Buffalo River Hydroelectric Project

Report Supporting Endorsement as a Low-Impact Hydroelectric Power Facility

FERC Project #1413



Prepared for:

Fall River Rural Electric Cooperative, Inc. Ashton, Idaho

April 2006

REPORT SUPPORTING ENDORSEMENT AS A LOW-IMPACT HYDROELECTRIC POWER FACILITY FOR THE

BUFFALO RIVER HYDROELECTRIC PROJECT FERC PROJECT #1413

Prepared for:

Fall River Rural Electric Cooperative, Inc. Ashton, Idaho

Prepared by:

Northwest Power Services, Inc. PO Box 535 Rigby, ID 83442

REPORT SUPPORTING ENDORSEMENT AS A

LOW-IMPACT HYDROELECTRIC POWER FACILITY

FOR THE

BUFFALO RIVER HYDROELECTRIC PROJECT

FERC PROJECT #1413

Introduction

Purpose:

This report is submitted as documentation that the Buffalo River Hydroelectric Project, FERC Project #1413 qualifies as a Low Impact Hydropower Institute's "Low-impact Hydroelectric Power Facility". This report is organized to respond to eight key questions posed in the Low Impact Hydropower Institute's Certification Package as revised August 2004. Attached, as "EXHIBIT A" is a list of the agencies that were sent a copy of this report.

Background Information:

- 1. The name of the facility is the Buffalo River Hydroelectric Project.
- 2. The project owner and applicant's name is:

Fall River Rural Electric Cooperative, Inc. Mr. Dee Reynolds, General Manager 1150 North 3400 East Ashton, Idaho 83420

Phone: (208) 652-7431 Fax: (208) 652-7825

The project liaison for all correspondence is:

Mr. Brent L. Smith, President Northwest Power Services, Inc.

P.O. Box 535

Rigby, Idaho 83442 Phone: (208) 745-0834 Fax: (208) 745-0835

E-mail: npsi@nwpwrservices.com

- 3. The Buffalo project is located on the Buffalo River near its confluence with the Henry's Fork River, north of Ashton, in Fremont County, Idaho. The project occupies about 9.8 acres of land within the Targhee National Forest, administered by the U.S. Forest Service.
- 4. The project was constructed with an installed capacity of 250 kilowatts.
- 5. The average annual generation for the Buffalo River Hydroelectric Project is approximately 1.9 gigawatt-hours annually.
- 6. The Buffalo River Hydroelectric Project is operated under FERC License #1413 issued by the Federal Energy Regulatory Commission on November 5, 2004. The FERC License was issued for a period of 40 years with an expiration date of November 2044. Attached, as "EXHIBIT E" is a complete copy of the FERC License #1413.
- 7. The project reservoir has a surface area of approximately 1.9 acres with negligible storage.
- 8. The project's primary features are the dam, intake structure, penstock, powerhouse and fishway. The project boundary occupied by primary project features, not included the reservoir, is 0.1 acre of United States land within the Targhee National Forest.
- 9. The overall project boundary encompasses 9.8 acres of United States lands within the Targhee National Forest. However, project features only inundate approximately 4.6 acres.
- 10. The total surface area of the impoundment is 1.9 acres. In addition, a 200 ft. zone extending around the entire impoundment is an additional 9 acres.
- 11. Please find attached as "EXHIBIT A" a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in recommending conditions for the Buffalo River Facility.
- 12. Please find attached as "EXHIBIT B" a description of the facility and its mode of operation. In addition, attached as "EXHIBIT C" are the maps of the project features and location.

CERTIFICATION CRITERIA

A. Flows:

1. Is the Facility in Compliance with Resource Agency Recommendations issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?

YES, Buffalo River's typical stream flow varies between 175 to 250 cubic feet per second (cfs) except during spring snowmelt when flows can exceed 400 cfs. While operating, the run-of-river project diverts a constant 100 cfs for power generation with the remaining flow staying in the natural stream course via a fish ladder release and a surface outlet spillway.

B. Water Quality:

- 1. Is the facility either:
 - a. In compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the facility after December 31, 1986? Or
 - b. In compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?
- YES The ID DEQ issued the water quality certification for the Buffalo River project on November 28, 2003, see Exhibit D. The applicant is in compliance with all conditions in the water quality certification.
- 2. Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?

NO.

C. Fish Passage and Protection:

- **1.** Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?
- YES The facility is in compliance with mandatory Fish Passage Prescriptions for anadromous and catadromous fish. The facilities include a 270-foot fishway to provide

upstream passage for the 12 feet of head. The intake structure includes fish screens to prevent turbine entrainment and the fishway and spillway provides downstream passage.

- **5.** Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of Riverine fish?
- YES The facility is in compliance with the Mandatory Fish Passage for upstream or downstream passage of Riverine fish due to the fishway, spillway and intake structure.
- **6.** Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?
- YES The Applicant is in compliance to recommendations from all resource agencies.

D. Watershed Protection:

1. Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline?

NO

2. Has the facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1.,and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?

NO

3. Has the facility owner/operator established through a settlement agreement with appropriate stakeholders and that has state and federal resource agencies agreement an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)

NO

4. Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.

YES

E. Threatened and Endangered Species Protection:

1. Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?

YES

2. If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?

YES, the following is from the FERC's EA issued on July 2, 2004:

Gray Wolf

The project does not occupy areas used for denning or hunting by gray wolves, so continued project operation and the proposed dam repairs would not jeopardize the continued existence of the experimental, nonessential population of the gray wolf.

Canada Lynx

The presence of Canada lynx in the project area is speculative; therefore, project operation and the proposed dam repairs would not be likely to affect the Canada lynx.

Grizzly Bear

The presence of grizzlies in the project area is possible but infrequent. Project operation and the proposed project modifications would not be likely to affect the grizzly bear.

Bald Eagle

Bald eagles in the four nesting territories in the project area could be disturbed by noise and human activity associated with the proposed project modifications. Fall River proposes to restrict its proposed project modifications to the period from August through October. Therefore, all breeding activities except possibly the fledging of young (depending on climatic variation) would occur before project construction activity begins.

The BOR's 14-square-mile Island Park reservoir is located less than 0.5 mile from the project (see figure 3-14 of the application). The Buffalo River reservoir has a surface area of only 1.9 acres. Bald eagles foraging in the project area during the August through October construction period would be expected to use the much larger Island Park reservoir rather

than the project reservoir, so the proposed dam repairs would not be likely to adversely affect foraging eagles.

Bald eagles perch on trees located between the Island Park dam and the Buffalo River. Construction noise and human activity may cause eagles to avoid the project area during the proposed project modifications and perch elsewhere. The proposed project modifications would necessitate the disturbance of 2,500 square feet of upland vegetation on the east side of the Buffalo River. The area that would be disturbed is vegetated with an open forest of mature conifers, 80 to 100 feet tall, with lodgepole pine as the dominant canopy tree (Ecosystems Research Institute, 2003). These conifers could be used by eagles as perches. Eagles are not known to use those trees currently, however, and the forested area to be disturbed would be small. Therefore, the loss of potential perch trees would not be likely to adversely affect bald eagles.

Powerline collision or electrocution can be a source of bald eagle mortality. Although the record contains no evidence of powerline collision in the project area, an immature bald eagle was killed by electrocution in Harriman State Park, near the project, in 1992 (Northern Rockies Conservation Cooperative, 2003). The project includes a 12.5-kV underground transmission line that extends 1,800 feet to the utility intertie. Because the project transmission line is underground, no bald eagle mortality due to collision or electrocution would occur.

In summary, the project operation and the proposed project modifications would not be likely to adversely affect the bald eagle.

Utah Valata Snail

The Utah valvata snail is not located in the project area; therefore, proposed project modifications and construction and operation would have no effect on this species.

Ute Ladies' Tresses

Ute ladies' tresses does not grow in the project area. Therefore, project operation and the proposed project modifications would have no effect on this species.

3. If the Facility has received authority to incidentally Take a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species

listed by a state and not by the federal government, obtaining authority pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authority?

N/A

5. If E.2. and E.3. are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?

YES

F. Cultural Resource Protection:

1. If FERC regulated, is the Facility in Compliance with all requirements regarding Cultural Resources protection, mitigation or enhancement included in the FERC license or exemption?

YES

G. Recreation:

- 1. If FERC regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?
- YES The licensee is in compliance to Article 401 which provides a recreation plan.
- 3. Does the Facility allow access to the reservoir and downstream reaches without fees or charges?
- YES The Buffalo River Hydroelectric Project provides access to the reservoir/impoundment and project area at no cost.

H. Facilities Recommended for Removal:

- 1. Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?
- NO The Buffalo River Hydroelectric Project Dam/Reservoir is a project feature under the jurisdiction of the licensee's FERC license and has not been recommended for removal.

Sworn Statement

Waiver of Liability

EXHIBIT A List of Contacts

List of Contacts

Idaho Department of Fish & Game
Gary Vecellio, Environmental Staff Biologist
4279 Commerce Circle
Idaho Falls, ID 83401
208•525•7290
gvecellio@idfq.idaho.gov

Henry's Fork Foundation
Jim De Rito, Conseration Director
PO Box 550
Ashton, ID 83420
208•652•3567
jderito@henrysfork.org

US Forest Service
Lee Mabey
1405 Hollipark Drive
Idaho Falls, ID 83401
208•557•5784
Imabey@fs.fed.us

US Fish & Wildlife Service
Deb Mignogno
4425 Burley Drive, Suite A
Chubbuck, ID 83202
208•237•6975
deb mignogno@fws.gov

EXHIBIT B Facility Description

The existing project consists of a 142-foot-long by 12-foot-high timber-faced rock-filled diversion dam. In 2005 the upstream face of the dam was sealed to prevent leakage and entrainment of trout in the leakage openings. A new intake structure was built in 2005 with fish screens and a mechanical screen cleaner having openings of 0.25 inch and a screen approach velocity less then 0.8 feet per second. The project has two spillways, a 40-footlong by 3-foot-high concrete slab spillway with stop logs and a small auxiliary spillway. The original fishway was replaced in 2005 with a 270-foot long fishway to pass age 0 trout as small as 100 mm. The fishway was designed in consultation with the FS, the U.S. Fish and Wildlife Service (FWS), Idaho Department of Fish and Game (IDF&G), and Henry's Fork Foundation. The fishway was put into operation in early 2006 and has demonstrated its capability to pass age 0 trout.

The 250-kW Bouvier Kaplan inclined shaft turbine is feed by a 52-foot-long by 5-foot-diameter concrete encased steel penstock. The turbine is in a 34x22 foot masonry block powerhouse. The powerhouse has been constructed with materials that blend into the area. This material include black split face masonry block with stucco on the concrete foundation. The estimated total average annual generation is 1.9 GWh. The generation is transferred in a 1,800-foot-long underground transmission line.

Buffalo River's typical stream flow varies between 175 to 250 cubic feet per second (cfs) except during spring snowmelt when flows can exceed 400 cfs. While operating, the run-of-river project diverts a constant 100 cfs for power generation with the remaining flow staying in the natural stream course via a fish ladder release and a surface outlet spillway. The public parking area was improved in 2005-2006 with defined parking areas, trails and signs providing information.

EXHIBIT C Project Location Maps

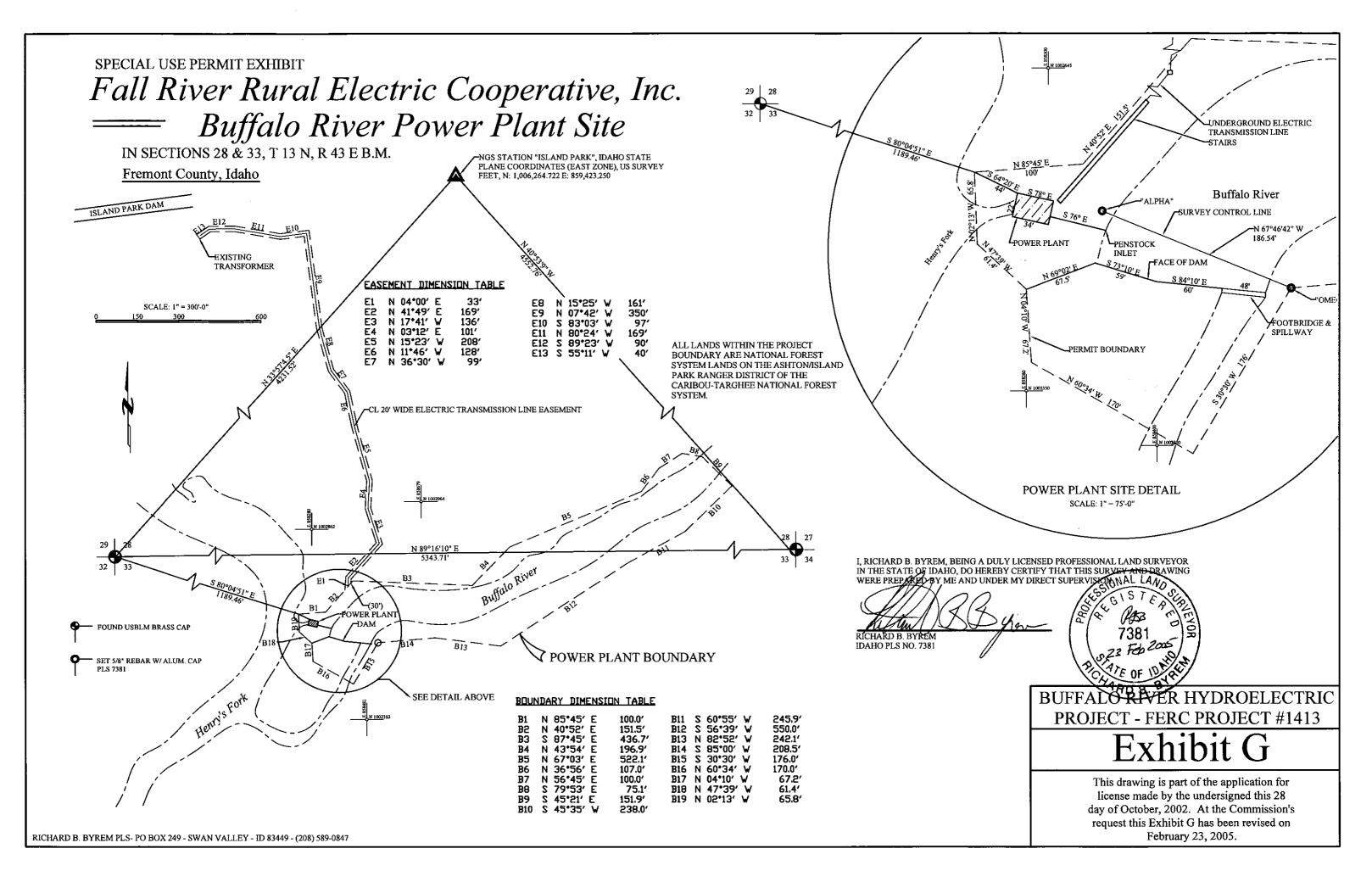


EXHIBIT D Water Quality Certification



900 North Skyline, Suite B • Idaho Falls, Idaho 83402-1718 • (208) 528-2650

Dirk Kempthorne, Governor C. Stephen Allred, Director

WATER QUALITY CERTIFICATION for FERC NO. 1413 For (Buffalo River) Ponds Lodge Hydroelectric Project November 28, 2003

ISSUED TO: Fall River Rural Electric Cooperative, Inc.

1150 North 3400 East Ashton, Idaho 83402

Attention: Dee M. Reynolds

Description of Certified Project:

This project consists of the FERC license renewal and minor improvements to construct a new concrete intake structure, which will include the installation of fish screens. The new intake structure will include a mechanical screen cleaner and a 5-foot gate on the penstock intake. The work will also include the sealing of the upstream face of the existing timber faced rock filled dam to reduce leakage through the dam.

Certification:

This water quality certification is issued under the authority of Section 401 of the Federal Water Pollution Control Act and its Amendments (Clean Water Act) and IDAPA 58.01.02. This certification is in response to the Fall River Rural Electric Cooperative's request for certification dated November 27, 2002. DEQ has reviewed the application submitted to FERC for the license renewal and hereby certifies pursuant to section 401 of the clean water act that, provided the facility operates as described in the application, there is a reasonable assurance the proposed project will comply with applicable requirements of section 301, 302, 303,306 and 307 of the Clean Water Act and the Idaho Water Quality Standards.

This § 401-certification decision may be appealed pursuant to the Idaho Environmental Protection and Health Act, Idaho Code § 39-107(5) and the Idaho Administrative Procedure Act. Such an appeal is a prerequisite to any district court action and must be initiated by filing a petition for a contested case in accordance with the Rules of Administrative Procedure before the Department of Environmental Quality (DEQ) Board (IDAPA 58.01.23) within thirty-five (35) days of the date of DEQ's decision regarding the 401 certification.

CERTIFICATION APPROVED

Regional Administrator

Date: _///10/03

cc:

U.S. Army Corps of Engineers IFRO

Steve Allred, Director

Doug Conde, Deputy Attorney General

Brent Smith, Northwest Power Services, Inc. Rigby ID.

EXHIBIT E FERC License

UNITED STATES OF AMERICA 109 FERC ¶62,077 FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.

Project No. 1413-032

ORDER ISSUING SUBSEQUENT LICENSE Minor Project

(Issued: November 5, 2004)

INTRODUCTION

1. Pursuant to Part I of the Federal Power Act (FPA), the Fall River Rural Electric Cooperative, Inc. (Fall River), filed an application on October 30, 2002, for a subsequent minor license to continue to operate the existing 250-kilowatt (kW) Buffalo River Hydroelectric Project (project). The run-of-river project is located on the Buffalo River near its confluence with the Henry's Fork River, north of Ashton, in Fremont County, Idaho. The project occupies about 9.8 acres of land within the Targhee National Forest, administered by the U.S. Forest Service (Forest Service). For the reasons stated below, I am issuing a subsequent license for the project.

BACKGROUND

- 2. The Commission issued the existing license for the project on March 14, 1980. That license expires on October 31, 2004.
- 3. On January 16, 2003, the Commission issued a public notice accepting the application for filing and soliciting interventions and protests. Timely motions to intervene were filed by the State of Idaho, on behalf of: (1) Idaho Department of Fish and Game (IDFG); (2) Idaho Department of Parks and Recreation (IDPR); (3) Idaho Department of Environmental Quality (IDEQ); (4) Idaho Water Resources Board; and (5) the Idaho State Board of Land Commissioners. Also, timely motions to intervene were

¹ 16 U.S.C. §§ 791a - 825r.

² As requested by Fall River, we are changing the name of this project from Ponds Lodge No. 1413 to Buffalo River Hydroelectric Project No. 1413.

³ FPA section 23(d)(1), 16 U.S.C. 817 (1), requires the project to be licensed because of its location on federal lands.

filed by the Forest Service, the Henry's Fork Foundation, and Idaho Rivers United. No party opposes licensing this project.

- 4. On November 18, 2003, the Commission issued a public notice, indicating that the license application was ready for environmental analysis (REA) and soliciting comments, recommendations, terms and conditions and prescriptions. Comments were received in response to the REA notice from the U.S. Department of the Interior, State of Idaho Agencies, and Idaho Rivers United. All of their comments were addressed in the environmental assessment that was issued on July 2, 2004.
- 5. The motions to intervene and comments filed by the agencies and Fall River have been fully considered and addressed in this order in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

- 6. The existing project consists of: (1) a 142-foot-long by 12-foot-high timber-faced rock-filled diversion dam; (2) a 40-foot-long by 3-foot-high concrete slab spillway with stop logs; (3) a fish passage structure; (4) a concrete intake structure with a 5-foot steel slide gate; (5) a trash rack; (6) a 52-foot-long by 5-foot-diameter concrete encased steel penstock; (7) a 34-foot-long by 22-foot-high masonry block powerhouse containing a 250-kilowatt Bouvier Kaplan inclined shaft turbine; (8) a 1,800-foot-long underground transmission line; and (9) other appurtenant facilities.
- 7. Fall River proposes to modify the project by sealing the upstream face of the dam, constructing a new concrete intake structure, installing a fish screen, and constructing a fishway. The Buffalo River's typical stream flow at the project varies between 175 to 250 cubic feet per second (cfs) except during spring snowmelt when flows can exceed 400 cfs. The run-of-river project diverts a constant 100 cfs for power generation with the remaining flow staying in the natural stream course via a fish ladder release and a surface outlet spillway.

APPLICANT'S PLANS AND CAPABILITIES

- 8. Fall River owns and operates the project, which is classified in accordance with Commission standards as having a low hazard potential rating. It is subject to Part 12 of the Commission's regulations concerning project safety.
- 9. Staff reviewed Fall River's record of management, operation, and maintenance of the project and concludes that the dam and other project works are safe, and that Fall River has the ability to manage, operate, and maintain the project safely for future

operation. Based on the results of this review, I conclude that the project would pose no threat to public safety if operated according to the regulations governing hydroelectric licenses

NEED FOR POWER

- 10. The project, with a rated capacity of 250 kW, historically has generated an annual average of 1,679 megawatt hours (MWh), which Fall River uses to help meet its system load requirements. Fall River purchases the majority of its power from the Bonneville Power Administration (BPA) and relies on BPA for all reserve margin.
- 11. In addition to Fall River's need for power, staff looked at the regional need for power. The project is located in the Northwest Power Pool (NWPP) area of the Western Electricity Coordinating Council (WECC) region. The NWPP area includes all or major portions of the states of Washington, Oregon, Idaho, Wyoming, Montana, Nevada, and Utah; a small portion of northern California; and the Canadian provinces of British Columbia and Alberta. For the period 2003 through 2012, WECC anticipates peak demand and annual energy requirements in the NWPP area to grow at annual compound rates of 2.5 and 2.3 percent, respectively. Resource capacity margins for this winterpeaking area range between 30.5 and 42.1 percent of firm peak demand over this 10-year period, assuming planned additions totaling about 12,000 megawatts (MW) are constructed on schedule. For the WECC region as a whole, the summer reliability margin is projected to fall below the recommended minimum of 14 to 15 percent by about 2010 without the new capacity additions that were uncommitted as of the December, 2003, date of the WECC's 10-Year Coordinated Plan Summary.⁴
- 12. If relicensed, the project would continue to contribute to Fall River's power needs as well as meeting a small portion of the local need for power. In the short and long term, the capacity supplied by relicensing the project would help to maintain sufficient capacity to meet regional demand, while maintaining resource diversification and displacing fossil-fueled power generation used by some of the regional utilities. The project would also continue to displace emissions from fossil-fueled power generation.

COMPLIANCE HISTORY AND ABILITY TO COMPLY WITH THE SUBSEQUENT LICENSE

13. Staff reviewed Fall River's record of compliance with the previous license in an effort to judge its ability to comply with the articles, terms, and conditions of a new

⁴ Western Electricity Coordinating Council, 10-Year Coordinated Plan Summary, December 2003

license. Fall River's compliance record indicates that it has in the past complied in a good faith manner with all articles, terms, and conditions of its current license. Based on the results of this review, I believe Fall River has the capability to comply with the conditions of this subsequent license.

WATER QUALITY CERTIFICATION

- 14. Under section 401(a) of the Clean Water Act (CWA),⁵ the Commission may not issue a license for a hydroelectric project unless the state certifying agency has either issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification shall become a condition on any federal license or permit that is issued.⁶
- 15. Fall River applied for a water quality certificate (WQC) for the project on November 26, 2002. IDEQ, the certifying agency for Idaho, received the request on the same date. On November 28, 2003, IDEQ issued a WQC with no conditions for the project; however, because IDEQ failed to act within one year of Fall River's request, the certification is deemed waived.⁷

THREATENED AND ENDANGERED SPECIES

16. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA), requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modifications of designated critical habit. That section further requires that formal consultation with the FWS and the National Marine Fisheries Service (NOAA Fisheries), as appropriate, be initiated if the proposed agency action is likely to affect the listed species, unless through informal consultation the action agency and services determine that there will not likely be an adverse effect. By letter dated July 7, 2004, the

⁵33 U.S.C. § 1341(a)(1).

⁶ 33 U.S.C. § 1341(d).

⁷ See 18 C.F.R. § 5.23(b)(2) (2004).

⁸ 16 U.S.C. § 1536(a)(2).

⁹ In this instance, no federally listed species falling under the jurisdiction of NOAA Fisheries are found in the project area.

Commission staff requested the concurrence from the FWS on the staff's determination that issuance of a subsequent license would not be likely to adversely affect the bald eagle, Canada lynx, and grizzly bear, and would not jeopardize the experimental, nonessential population of the grey wolf. The FWS provided its concurrence with the staff's findings by letter dated July 28, 2004.

SECTION 4(e) FINDINGS AND CONDITIONS

- 17. Section 4(e) of the FPA, 16 U.S.C. § 797(e), states that 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 the purpose for which such reservation was created or acquired. The project is located fully on lands within the Targhee National Forest, which is under the supervision of the Forest Service. Section 3(2) of the FPA¹⁰ defines reservation as including national forests. We conclude that the project's occupancy of the National Forest does not interfere, and is not inconsistent, with the uses of the Forest lands.
- 18. Under section 4(e), the Commission must include in any license for a project located within a federal reservation all conditions that the managing agency shall deem necessary for the adequate protection and utilization of that reservation. The Forest Service filed its final section 4(e) conditions on July 29, 2004. The final terms and conditions are set forth in Appendix A of this order and incorporated into this license and summarized below.
- 19. The Forest Service 4(e) conditions require Fall River to: (1) 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; (2) obtain written approval of the Forest Service prior to making any changes in any constructed project features or facilities, or in the uses of project lands and waters that may affect National Forest System lands; (3) consult with the Forest Service 60 days preceding the anniversary of the license with regard to measures needed to ensure protection and utilization of the Nation Forest System lands and resources affected by the project; (4) prior to any surrender or transfer of this license restore National Forest System lands to a condition satisfactory to the Forest Service; (5) obtain a Forest Service special-use authorization for occupancy and use of National Forest System lands; (6) develop a Hazardous Substance Plan; (7) develop an Public Safety Plan; (8) obtain a Road Use Permit and develop a Road Use Plan; (9) maintain all the National Forest System lands occupied by the project to standards acceptable to the Forest Service; (10) develop a Recreation Plan; (11) develop an Interpretive Display Plan; (12) develop a

¹⁰ 18 C.F.R. § 796(2) (2004).

Heritage Resource Protection Plan; (13) develop a Scenery Management Plan; (14) install a fish screen on the diversion intake structure; (15) develop a Diversion Operation Plan; (16) develop an Erosion Control Plan; (17) develop a Vegetation Management Plan; (18) develop a Threatened, Endangered, and Proposed for Listing Species Plan to protect federally listed or proposed species and their critical habitat; and (19) develop a Biological Evaluation for sensitive species.

SECTION 18 FISHWAY PRESCRIPTIONS

20. Section 18 of the FPA¹¹ provides that the Commission shall require the construction, operation, and maintenance by a licensee of such fishways as the Secretaries of Commerce or the Interior may prescribe. Interior timely asked the Commission to reserve its authority to prescribe fishways.¹² It is the Commission's policy to include in a license, on request of Interior or Commerce, an article reserving the Commission's authority to require the licensee to construct, operate, and maintain such fishways as the agencies might prescribe in the future. Article 409 of the license contains this reservation

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

A. Recommendations Pursuant to Section 10(j) of the FPA

- 21. Section 10(j)(1) of the FPA, 16 U.S.C. § 803(j)(1), requires the Commission, when issuing a license, to include conditions based on recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act¹³ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) affected by" a project.
- 22. FWS and IDFG submitted seven recommendations that fall within the scope of section 10(j). The license contains conditions consistent with all of these recommendations. These adopted measures require the licensee to: (a) construct and

¹¹ 16 U.S.C. § 811.

¹² See Interior's letter to the Commission dated January 20, 2004.

¹³16 U.S.C. § 661 *et seg*.

¹⁴ Three of the recommendations were submitted by the FWS and four were submitted by IDFG.

continuously operate an upstream fishway (Article 405); (b) install a fish screen (Article 406 and Condition No. 14 of Appendix A); (c) develop and implement a fishway effectiveness monitoring and evaluation plan (Article 407 and Condition No. 14 of Appendix A); and (d) restrict fishway construction to between August and October (Article 408).

B. Recommendations Pursuant to Section 10(a)(1) of the FPA

- 23. IDFG made recommendations that are not specific measures to protect, mitigate damages to, or enhance fish and wildlife; consequently, we do not consider these recommendations under section 10(j) of the FPA. Instead, we consider these recommendations under the broad public-interest standard of FPA section 10(a)(1), 16 U.S.C. § 803(a)(1).¹⁵
- 24. IDFG recommended that if future changes occur to the hydrology of the Buffalo River, then Fall River should provide a minimum flow of at least 50 cubic feet per second to the bypassed reach. Including a requirement for a minimum flow based on an uncertain future event is premature; however, this license includes, in standard Article 11, the Commission's reservation of authority to reopen the license to modify project structures and operations for the conservation and development of fish and wildlife resources in response to future events.
- 25. IDFG recommended that in order for the fish and wildlife agencies to track Fall River's progress with implementing the measures required by the license, Fall River should file an annual status report, including disclosure of whether the measures are being implemented in accordance with required schedules. The Commission has an established compliance and administration program, which includes a computer tracking system and routine compliance audits; therefore, this license does not impose a redundant condition on the licensee requiring it to send compliance status reports and disclosure statements to the fish and wildlife agencies. The Commission, however, often requires licensees to evaluate the effectiveness of specific enhancement measures and provide agencies with gaging and project operation and generation data, which we do here in Articles 403 and 407.

¹⁵ Section 10(a)(1) requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

26. IDFG recommended that the license establish an adaptive management process for the implementation of the license requirements. As previously noted, the license includes a reopener provision in standard Article 11, requires monitoring and evaluation of fishway effectiveness (Article 407), and reserves the Commission's authority to require Fall River to construct, operate, and maintain fishways prescribed by Interior under section 18 of the FPA (Article 409).

OTHER ISSUES

A. Administrative Conditions

- 27. Section 10(e) of the FPA¹⁶ provides that the Commission shall assess licensees' annual charges to reimburse the United States' cost of administering Part I of the FPA, and to reimburse the United States for the occupancy and use of any federal lands. Article 201 provides for the collection of such funds.
- 28. The Commission requires licensees to file sets of approved drawings on microfilm with Form FERC-587, three sets of the revised exhibit drawings in electronic format, and three sets of project boundary data in a geo-referenced electronic format. Article 202 provides for the filing of these drawings.
- 29. Some projects directly benefited from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 203 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

B. Review of Final Plans and Specifications

- 30. Article 301 requires the licensee to provide the Commission's Division of Dam Safety and Inspection Portland Regional Office (D2SI-PRO) with final contract drawings and specifications—together with a supporting design report consistent with the Commission's engineering guidelines.
- 31. Article 302 requires the licensee to provide the Commission's D2SI-PRO with the plan for a quality control and inspection program.
- 32. Article 303 requires the licensee to provide the Commission's D2SI-PRO with cofferdam construction drawings.

¹⁶ 16 U.S.C. § 803(e).

- 33. Article 304 requires the licensee to provide the Commission's D2SI-PRO with a temporary emergency action plan.
- 34. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as-built. Article 305 provides for the filing of these drawings.

C. Consultation for Resource Plans

35. In Appendix A there are certain 4(e) conditions: approval of final designs; approval of changes after initial construction; a public safety plan; a road use permit; a recreation plan; an interpretive display; a heritage resource protection plan; a scenery management plan; an erosion control plan; a vegetation management plan; a protection of threatened and endangered species plan; and a sensitive species biological evaluation that require the licensee to file plans with the Commission after the plans have been approved by the Forest Service; however, the conditions do not provide for consultation with the FWS or IDFG or other agencies during plan development. Therefore, Article 401 requires the licensee to consult with the other agencies during plan development and to file the plans with the Commission for approval.

D. Use and Occupancy of Project Lands and Waters

36. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 411 allows Fall River to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape plantings. Such uses must be consistent with the purpose of protecting and enhancing the scenic, recreational, and environmental values of the project.

E. Hazardous Substances Plan

37. Article 404 requires the licensee to develop and implement a Hazardous Substances Plan that includes provisions specified by Condition 6 of Appendix A as well as additional provisions for: (1) Storage, handling, and transfer of hazardous substances; (2) Notification of spills to the state and federal agencies and Commission; and (3) Implementation of the plan.

F. Project Operation

38. Article 402 requires the licensee to continue operating the project run-of-river for the protection of aquatic resources in the Buffalo River and Henry's Fork River in the project area.

G. <u>Diversion Operation Plan</u>

39. Article 410 requires the licensee to develop and implement a Diversion Operation Plan that includes provisions specified by Condition 15 of Appendix A and an implementation schedule. The purpose of the plan is for channel maintenance in the Buffalo River project area, including the passage of large woody debris past the project.

STATE AND FEDERAL COMPREHENSIVE PLANS

40. Section 10(a)(2) of the FPA¹⁷ requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. ¹⁸ Accordingly, federal and state agencies filed a total of 6 comprehensive plans that address various resources relevant to the project. I conclude, that with the inclusion of our recommended measures, the proposed project would not conflict with any of these plans. ¹⁹

¹⁷ 16 U.S.C. § 803(a)(2)(A).

¹⁸ Comprehensive plans for this purpose are defined at 18 C.F.R § 2.19 (2004).

^{19 (1)} Forest Service. 1997. Targhee National Forest Revised Forest Plan, including the Final environmental impact statement. Department of Agriculture, Idaho Falls, Idaho. April 1997; (2) Idaho Department of Fish and Game. 2001. Idaho fisheries management plan, 2001-2006. Boise, Idaho; (3) Idaho Department of Fish and Game. Bonneville Power Administration. 1986. Pacific Northwest rivers study. Final report: Idaho. Boise, Idaho. 12 pp. and appendices; (4) Idaho Department of Health and Welfare. Division of Environment. 1985. Idaho water quality standards and wastewater treatment requirements. Boise, Idaho. January 1985. 72 pp. and appendices; (5) Northwest Power Planning Council. 1994. Columbia River Basin fish and wildlife program. Portland, Oregon. December 14, 1994. 409 pp. and appendices; (6) Fish and Wildlife Service. Undated. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C. 11 pp.

COMPREHENSIVE DEVELOPMENT

- 41. Sections 4(e) and 10(a)(1) of the FPA²⁰ require the Commission, in acting on applications for license, to give equal consideration to all the power and development purposes and to the purposes of energy conservation; the protection, mitigation of damage to, and enhancement of fish and wildlife; the protection of recreational opportunities; and the preservation of other aspects of environmental quality. Any license issued shall be in the Commission's judgment best adapted to a comprehensive plan for improving or developing a waterway for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.
- 42. 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 benefit of the project power. As was articulated in Mead Corporation, Publishing Paper Division, ²¹ 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 issuance date. The basic purpose of the analysis is to provide general estimates of the potential power benefits and costs of a project, and reasonable alternatives to project power.
- 43. Under the no-action alternative, the project generates 1,679 MWh of energy annually. The current annual value of this power is \$53,700 (\$32.00/MWh), and the current annual cost is \$11,400 (\$6.79/MWh), resulting in a net annual benefit of \$42,300 (\$25.21/MWh).²²
- 44. To determine whether the proposed project is currently economically beneficial, we subtract the cost of project power as licensed from the cost of the most likely source of alternative power. When licensed in accordance with the conditions adopted herein, the project would produce an average of about 1,679 MWh of energy annually at an annual cost of \$65,800, or \$12,100 more than the \$53,700 cost to obtain the same amount of power in the market. Although the cost of project power currently exceeds the cost using alternative generation resources, it is the licensee's responsibility to determine

²⁰16 U.S.C. §§ 797(e) and 803(a)(1).

²¹72 FERC ¶ 61,027 (1995).

²² All generation and cost information is taken from the Commission's EA.

whether or not continued operation of an existing project under these conditions is a prudent decision.

LICENSE TERM

- 45. Section 15(e) of the FPA²³ states that licenses under Part I of the FPA shall be issued for a period not to exceed 50 years. The Commission's policy establishes 30-year terms for those projects that propose little or no redevelopment, new construction, new capacity, or enhancement; 40-year terms for those projects that propose a moderate amount of redevelopment, new construction, new capacity or enhancement; and 50-year terms for those projects that propose extensive redevelopment, new construction, new capacity or enhancement. Because this license requires a moderate amount of new construction including: (1) sealing the upstream face of the dam; (2) constructing a new concrete intake structure; (3) constructing a new fish screen with a mechanical screen cleaner; (4) installing a new 5-foot gate at the penstock intake; and (5) constructing a fishway, I am providing a license term of 40 years for the project.
- 46. This license is subject to the conditions submitted by the Forest Service, under section 4(e) of the FPA, as those conditions are set forth in Appendix A of this order to the extent those conditions apply to project lands and facilities located on Targhee National Forest lands. The Commission reserves the right to amend this license as appropriate in light of the Forest Service's ultimate disposition of any appeals of, or modifications to, the mandatory section 4(e) conditions that might arise.
- 47. The EA contains background information, analysis of impacts, support for related license articles, and the basis for a finding that licensing the project would not constitute a major federal action significantly affecting the quality of the human environment. 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.
- 48. Based on a review of agency and public comments filed on the project, and Commission staff's independent analysis pursuant to sections 4(e), 10(a)(1), and 10(a)(2) of the FPA, I conclude that issuing a license for the Buffalo River Hydroelectric Project No. 1413, with the required environmental measures and other special license conditions, will be best adapted to the comprehensive development of Buffalo River for all beneficial public uses.

²³16 U.S.C. § 808 (e).

The Director orders:

- (A) This license is issued to Fall River Rural Electric Cooperative, Inc. (licensee) for a period of 40 years effective November 1, 2004. 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 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 interest in those lands, enclosed by the project boundary shown by Exhibit G, filed October 30, 2002, as revised in this order:

Description

FERC Drawing No 1413-

1001

Special Use Permit Exhibit, Fall River Rural Electric Co-Op, Inc., Buffalo River Power Plant Site

(2) Project works consisting of: (1) a 142-foot-long by 12-foot-high timber-faced rock-filled diversion dam; (2) a 40-foot-long by 3-foot-high concrete slab spillway with stop logs; (3) a fish passage structure; (4) a concrete intake structure with a 5-foot steel slide gate; (5) a trash rack; (6) a 52-foot-long by 5-foot-diameter concrete encased steel penstock; (7) a 34-foot-long by 22-foot-high masonry block powerhouse containing a 250-kilowatt Bouvier Kaplan inclined shaft turbine; (8) a 1,800-foot-long underground transmission line; and (9) appurtenant facilities.

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

Exhibit A: Pages 16 and 17 filed on October 30, 2002.

Exhibit F: The following Exhibit F of the license application filed on October 30, 2002:

Description	FERC Drawing No.1413	
Existing Site Plan	1002	
Powerhouse Elevation and Dam Section	1003	
Powerhouse Plan and Section View	1004	
Proposed Site Plan	1005	

- (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 and F, as designated in ordering paragraph (B) above, are approved and made a part of this license. Exhibit F shall be refiled in the Commission's electronic file format as specified in Article 202.
- (D) Within 45 days of license issuance, the licensee shall submit a revised Exhibit G with the Commission for approval and in accordance with the format described in Article 202. The revised Exhibit G shall identify all federal lands within the project boundary as directed in 18CFR § 4.41(h) of the Commission regulations.
- (E) The following sections of the FPA are waived and excluded from the license for this minor project:

Section 4(b), except the second sentence; section 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; section 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the FPA that are waived here; section 10(c), insofar as it relates to depreciation reserves; sections 10(d); 10(f); and 14, except insofar as the power of condemnation is reserved; and sections 15; 16; 19; 20; and 22.

- (F) This license is subject to the conditions submitted by the Forest Service under section 4(e) of the FPA, as set forth in Appendix A to this order.
- (G) This license is subject to the articles set forth in Form L-16 (October 1975), entitled "TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED MINOR PROJECT AFFECTING LANDS OF THE UNITED STATES", 54 F.P.C 1792, 1888-1896, and the following additional articles:
- Article 201. Annual Charges. The licensee shall pay the United States the following annual charges, effective as of the first day of the month in which this license is issued:
- (a) For the purposes of reimbursing the United States for the Commission's administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount 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 250-kilowatts.

Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kilowatts will not be assessed annual charges.

(b) Recompensing the United States for the use, occupancy and enjoyment of 9.8 acres of its lands, other than for transmission line right-of-way, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time.

Article 202. Aperture Cards and Exhibit Drawings. Within 45 days of the date of issuance of the license, the licensee shall file exhibit drawings F and G described in ordering paragraph (C) and (D) in aperture card and electronic formats.

(1) Four sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (e.g., P-1413-1001 through P- 1413-###) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office. The remaining set of aperture cards and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

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

(2) The licensee shall file two separate sets of exhibit drawings in electronic format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections Portland Regional Office (D2SI-PRO). The drawings must be identified as (CEII) material under 18 CFR §388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this

license, and file extension [e.g., P-1413-###, G-1, Project Boundary, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

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

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

(3) The licensee shall file three separate sets of the project boundary data in a georeferenced vector electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1413, boundary vector data, MM-DD-YYYY. SHP]. The geo-referenced electronic boundary data file must be positionally accurate to ±40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-1413, project boundary metadata, MM-DD-YYYY.TXT].

Article 203. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

Article 301. Contract Plans and Specifications. At least 60 days before starting any license-related construction activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – Portland Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of a supporting design report and final contract plans and specifications. The Commission may require changes to the plans and specifications to ensure the work is completed in a safe and environmentally sound manner. Construction may not commence until authorized by the Regional Engineer.

Article 302. Quality Control and Inspection Program. At least 60 days before starting any license-related construction or ground disturbance activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – Portland Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include a sediment and erosion control plan.

Article 303. Cofferdam Construction Drawings. Before starting any license-related construction activities, the licensee shall review and approve the design of contractor-designed cofferdams. At least 30 days before starting construction of the cofferdams, the licensee shall submit one copy to the Division of Dam Safety and Inspections – Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 304. Temporary Emergency Action Plan. At least 60 days before starting any license-related construction activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – Portland Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures in case failure of a cofferdam, large sediment control structure, or any other water retaining structure that could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies, a plan drawing of the proposed cofferdam arrangement, the location of safety devices and escape routes, and a brief description of testing procedures.

Article 305. As Built Drawings. Within 90 days of completion of construction of the facilities authorized by any article of this license (e.g., sealing of face of dam, construction of an intake structure, fish screen, and fishway, installation of gate at

penstock intake), the licensee shall file for Commission approval revised Exhibits A, F, and G, as applicable, to describe and show those project facilities as built. A courtesy copy shall be filed with the Commission's Division of Dam Safety and Inspection – Portland Regional Office (D2SI-PRO); the Director, D2SI; and the Director, Division of Hydropower Administration and Compliance.

Article 401. Commission Approval and Reporting. Certain conditions found in Appendix A require the licensee to file plans with the Commission after the plans have been approved by the U.S. Forest Service (Forest Service). The conditions do not provide for consultation with the Idaho Department of Fish and Game (IDFG), U.S. Fish and Wildlife Service (FWS), Idaho Department of Environmental Quality (IDEQ), Idaho Department of Park and Recreation (IDPR), and the Henry's Fork Foundation (HFF) during plan development. Each such plan identified below, with a reference to a source of its requirement, shall also be submitted to the Commission for approval by the due date specified in the table and must be approved by the Commission before being implemented by the licensee.

4(e) Condition No.	Description	Due Date
1	Approval of Final Design	Prior to any new
		construction
2	Approval of Changes after Initial	Prior to any changes
	Construction	
7	Public Safety Plan	Within 6 months of
		license issuance
8	Road Use Permit	Prior to any new
		construction
10	Recreation Plan	Within one year of
		license issuance
11	Interpretive Display	Within one year of
		license issuance
12	Heritage Resource Protection Plan	If items of potential
		cultural, historical,
		archeological, or
		paleonotological are
		reported or discovered
13	Scenery Management Plan	Within one year of
		license issuance
16	Erosion Control Plan	90 days prior to any
		ground-disturbing
		activities

17	Vegetation Management Plan	90 days prior to any ground-disturbing activities
18	Threatened and Endangered Species Plan	90 days prior to any ground-disturbing activities
19	Forest Service Sensitive Species Biological Evaluation	90 days prior to implementing any activity that may affect Forest Service species and their habitat

In addition to consultation with the Forest Service, the licensee shall prepare the above plans after consultation with IDFG, FWS, IDEQ, and IDPR. The licensee shall include with the plans documentation of consultation, copies of comments and recommendations on the completed plans after the plans have been prepared and provided to the agencies, and specific descriptions of how agencies' comments are accommodated by the plans. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plans with the Commission. If the licensee does not adopt a recommendation, the filings shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to make changes to any plan submitted. Upon Commission approval, the plan becomes a requirement of the license, and the licensee shall implement the plan or changes in the project operations or facilities, including any changes required by the Commission.

Article 402. Project Operation. The licensee shall operate the project in a run-of-river mode for the protection of aquatic resources in the Buffalo River and Henry's Fork River in the project area. The licensee shall at all times act to minimize the fluctuation of the reservoir surface elevation by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream from the project dam and tailrace, when combined approximate the sum of inflows to the reservoir.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement among the licensee, Idaho Department of Fish and Game, and U.S. Forest Service. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

<u>Article 403</u>. *Operational Compliance Monitoring Plan*. Within six months of the effective date of this license, the licensee shall file for Commission approval an operational compliance monitoring plan.

The plan shall include at a minimum:

- (1) a description of the exact location of each gage or measuring device, the method of calibration for each gage or measuring device, the frequency of recording for each gage or measuring device, and a monitoring schedule;
- a description of how the project would maintain compliance with the operational requirement of Article 402;
- (3) a provision for maintaining a log of project operation and generation;
- (4) a provision for providing the gaging and project operation and generation data to the Idaho Department of Fish and Game (IDFG), U.S. Forest Service (Forest Service), U.S. Fish and Wildlife Service (FWS), and Idaho Department of Environmental Quality (IDEQ) within 30 days of the date of the agency's request for the data; and
- (5) an implementation schedule for the plan.

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

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI.

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

Article 404. *Hazardous Substances Plan*. Within six months of license issuance, the licensee shall file for Commission approval, a Hazardous Substances Plan to protect fish and wildlife resources from adverse effects associated with fuel and hazardous substance spills at the project.

In addition to the provisions specified in Condition No. 6 of Appendix A, the plan shall include, at a minimum:

- (1) a description of the procedures for storage, transfer, and handling of fuel and hazardous substances;
- (2) a description of the procedures that will be followed in the event of a fuel or hazardous substances spill, including cleanup and notification of the Forest Service, the Fish and Wildlife Service, the Idaho Department of Fish and Game, the Idaho Department of Environmental Quality, and the Commission should fuel or hazardous substances at the project spill into or adjacent to any water body within or below the project; and
 - (3) an implementation schedule.

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

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI.

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

Article 405. Upstream Fishway. Within one year of license issuance, the licensee shall file for Commission approval detailed design drawings of the licensee's proposed upstream fishway together with a schedule to construct or install, operate, and maintain the fishway. The fishway shall be operated continuously and be designed to pass all life history stages of rainbow trout of at least 100 millimeters total length and together with

the new sluiceway maintain the wetted area at the base of the west end of the dam. The design for the fishway must be filed with the project plans and specifications required by Article 301.

The licensee shall prepare the drawings and schedule after consultation with the Idaho Department of Fish and Game, U.S. Forest Service, U.S. Fish and Wildlife Service, and Henry's Fork Foundation (Foundation). The licensee shall include with the drawings and schedule documentation of consultation, copies of comments and recommendations on the drawings and schedule after they have been prepared and provided to the agencies and Foundation, and specific descriptions of how the agencies' and Foundation's comments are accommodated by the licensee's plan. The licensee shall allow a minimum of 30 days for the agencies and Foundation to comment and to make recommendations before filing the drawings and schedule with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI. The Commission reserves the right to require changes to the proposed fishway and schedule. Construction or installation of the fishway shall not begin until the licensee is notified by the Commission that the filing is approved and D2SI-PRO authorizes start of construction. Upon Commission approval, the licensee shall implement the proposal, including any changes required by the Commission.

Article 406. Fish Screen. Within six months of license issuance, the licensee shall file for Commission approval detailed design drawings of the fish screen required by Condition No. 14 of Appendix A together with a schedule to construct or install, operate, and maintain the fish screen. The design for the fish screen must be filed with the project plans and specifications required by Article 301.

The licensee shall prepare the drawings and schedule after consultation with the Idaho Department of Fish and Game, U.S. Forest Service, U.S. Fish and Wildlife Service, and Henry's Fork Foundation (Foundation). The licensee shall include with the drawings and schedule documentation of consultation, copies of comments and recommendations on the drawings and schedule after they have been prepared and provided to the agencies and Foundation, and specific descriptions of how the agencies' and Foundation's comments are accommodated by the licensee's plan. The licensee shall allow a minimum of 30 days for the agencies and Foundation to comment and to make recommendations before filing the drawings and schedule with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and Director, D2SI. The Commission reserves the right to require changes to the proposed fishway and schedule. Construction or installation of the fishway shall not begin until the licensee is notified by the Commission that the filing is approved and D2SI-PRO authorizes start of construction. Upon Commission approval, the licensee shall implement the proposal, including any changes required by the Commission.

Article 407. Fishway and Fish Screen Effectiveness Monitoring, Evaluation, and Maintenance. Within one year of licensee issuance, the licensee shall file for Commission approval a plan for conducting post-construction monitoring and evaluation of the fishway and fish screen required by Articles 405 and 406 for a period of 3 years and every third year thereafter for the term of the license. In addition to the monitoring provision specified in Condition No. 14 of Appendix A, the plan shall include, at a minimum, a provision for monitoring and documenting fishway use and effectiveness; recording the species, length, and quantity of fish found impinged on the fish screen; a description of the procedures for maintenance of the fishway and fish screen; and a schedule for:

- (1) implementation;
- (2) consultation with the Idaho Department of Fish and Game (IDFG), U.S. Forest Service (Forest Service), U.S. Fish and Wildlife Service (FWS), and Henry's Fork Foundation (Foundation) concerning the results of the monitoring and evaluation; and
- (3) filing the monitoring and evaluation results, the agencies' and Foundation's comments, and the licensee's response to the agencies' and Foundation's comments with the Commission in years when monitoring takes place.

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

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI. The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the

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

The Commission reserves the right to direct the licensee to modify project structures or operations if the results of the monitoring indicate that changes in project structures or operations are necessary to protect fishery resources.

Article 408. Upstream Fishway Construction Scheduling. At least six months before the start of the fishway construction/installation required by Article 405, the licensee shall file for Commission approval a construction/installation plan and schedule that includes a provision for conducting fishway construction/installation activities only during the months of August through October in order avoid disturbance to rainbow trout spawning movements and rearing of newly hatched rainbow trout fry and displacement of wintering trumpeter swans.

The plan shall include, at a minimum:

- (1) identification of all land-disturbing and land-clearing activities associated with construction or installation of the fishway; and
 - (2) a specific implementation schedule.

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

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI.

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

Article 409. Reservation of Authority - Fishways. Authority is reserved by the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior under section 18 of the Federal Power Act.

<u>Article 410</u>. *Diversion Operation Plan*. Within one year of license issuance, the licensee shall file for Commission approval, a Diversion Operation Plan to maintain the Buffalo River channel in the project area and pass large woody debris past the project.

In addition to the provisions specified in Condition No. 15 of Appendix A, the plan shall include, at a minimum, an implementation schedule.

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

A courtesy copy of the plan shall be filed with the Commission's D2SI-PRO and the Director, D2SI.

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

Article 411. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article.

If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, such action includes, as 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, 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 Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G 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 intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article: (1) before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and

the State Historic Preservation Officer; (2) before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value; (3) the instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters; and (4) the Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

- (f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G 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.
- (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 the filing. Proof of service on these entities must accompany the filing with the Commission.

(I) This order is issued under authority delegated to the Director and is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in section 313(a) 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, expect as specifically ordered by the Commission. The licensee's failure to file a request for rehearing of this order shall constitute acceptance of this license.

J. Mark Robinson Director Office of Energy Projects

APPENDIX A

Forest Service's

Final Section 4(e) Terms and Conditions

Condition No. 1 - Forest Service Approval of Final Design

Prior to undertaking activities on National Forest System lands, the Licensee shall obtain written approval from the Forest Service for all final design plans for project components that the Forest Service deems as affecting or potentially affecting National Forest System lands and resources. As part of such prior written approval, the Forest Service may require adjustments in final design plans and facility locations to preclude or mitigate impacts and to assure that the project is compatible with on-the-ground conditions. Should the Forest Service, the Commission, or the Licensee determine that necessary changes are 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 Article 3 shall be made subject to any new terms and conditions the Secretary of Agriculture may make pursuant to section 4(e) of the Federal Power Act.

Condition No. 2 - Approval of Changes After Initial Construction

Notwithstanding any license authorization to make changes to the project, the Licensee shall obtain written approval from the Forest Service prior to making any changes in any constructed project features or facilities, or in the uses of project lands and waters the Forest Service deems as affecting or potentially affecting National Forest System lands and resources. Following receipt of such approval from the Forest Service, and a minimum of 60-days prior to initiating any such changes, the Licensee shall file a report with the Commission describing the changes, the reasons 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 requirement for license amendment or other requirements of Article 2 or Article 3 of this license. Any changes to the license made for any reason pursuant to Article 2 or Article 3 shall be made subject to any new terms and conditions the Secretary of Agriculture may make pursuant to section 4(e) of the Federal Power Act.

Condition No. 3 – Consultation

Each year during the 60-days preceding the anniversary of this license, or as arranged with the Forest Service, the Licensee shall consult with the Forest Service with

regard to measures needed to ensure protection and utilization of the National Forest System lands and resources affected by the Project. Within 60-days following such consultation, the Licensee shall file with the Commission evidence of the consultation with any recommendations made by the Forest Service. The Forest Service reserves the right, after notice and opportunity for comment and administrative review, to require changes in the project and its operation through revision of the 4(e) conditions that require measures necessary to accomplish protection and utilization of National Forest lands and resources.

Condition No. 4 - Surrender of License or Transfer of Ownership

Prior to any surrender of this license, the Licensee shall restore National Forest System lands to a condition satisfactory to the Forest Service. At least 1 year in advance of the proposed application for license surrender, the Licensee shall file with the Commission a restoration plan approved by the Forest Service. The restoration plan shall identify improvements to be removed, restoration measures, and time frames for implementation and estimated restoration costs. In addition, the Licensee shall pay for an independent audit to assist the Forest Service in determining whether the Licensee has the financial ability to fund the surrender and restoration work specified in the plan.

As a condition of any transfer of the license or sale of the project, the Licensee shall require the proposed transferee to demonstrate, in a manner satisfactory to the Forest Service, that it has the financial ability to provide for the costs of surrender and restoration of the project.

Condition No. 5 - Requirement to Obtain a Forest Service Special-Use Authorization

The Licensee shall obtain a special-use authorization from the Forest Service for the occupancy and use of National Forest System lands. The licensee shall obtain the executed authorization before beginning ground-disturbing activities on National Forest System lands or within six months of license issuance if no construction or reconstruction was proposed in the application for license.

The Licensee may commence ground-disturbing activities authorized by the License and special-use authorization no sooner than 60 days following the date the licensee files the Forest Service special-use authorization with the Commission, unless the Commission prescribes a different commencement schedule.

In the event there is a conflict between any provisions of the license and Forest Service special-use authorization, the special-use authorization shall prevail to the extent

that the Forest Service, in consultation with the Commission, deems necessary to protect and utilize National Forest System resources.

Condition No. 6 - Hazardous Substances Plan

During planning for and prior to any new construction or maintenance, the Licensee shall file with Commission, a Hazardous Substances Plan approved by the Forest Service for oil and hazardous substances storage and spill prevention and cleanup. At a minimum, the Licensee shall:

- Outline the Licensee's procedures for reporting and responding to releases of hazardous substances, including names and phone numbers of all emergency response personnel and their assigned responsibilities,
- Maintain in the project area, a cache of spill cleanup equipment suitable to contain any spill from the project,
- Semi-annually 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,
- Inform the Forest Service immediately of the nature, time, date, location, and action taken for any spill affecting National Forest System lands and Licensee adjoining fee title property.

Condition No. 7 – Public Safety Plan

Within 6 months of the license issuance, the Licensee shall file with the Commission a Public Safety Plan approved by the Forest Service. This plan will identify potential hazardous situations, evaluate all project facilities for conformance with the International Building Code, and identify measures necessary to bring project facilities in conformance with the Code, and shall include a schedule for completion of any hazard abatement measures. The plan will also identify how the project complies with FERC's Guidelines for Public Safety at Hydropower Projects (March 1992).

The Licensee shall perform daily (or on a schedule otherwise agreed to by the Forest Service) inspections of Licensee's construction operations on National Forest System lands while construction is in progress. The Licensee shall document these inspections (informal writing sufficient) and shall deliver such documentation to the Forest Service on a schedule agreed to by the Forest Service. The inspections must

include fire plan compliance, measures to provide for public safety, and environmental protection. The Licensee shall act immediately to correct any items found to need correction.

Condition No. 8 - Road Use

The Licensee shall confine all project vehicles, including but not limited to administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes. The Forest Service reserves the right to close any and all such routes where damage is occurring to the soil or vegetation, or, if requested by Licensee, to require reconstruction/construction by the Licensee to the extent needed to accommodate the Licensee's use.

The Licensee shall obtain a Road Use Permit (FS-7700-41) for all roads needed for project construction activities. This permit shall be applied for and obtained from the Forest Service prior to any use of any Forest development road for construction purposes. An Operation and Maintenance Plan will become part of any road use permit granted by the Forest Service.

Condition No. 9 - Maintenance of Improvements

The Licensee shall maintain all its improvements and premises on National Forest System lands to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the Forest Service. The Licensee shall comply with all applicable Federal, State, and local laws, regulations, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., the Resources Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Comprehensive Environmental Response, Control, and Liability Act, 42 U.S.C. 9601 et seq., and other relevant environmental laws, as well as public health and safety laws and other laws relating to the citing, construction, operation, maintenance of any facility, improvement, or equipment.

Condition No. 10 - Recreation Plan

Within 1 year of license issuance the Licensee shall file with the Commission a Recreation Plan that is approved by the Forest Service. The Plan shall, as appropriate, include:

• Licensee responsibility for construction, operation and maintenance of recreation facilities and sites on National Forest System lands,

- Specific mitigation measures for existing recreation facilities and sites, including compliance with the Americans with Disabilities Act. The plan should include accommodations for the existing parking area and turn-around at the end of Forest Road #80136, Riverside Drive.
- Planning for future development or rehabilitation of recreation facilities or sites. Future development or rehabilitation of recreation sites shall include the parking area, the short trail connecting parking area to Box Canyon Trailhead and turn around on the south side of the Buffalo River, access via Forest Road 80136, Riverside Drive. Other future recreation developments should include interpretive signing for hydropower facilities and the Box Canyon trail along the Henry's Fork River. A site plan should be provided at a scale of one inch equals 30, 40 or 50 feet and approved by the Forest Service prior to construction activities.

Condition No. 11 - Interpretive Display

Within 1 year of license issuance the Licensee shall file with the Commission an Interpretive Display Plan that is approved by the Forest Service. The Plan will provide a history of the hydropower facility, describe its operation and benefits and measures taken to mitigate environmental effects and for the Forest Service to provide general information about recreation opportunities and other information of interest to the public.

Condition No. 12 - Heritage Resource Protection

If during ground-disturbing activities or as a result of project operations, items of potential cultural, historical, archeological, or paleontological value are reported or discovered, or a known deposit of such items is disturbed on National Forest System lands the Licensee shall immediately cease work in the area so affected. The Licensee shall then notify the Forest Service and the Commission and shall not resume work on ground-disturbing activity until it receives written approval from the Forest Service.

If it deems it necessary, the Forest Service may require the Licensee to perform recovery, excavation, and preservation of the site and its artifacts at the Licensee's expense through provisions of an Archaeological Resources Protection Act permit issued by the Forest Service.

Condition No. 13 - Scenery Management

Within 1 year of license issuance the Licensee shall file with the Commission a Scenery Management Plan that is approved by the Forest Service. At a minimum, the Plan shall address:

- Clearings, spoil piles, and project facilities including diversion structures, penstocks, pipes, ditches, powerhouses, other buildings, transmission line corridors, fish ladders and access roads,
- Facility configurations, alignments, building materials, colors, landscaping, and screening,
- Proposed mitigation and implementation schedules necessary to bring project facilities into compliance with Targhee National Forest Land and Resource Management Plan direction and provide protection of scenic value, one of the outstanding and remarkable values (ORV's) of the eligible Wild Henry's Fork and Buffalo Rivers. The plan will include measures to protect visual resources during construction that involve ground disturbance and vegetation removal.

Mitigation measures shall include, but are not limited to:

- Surface materials and colors of the exterior of the powerhouse,
- Use of native plant materials to screen facilities from view,
- Surface treatment colors and use of native rock on new concrete exposures,
- Use of barrier rocks around parking area,
- Reshaping and revegetating disturbed areas

Condition No. 14 - Fish Screen for Diversion Structure

The Licensee shall install a screen device on the intake structure of the penstock to prevent entrainment of salmonid fingerlings into the conduit and penstock systems. The intake shall be screened with openings no greater than 0.25 inches. Screen design shall be such that approach velocities do not exceed 0.80 feet per second. The licensee shall provide for the frequent removal of debris and trash in order to constantly maintain proper approach velocities. The fish screen design and a plan for monitoring fish mortality associated with the fish screen will be developed in consultation with the USDA Forest Service, Idaho Fish and Game, and US Fish and Wildlife Service.

Within six months of license issuance the Licensee shall file with the Commission functional drawings for the design of the screen and the plan for monitoring fish mortality that have been approved by the USDA Forest Service, Idaho Fish and Game, and US Fish and Wildlife Service. The Commission may require modifications to the design. All facilities should be constructed by year two and fully operational to meet the approved design by year three of the license.

Condition No. 15 - Diversion Operation Plan

Within 1 year of license issuance the Licensee shall file with the Commission a Diversion Operation Plan that is approved by the Forest Service. At a minimum the Plan shall address:

- A policy and methodology for passing large woody debris fully intact over the dam as mentioned in license application,
- Methods for sediment flushing or removal,
- Procedures for flood conditions, methods of erosion prevention in the diversion area and spillway channel,
- Trash and debris removal, and
- An implementation schedule and maintenance program.

Upon Commission approval, the licensee shall implement the plan. The Commission may require changes to the plan to ensure adequate protection of the environmental, scenic and cultural values of the project area.

Condition No. 16 - Erosion Control Measures Plan

At least 90-days prior to any ground-disturbing activity, the Licensee shall file with the Commission an Erosion Control Measures Plan that is approved by the Forest Service. The Plan shall include measures to control erosion, stream sedimentation, dust, and soil mass movement. Upon approval, the Licensee shall implement the plan.

Condition No. 17 - Vegetation Management Plan

Prior to any ground-disturbing activity, the Licensee shall file with the Commission a Vegetation Management Plan that is approved by the Forest Service. At a minimum the Plan shall:

• Identify and prioritize (into high, moderate and low priority sites) all inadequately vegetated areas to be re-vegetated or rehabilitated along with an implementation schedule,

- List the species to be used along with planting locations, methods, and densities (emphasis shall be given to use of native species),
- Identify site preparation, irrigation, mulch, fertilizer, and herbivore protection requirements for plant establishment,
- Identify methods for prevention and control of noxious weeds. Treatment of existing infestations of highest priority weeds shall be initiated immediately upon approval of the vegetation management plan by the Commission,
- Identify all vegetation control methods the Licensee proposes to use at or along all project facilities,
- Explain re-vegetation and vegetation control methods and materials meet objectives for integrated noxious weed management, erosion control, wildlife habitat and other management direction,
- Develop a monitoring program to evaluate the effectiveness of re-vegetation, vegetation control, and noxious weed control measures, and
- Develop procedures for identification of additional measures that the licensee shall implement if monitoring reveals that re-vegetation and vegetation control is not successful or does not meet intended objectives.

Condition No. 18 - Protection of Threatened and Endangered Species Plan

Within 90-days prior to any ground-disturbing activity that may affect a federally listed or proposed species and their critical habitat, the Licensee shall file with the Commission a Threatened, Endangered, and Proposed for Listing Species Plan that is approved by the Forest Service in consultation with appropriate Federal and State agencies. This Plan shall describe how the Licensee shall coordinate, consult, and prepare a biological assessment evaluating the potential impact that any action may have on listed and proposed species and their habitat. At a minimum the plan shall:

- Develop procedures to minimize adverse effects to listed species,
- Ensure project-related activities shall meet restrictions included in site management plans for listed species,
- Develop implementation and effectiveness monitoring of measures taken or employed to reduce effects to listed species,
- Identify required elements contained within a biological assessment.
- All construction shall be timed to avoid conflicts with sensitive species.

Condition No. 19 – Forest Service Sensitive Species Biological Evaluation

Within 90-days prior to implementing any activity that may affect a Forest Service sensitive species and their habitat, the Licensee shall file with the Commission a biological evaluation (BE) for Sensitive Species that is approved by the Forest Service. At a minimum incorporate the following mitigation in the BE:

- Develop procedures to minimize adverse effects to sensitive species.
- Develop implementation and effectiveness monitoring of measures taken or employed to reduce effects to sensitive species.
- All construction shall be timed to avoid conflicts with sensitive species.