection and Public Education Project;
Appendix E:	Watershed Council Program;
Appendix F1:	Support of Tri-State Implementation Council Water Quality
	Monitoring Program;

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Mobilization of Sediment Trapped Nutrients or Heavy Metals;
Aquatic Organism Tissue Analysis;
Water Quality Protection and Monitoring Plan for Maintenance,
Construction, and Emergency Activities;
Gas Supersaturation Control, Mitigation, and Monitoring;
Implementation of the Wildlife, Botanical, and Wetland Management
Fund;
Wildlife Habitat Acquisition, Enhancement, and Management Fund;
Wetlands Protection and Enhancement Program;
Clark Fork Delta Habitat Protection and Mitigation Program;
Erosion Fund and Shoreline Stabilization Guidelines Program;
Project Operations Package.

2. This approval is limited to and includes the proposal and plans contained in the application and supporting documents submitted and affirmed by the applicant. All variances from the plans and proposals contained in the application and supporting documents are subject to the review and approval of DEQ prior to implementation;

3. The projects shall not cause or contribute to violations of surface water criteria as identified in IDAPA §§16.01.02.200, 250, 276, and 900. DEQ reserves authority under this certification to require plans, corrective actions and monitoring necessary to correct water quality violations that may develop as a result of operation, maintenance or construction associated with the projects, and as a result of Avista's failure to comply with the terms of the Settlement Agreement;

4. Nonpoint source activities associated with the projects shall be controlled through the use of approved best management practices (BMPs) conducted in a manner that demonstrates reasonable and knowledgeable effort to minimize adverse water quality impacts (IDAPA §16.01.02.350). DEQ reserves authority under this certification to require plans, corrective actions and monitoring to ensure nonpoint source activities do not result in adverse water quality impacts, and as a result of Avista's failure to comply with the terms of the Settlement Agreement;

5. Avista shall obtain all necessary federal, state, and local authorizations prior to commencement of any activity that could be expected to violate Idaho water quality standards;

6. If the project is abandoned or not used as an electric generating facility for three consecutive years, this certification shall become null and void and the applicant shall request consideration of water quality certification from DEQ, as amended;

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7. If FERC issues an order related to project operation, maintenance, or construction that is materially inconsistent with the conditions of this certification and the supporting Settlement Agreement, this approval shall be considered null and void and the applicant shall request consideration of water quality certification for the project as ordered by FERC;

8. This certification shall apply to the license upon issuance of a final FERC license for the project and shall expire in conjunction with license expiration;

9. This approval shall expire upon assignment or transfer of the property covered by this certification unless the new owner submits a written consent to all terms and conditions in this certification.

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APPENDIX B

U.S. Forest Service

4(e) Conditions

Condition 1. The licensee shall completely and fully comply with all terms of the January 28, 1999, Clark Fork Settlement Agreement, including:

a) all protection, mitigation, and enhancement measures identified in Appendices A-V to that Settlement Agreement;

b) all commitments identified in various plans referenced in the Settlement Agreement and Appendices.

Condition 2. Condition 1 above includes, but is not limited to, the following clarification of the Settlement Agreement:

a) The estimated annual funding of \$27,698 for operation and maintenance of Forest Service recreation sites, does not include maintenance costs for boat docks and ramps, and the costs of pumping of toilets. AVISTA will pay these costs in addition to the estimated funding shown above and shown in Appendix H. See AVISTA letter to Kathleen McAllister dated January 14, 1999, (attached).

b) The inflation/deflation index described in Paragraph 23 of the Settlement Agreement applies to all funding identified in Appendix U.

c) Unspent monies identified as "Funds" or "Budgeted Costs" in Appendix U to the Settlement Agreement, except the erosion fund as specified in appendix S, will accumulate over the term of the license and will accrue interest in accordance with Paragraph 23 of the Settlement Agreement.

d) The Forest Service is, and will remain throughout the term of the license, a member of the group of five parties from whom unanimity is required for any vote of the Management Committee, which is defined and characterized in paragraphs 26 through 29 of the Settlement Agreement. The Forest Service also is, and will remain throughout the term of the license, a necessary party which must be present at Management Committee meetings to constitute a quorum of the committee.

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e) The licensee will complete the "high priority" modifications and repairs to existing recreation sites located on National Forest System lands, specified in Exhibits 1 through 3 of the Recreation Resource Management Plan (referenced in Appendix H, page H-3 of the Settlement Agreement), by March 1, 2004, unless otherwise decided by the management committee. The licensee will fund these modifications and repairs with monies specified in Appendix U, page U-2, under "Annual contribution to facilities fund years 1-5 (\$187,000)."

Condition 3. The above 4(e) conditions are premised on two requirements:

a) The FERC's acceptance and incorporation of the Settlement Agreement and the protection, mitigation, and enhancement measures identified in the appendices to the Settlement Agreement, substantially unmodified, into license terms; and

b) The licensee's immediate and complete implementation of measures the Settlement Agreement identifies as occurring prior to FERC's issuance of a new license. In the event either of these requirements is not met, the Forest Service reserves its right to supplement these 4(e) conditions at a later time.

Condition 4. Forest Service Approval of Final Design

Before implementation of PM&E measures occurs on National Forest System land, the Licensee shall obtain the prior written approval of the Forest Service for all final design plans for project components which the Forest Service deems as affecting or potentially affecting National Forest System lands and resources. As part of prior written approval the Forest Service may require adjustments in final plans and facility locations to preclude or mitigate impacts and to assure that the project is compatible with on-the-ground conditions. Should such necessary adjustments be deemed by the Forest Service, the Commission, or licensee to be a substantial change, the licensee shall follow the procedures of Article 2 of the license. Any changes to the license made for any reason pursuant to Article 2 or 3 shall be made subject to any new terms and conditions of the Secretary of Agriculture made pursuant to Section 4(e) of the Federal Power Act.

Condition 5. Approval of Changes After License is Issued.

Notwithstanding any license authorization to make changes to the project, the licensee shall get written approval from the Forest Service prior to making any changes in the location of any constructed project features or facilities, or in the uses of project lands and waters, or any departure from the requirements of any

approved exhibits filed with the Commission if those changes are likely in the judgement of the Forest Service to affect National Forest System lands or resources. Following receipt of such approval from the Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission describing the changes, the reason for the changes, and showing the approval of the Forest Service for such changes. The licensee shall file an exact copy of this report with the Forest Service at the same time it is filed with the Commission. This article does not relieve the Licensee from the amendment or other requirements of Article 2 or Article 3 of this License.

Reservoir Operation

Condition 6. Public Notification Plan

Within 1 year following the date of issuance of this license, the Licensee shall file with the Director, Office of Hydropower Licensing, a plan, approved by the Forest Service, which includes guidelines and contact telephone numbers for notifying the Forest Service and the public of potential or emergency activities which may affect recreational use and/or access to the project area.

The licensee shall implement this plan at a time which will provide at least 60 days advance notice to the Forest Service and the public of construction activities, 30 days notice for maintenance activities and the maximum possible time for emergencies.

Soil Conservation and Protection of Water Quality

Condition 7. Solid Waste and Water Plan

Before the implementation of projects approved by the Management Committee and when the Forest Service determines these to be of a land disturbing nature on National Forest System land, the Licensee shall file with the Director, Office of Hydropower Licensing, a plan approved by the Forest Service, for the treatment and disposal of solid waste and waste water generated during construction and operation of the project and ancillary facilities. At a minimum, the plan must address the estimated quantity of solid waste and waste water generated each day; the location of disposal sites and methods of treatment; implementation schedule; areas available for disposal of wastes; design of facilities; comparisons between on and offsite disposal; and maintenance programs.

The Licensee may commence activities the Forest Service determines to be affected by the plan immediately upon written approval of the Forest Service unless the Director, Office of Hydropower Licensing, prescribes a different commencement schedule. Licensee shall report the activity and the approval of the Forest Service in the Annual Report to the Commission.

Condition 8. Hazardous Substances Plan.

A plan, approved by the Forest Service, for oil and hazardous substances storage and spill prevention and cleanup from existing operations shall be filed with the Director, Office of Hydropower Licensing, within one year of the issuance of a license. As future activities are approved by the Management Committee the plan shall be amended to include those activities annually.

At a minimum, the plan must require the Licensee to (1) maintain in the project area, a cache of spill cleanup equipment suitable to contain any spill for the project; (2) to periodically inform the Forest Service of the location of the spill cleanup equipment on National Forest System lands and of the location, type, and quantity of oil and hazardous substances stored in the project area; and (3) to inform the Forest Service immediately of the nature, time, date, location, and action taken for any spill.

The Licensee shall not commence activities the Forest Service determines to be affected by the plan until after 60 days following the filing date, unless the Director, Office of Hydropower Licensing, prescribes a different commencement.

Condition 9. Noxious Weeds.

Licensee shall be responsible for the prevention and control of noxious weeds and/or exotic plants of concern on National Forest System lands within the project area, and shall provide prevention and control measures prescribed by the Forest Service. Noxious weeds/exotic plants of concern are defined as those species recognized by the county weed authority and/or National Forest in which the authorized use is located.

Licensee shall also be responsible for prevention and control of noxious weed/exotic plant infestations which are not within the project area, but which are determined by the Forest Service to have been caused by the existence or operation of the project.

When determined necessary by the Forest Service, the Licensee shall develop a site-specific plan for noxious weed/exotic plant prevention and control. Such plan shall be subject to Forest Service approval and shall be consistent with plans developed for adjacent non-project Forest Service lands.

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Condition 10. Pesticide/herbicide Use.

Licensee shall not use pesticides or herbicides on National Forest System (NFS) lands for any purpose without the prior written approval of the Forest Service. Before any pesticide application program is implemented on National Forest System lands, the Licensee shall develop a pesticide use plan which shall be approved by the Forest Service, and include it as a part of the licensee's Annual Report to FERC. In any year there are changes proposed to the plan, the licensee shall ensure the amendments are approved by the Forest Service, and include the plan in the Annual Report to FERC.

Only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned will be considered for use on National Forest System lands. Label instructions will be strictly followed in the preparation and application of pesticides and disposal of excess material and containers.

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APPENDIX C

U.S. Department of the Interior

Section 18 Prescriptions

- 1 The licensee shall assess, plan, design, construct, operate, and maintain upstream fishway devices or measures and downstream fish protection devices or measures in accordance with the Native Salmonid Restoration Plan (Plan) (License Application Volume IV.A). Construction, operation, and maintenance of fishways will proceed in a stepwise manner, beginning at the effective date of the Settlement Agreement (License Application Volume III), utilizing the principles of adaptive management (i.e., the ability to change program direction based on new information provided by monitoring and evaluation of experimental measures). Following initial feasibility assessments, and within 1 year of the effective date of the Settlement Agreement, an experimental fish trap and truck program for the purpose of moving bull trout from below Cabinet Gorge Dam to the Cabinet Gorge Reservoir pool shall be constructed, operated, and maintained. Assessment and implementation of other fish stock enhancement measures shall begin at the effective date of the Settlement Agreement, as described in the Plan. Evaluation of the effectiveness of the fish trap and truck program below Cabinet Gorge, and evaluation of other stock enhancement measures will determine the timing of construction, operation, and maintenance of other upstream fishway facilities and measures and downstream fish entrainment protection devices at Cabinet Gorge and Noxon Rapids Dams.
- 2. At the effective date of the Settlement Agreement (License Application Volume III), the licensee shall develop and implement a fish passage program in accordance with the terms of the Clark Fork Settlement Agreement and the Native Salmonid Restoration Plan (License Application Volume IV.A). Implementation of the Plan shall include initial project scoping activities resulting in goals and objectives; background information, compilation and updating in areas of fish genetics, fish pathogens, exotic fish control, existing fish populations, stream and mainstem habitat conditions; assessment of suitable fish stock availability, fish transfer options, and fish hatchery options; and implementation of experimental and comprehensive fish passage measures, as appropriate, and a monitoring program to assess the effectiveness of fishways and other measures.

3. The Secretary of the Interior reserves the authority to prescribe the construction, operation, and maintenance of fishways, as may be determined necessary in the future, including, but not limited to the requirement of measures to implement fish passage strategies developed in conjunction with and pursuant to the Native Salmonid Restoration Plan (License Application IV.A.).

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APPENDIX D

U.S. Department of the Interior

Terms and Conditions

In accordance with Section 7(b)(4) of the Endangered Species Act (Act), the U.S. Department of the Interior, Fish and Wildlife Service, submitted an incidental take statement containing 9 reasonable and prudent measures, which are listed in the Threatened and Endangered Species section of the license order, and the following 26 terms and conditions it believes necessary to implement the measures.

To implement measure #1:

a. Through genetic testing and other means determine the likely natal origin of adult bull trout which congregate downstream of Cabinet Gorge Dam.

b. In order to positively identify bull trout originating from spawning areas upstream of the dams, institute a permanent fish tagging system for all bull trout handled during monitoring and other fisheries investigation activities in the project area.

c. Establish adult bull trout collection facilities downstream of Cabinet Gorge Dam for the purpose of capturing adult bull trout for transport above the dam.

d. In a timely manner, agreed to by the Service, for those bull trout determined to have originated from natal areas upstream of Cabinet Gorge Dam, transport these fish captured below Cabinet Gorge Dam to an appropriate location for release in Cabinet Gorge Reservoir.

To implement measure #2:

a. During stock assessment and other fisheries investigations in tributary streams to the reservoirs, in a timely manner agreed to by the Service, capture and transport all juvenile bull trout, determined to be migrating downstream, to an appropriate release site downstream of Cabinet Gorge Dam.

b. Implement assessment measures in the Native Salmonid Restoration Plan for determining the feasibility of downstream fishways for minimizing take of migrating juvenile bull trout.

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To implement measure #3:

a. Interim operational procedures will be implemented to reduce or minimize the total dissolved gas production at Noxon Rapids and Cabinet Gorge Dams during periods of spill.

b. In order to assess the extent, effect and solution of the gas supersaturation resulting from spill, monitoring of total dissolved gas will be conducted in the project area, biological impact studies will be conducted, and engineering feasibility studies will be conducted to assess options for reduction of gas supersaturation.

c. In 2002, a comprehensive Gas Supersaturation and Control Plan will be submitted to the Service for approval.

To implement measure #4:

a. The instantaneous minimum flow below Cabinet Gorge Dam will be increased to 5,000 cfs.

b. The benefit of the increased minimum flow to bull trout and other species will be evaluated for a 10 year period and in 2009, or earlier, a recommendation for continuation or change of the minimum flow will be submitted to the Service for approval.

To implement measure #5:

a. An assessment of potential impacts on bull trout of particular exotic species in the reservoirs and their tributaries will be performed in a timely manner, agreed to by the Service.

b. Based on the assessment (a., above), an evaluation of the site specific need for exotic species control programs will be prepared in a timely manner, agreed to by the Service.

c. Exotic species control programs will be developed, implemented, and monitored in coordination with appropriate State management agencies.

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To implement measure #6:

a. Conduct a feasibility evaluation of various interim methods for collecting and transporting downstream migrating juveniles from tributary streams to Cabinet Gorge Reservoir.

b. Implement and monitor the effectiveness of the interim juvenile transport program (a., above) and investigate permanent long term solutions to minimize the impact to downstream juvenile migrations.

c. In a timely manner, agreed to by the Service, propose for Service approval a permanent downstream fishway solution for juvenile migrants.

To implement measure #7:

a. In consultation with Idaho Fish and Game and using the best available information, annually prepare and submit to the Service an assessment of the Lake Pend Oreille bull trout population trend (tributary redd counts, etc.).

b. In consultation with Idaho Fish and Game, annually prepare and submit to the Service an assessment, based on the best available information, of the Lake Pend Oreille prey base population trends (kokanee and other species) and an evaluation of the need for fish passage (or other measures) to benefit prey species to mitigate dam impacts to prey species.

c. In a timely manner, agreed to by the Service, propose, for Service approval, fish passage or other measures to offset dam impacts on prey species in Lake Pend Oreille.

To implement measure #8:

a. Annually prepare and submit to the Service a report of the next year's proposed activities under the Native Salmonid Restoration Plan and other fisheries monitoring that may result in intentional as well as incidental take of bull trout. The report will quantify the number of bull trout proposed to be intentionally taken by each activity and summarize the extent of intentional take from all previous year's activities.

b. Upon locating dead, injured, or sick bull trout, or upon observing destruction of redds, notification must be made within 24 hours to the Service's Division of Law Enforcement Special Agent (Richard Branzell, P.O. Box 7488, Missoula, MT., 59807-

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7488, 406-329-3000). Instructions for proper handling and disposition of such specimens will be issued by the Division of Law Enforcement. Care must be taken In handling sick or injured fish to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. In conjunction with the care of sick or injured bull trout, or the preservation of biological materials from a dead trout, the FERC and the applicant have the responsibility to ensure that information relative to the date, time, and location of the fish when found, and possible cause of injury or death of each fish be recorded and provided to the Service. Dead, injured, or sick bull trout should also be reported to the Service's Helena Field Office (406-449-5225).

c. During project implementation the FERC or applicant shall promptly notify the Service of any emergency or unanticipated situations arising that may be detrimental for bull trout relative to the proposed activity.

d. Within 90 days of the end of each year, the FERC or applicant will provide a written report or letter to the Service indicating the actual number of bull trout taken, if any, as well as any relevant biological/habitat data or other pertinent information on bull trout that was collected.

To implement measure #9:

a. During stock assessment and other fisheries investigations in tributary streams to the reservoirs, determine the need for measures to preserve the genetic integrity of migratory bull trout stocks.

b. In a timely manner, agreed to by the Service, prepare a plan for genetic conservation of migratory bull trout stocks.

c. If deemed appropriate by the Service, prepare and implement a plan for creating a genetic reserve, or other measures, to be used in conserving and restoring migratory bull trout stocks to the Clark Fork tributary systems.

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