

# memorandum

DATE: June 20, 2000

REPLY TO  
ATTN OF: KECP-4

SUBJECT: Supplement Analysis for the Dworshak Small Hydroelectric Project, DOE/EIS-0183-SA-02

TO: Thomas Foeller  
Project Manager – PNG-1

**Proposed Action:** Dworshak Small Hydroelectric Project – Purchase of Electrical Energy Output, Contract No. DE-MS79-90BP92888

**PL-6:** P31101

**Location:** North Fork Clearwater River, Clearwater County, Idaho

**Proposed by:** Bonneville Power Administration (BPA) and Idaho Water Resource Board (IWRB)

## 1. Introduction

BPA is considering purchasing all of the electrical output of IWRB's new 2.9 megawatt (MW) Dworshak Small Hydroelectric Project. The term of the contract is 30 years. BPA analyzed the potential environmental impacts of renewable resources development and BPA acquisition of those resources in its Business Plan Environmental Impact Statement (BP EIS, DOE/EIS-0183, June 1995). The Business Plan Record of Decision (BP ROD, August 15, 1995) documented BPA's decision to pursue a market-driven business direction. The acquisition of renewable energy resources was included in that decision. The purpose of this Supplement Analysis is to determine whether any further NEPA documentation is required for BPA to enter into the contract with IWRB.

## 2. NEPA Analysis to Date

Several existing National Environmental Policy Act (NEPA) documents address various aspects of the project:

- BPA's BP EIS analyzed the generic impacts of renewable energy resources and transmission, as well as the impacts of adding those resources to the existing system.
- The U.S. Army Corps of Engineers' (Corps) Clearwater Fish Hatchery Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), issued in May 1989, focused on the impacts of development of a fish hatchery to increase the production of steelhead trout and spring Chinook salmon in the Lower Snake River Basin, specifically the Clearwater River drainage in northern Idaho. As part of the proposed action, however, the EA and FONSI addressed the potential environmental impacts of minimum facilities for a future small hydroelectric development.

- The Federal Energy Regulatory Commission (FERC) issued a Dworshak Small Hydroelectric Project EA and FONSI for Hydropower License in June 1997. The EA analyzed the impacts of the construction and operation of the project by IWRB, as well as the environmental impacts of IWRB's and Clearwater Power Company's (CPC) associated transmission facilities. FERC found that the project would have no significant impact.

### **3. Description of the Project**

The IWRB was issued a FERC license to construct and operate the Dworshak Small Hydroelectric Project on the existing water conveyance system that provides water from the Corps' Dworshak Dam to two fish hatcheries. The Dworshak Dam is located on the North Fork Clearwater River in Clearwater County, Idaho. The project site is on land owned by the Corps, the U.S. Fish and Wildlife Service, and the Bureau of Land Management, within the Nez Perce Indian Reservation.

The water supply system for the Clearwater Fish Hatchery and the Dworshak National Fish Hatchery includes a 36-inch diameter pipe, an 18-inch diameter pipe, and a distribution tank. The pipelines convey water from their intakes in Dworshak Dam about 8,400 feet along the east bank of the North Fork Clearwater River to the distribution tank. The Dworshak Small Hydroelectric Project consists of connections to the existing water supply pipes; a powerhouse on top of the existing distribution tank; two generating units with installed capacities of 2.5 and 0.5 MW that discharge flows directly into the distribution tank; a generation substation adjacent to the powerhouse; and underground transmission.

The project will be operated as "run-of-pipeline," using the pipeline flow volumes authorized for the hatcheries at the flow rates determined by the Clearwater Hatchery superintendent. The power project will be operated by remote control.

### **4. Analysis**

- BPA's BP EIS contemplated the acquisition of renewable resources and included an analysis of the environmental impacts of adding those resources to the existing system.
- The analysis of potential environmental impacts of the Dworshak Small Hydroelectric Project and associated transmission were analyzed in FERC's Final EA for Hydropower License and accompanying FONSI. Furthermore, the water supply pipeline and distribution tank at the Clearwater Hatchery were configured to accommodate future development of a small hydroelectric facility. This contingency was included in the Corps's Clearwater Fish Hatchery, Ahsahka, Idaho, Final EA and FONSI.
- FERC determined that the federally-listed Snake River fall Chinook (threatened) may occur in the project area, but that the project, as licensed, would not be likely to adversely affect this species. The National Marine Fisheries Service (NMFS) concurred. Snake River steelhead trout, including the Dworshak National Fish Hatchery stock, was federally-listed as a threatened species after FERC's Final EA was published. NMFS advised FERC that the project is not likely to adversely affect this species, either.

- Also subsequent to the Final EA, bull trout in the Columbia Basin, including the North Fork Clearwater River, was federally-listed as a threatened species. FERC concluded that the Dworshak Small Hydroelectric Project is not likely to adversely affect bull trout. The U.S. Fish and Wildlife Service concurred.
- The FERC license (issued August 4, 1998) contemplated a 2.5 MW project, consisting of one 2.0 MW unit and one 0.5 MW unit. A subsequent amendment (July 8, 1999) modified the project description in the original license to reflect a 3.0 MW project (one 2.5 MW unit and one 0.5 MW unit). The change in generator capacity was necessary to accommodate the higher water flow (peak combined water flow of 89.5 cfs) requested by the two fish hatcheries and to maximize the energy potential of the system. The turbine was designed with a hydraulic capacity of 90 cfs. However, to correctly size the generator for that flow, its nameplate rating was increased. Since the project was designed to be run of pipeline, there are no additional environmental impacts.

Subsequently, however, on May 4, 2000, IWRB notified FERC of its intention to reduce the secondary generator rating at the project, from 500 kilowatts (kW) to 400 kW. This reduction is based on the maximum available expected energy. There are no changes to turbine capacity, which will still make full use of all available flow in the secondary pipeline, and no change in the amount of energy produced. Since this change merely reduces the authorized total project generator rating from 3.0 MW to 2.9 MW, there will be no change in environmental effects.

- The FERC license addressed an underground 810-foot-long, 14.4-kv transmission line connecting to CPC's existing overhead distribution line adjacent to the Dworshak National Fish Hatchery. The July 8, 1999, Order amending the license revised the project description. At CPC's request, the connection was relocated. IWRB would install approximately 800 feet of 24.9 kV underground conductor from the generator to CPC's underground vault located on the south side of the Ahsahka Bridge over the North Fork Clearwater River. CPC would install about 700 feet of cable through a conduit on the bridge to connect to their underground vault on the north side of the bridge, and then another 100 feet of underground conductor to their Ahsahka Substation located adjacent to the north side of the bridge. All of the transmission facility actions undertaken by IWRB and CPC are included within a class of actions that are normally categorically excluded under DOE's NEPA Implementing Procedures: B4.12 "Construction of electric powerlines approximately 10 miles of length or less that are not for the integration of major new generation resources into a main transmission system."
- On January 19, 2000, IWRB and CPC entered into an Electric Power Wheeling and Maintenance Agreement for Use of Electrical Transmission Facilities Associated with the Dworshak Small Hydroelectric Project. This Agreement documented the construction and maintenance services for IWRB and CPC per the FERC License. It also documented the wheeling services over CPC's one-mile long 115-kv transmission line that interconnects its Ahsahka Substation to BPA's transmission system. The integration of the output of the generation into BPA's transmission system was anticipated in the FERC Final EA. The applicable categorical exclusion under DOE's NEPA Implementing Procedures: B4.8 "New electricity transmission agreements..." is normally restricted so no new generation projects are involved. However, the new generation project's environmental effects have been adequately analyzed and found to have no significant impact.

- BPA entered into Agreement No. 00TX30375 with CPC for interconnection voltage and metering. Per this Agreement, BPA would install revenue metering in BPA's meterhouse within CPC's Ahsahka Substation. This type of action is normally categorically excluded under DOE's NEPA Implementing Procedures: B4.6 "Additions of modifications to electric power transmission facilities that would not affect the environment beyond the previously developed facility area."

## 5. Findings

As documented in this Supplement Analysis, the potential impacts of entering into a 30-year Power Purchase Agreement with IWRB for the 2.9 MW output of the Dworshak Small Hydroelectric Project are within the scope of BPA's BP EIS and ROD. The potential environmental impacts of the project itself and the associated transmission have been adequately analyzed in other agency's NEPA documents. No additional impacts would occur as a result of this power purchase agreement. There are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, a supplement to the Business Plan EIS is not needed.

/s/ Katherine S. Pierce

Katherine S. Pierce  
Environmental Specialist  
Environment, Fish and Wildlife

Concur: /s/ Thomas C. McKinney  
Thomas C. McKinney  
NEPA Compliance Officer

Date: 6/20/00

Documentation on file:

Federal Energy Regulatory Commission (FERC). 1997. Dworshak Small Hydroelectric Project, Final Environmental Assessment. Washington, DC.

FERC. 1997. Dworshak Small Hydroelectric Project, Finding of No Significant Impact. Washington, DC.

FERC. 1999. Notice of Amendment of License for Idaho Water Resource Board's Dworshak Small Hydroelectric Project. Washington, DC.

United States Army, Corps of Engineers (USA/Corps). 1989. Clearwater Fish Hatchery, Ahsahka, Idaho, Final Environmental Assessment. Walla Walla, WA.

USA/Corps. 1989. Clearwater Fish Hatchery on the North Fork of the Clearwater River, Ahsahka, Idaho Finding of No Significant Impact. Walla Walla, WA.

United States Department of Energy, Bonneville Power Administration (USDOE/BPA). 1995. Business Plan Final Environmental Impact Statement. DOE/EIS-0183. Portland, OR

USDOE/BPA. 1995. Business Plan Record of Decision. Portland, OR

cc:

L. Croff, Bonneville Power Administration  
J. Kehoe, Bonneville Power Administration  
T. McKinney, Bonneville Power Administration  
G. Thompson, Bonneville Power Administration  
J. Trottier, Bonneville Power Administration  
J. Williams, Bonneville Power Administration  
E. Woessner, Bonneville Power Administration  
H. Nigam, Department of Energy/EH-42 (FORS BLDG., Rm 3E080)  
K. Dreher, Idaho Water Resource Board  
R. Mellin, Idaho Water Resource Board  
B. Miller, U.S. Army Corps of Engineers  
C. Krahenbuhl, U.S. Army Corps of Engineers  
Official File - KEC (EQ-14)

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