

DEPARTMENT OF ENERGY

Bonneville Power Administration

Cowlitz Falls Hydroelectric Project  
Record of Decision

AGENCY: Bonneville Power Administration (BPA), DOE

ACTION: Record of Decision for BPA's Cowlitz Falls Hydroelectric Project.

SUMMARY: BPA has decided to acquire the power output from the Cowlitz Falls Hydroelectric Project (Project), owned by the Public Utility District No. 1 of Lewis County (District), with headquarters in Chehalis, Washington. The power output from this Project will add about 30.8 average megawatts (aMW) to the existing Federal power system in the Pacific Northwest (assuming average water conditions). BPA's decision is based on the need to acquire power to meet growing loads. To make this decision, BPA used the information in the Cowlitz Falls Final Environmental Impact Statement (EIS) and Attachment, issued in December 1990.

BPA has determined that its purchase of the power output of the Project is cost effective. All practicable mitigation has been adopted. Mitigation plans and other environmental agreements are in place for protection of fish and wildlife, water quality, wild and scenic river values, flooding, cultural resources, and the Federal Energy Regulatory Commission (FERC) permit requirements.

ADDRESSES: Copies of the Cowlitz Falls Final Environmental Impact Statement and Attachment, December 1990, (DOE/EIS-0156), the comments we have received on this issue, this Record of Decision, and the 1990 Resource Program, July 1990, (DOE/BP-1405), are available from BPA's Public Involvement Office, P.O. Box 12999, Portland, Oregon 97212.

FOR FURTHER INFORMATION CONTACT: Mr. Charles Alton, Environmental Coordinator for Energy Resources - RM, Bonneville Power Administration, P.O. Box 3621, Portland, Oregon 97208; telephone 503-230-5878. For copies of the documents listed above, you may also contact BPA's Public Involvement Office at 503-230-2378. Oregon callers may use 800-452-8429; callers in California, Idaho, Montana, Nevada, Utah, Washington, and Wyoming may use 800-547-6048.

Information may also be obtained from:

Mr. George E. Gwinnutt, Lower Columbia Area Manager, Suite 243, 1500 N.E. Irving Street, Portland, Oregon 97232, 503-230-4551.

Mr. Robert N. Laffel, Eugene District Manager, Room 206, 211 East Seventh Avenue, Eugene, Oregon 97401, 503-465-6952.

Mr. Wayne R. Lee, Upper Columbia Area Manager, Room 561, West 920 Riverside Avenue, Spokane, Washington 99201, 509-353-2518.

Mr. George E. Eskridge, Montana District Manager, 800 Kensington, Missoula, Montana 59801, 406-329-3060.

Mr. Ronald K. Rodewald, Wenatchee District Manager, Room 307, 301 Yakima Street, Wenatchee, Washington 98801, 509-662-4377, extension 379.

Mr. Terence G. Esvelt, Puget Sound Area Manager, Suite 400, 201 Queen Anne Avenue North, Seattle, Washington 98109-1030, 206-553-4130.

Mr. Thomas V. Wagenhoffer, Snake River Area Manager, 101 West Poplar, Walla Walla, Washington 99362, 509-522-6225.

Mr. Richard Itami, Idaho Falls District Manager, 1527 Hollipark Drive, Idaho Falls, Idaho 83401, 208-523-2706.

Mr. Thomas H. Blankenship, Boise District Manager, Room 450, 304 North Eighth Street, Boise, Idaho 83702, 208-334-9137.

SUPPLEMENTARY INFORMATION:

I. Background

The large surplus of federal power that the Pacific Northwest Region (Region) relied upon during the 1980's is almost gone. Current forecasts indicate BPA will essentially remain in load/resource

balance through 2001 under medium growth rates. However, if utility loads continue to grow at the current rate or if direct service industrial loads remain high, BPA would need additional power supplies in the early 1990's.

To address this need, BPA has begun a pilot resource acquisition effort: to test the mechanisms of acquiring a lost opportunity resource; to acquire cost-effective resources; to be consistent with BPA's Resource Acquisition Program; to be consistent with the Northwest Conservation and Electric Power Plan; and to minimize environmental cost. Acquisition of power output, but not the generating facilities themselves, was authorized by the 1980 Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act), (P.L. 96-501, December 5, 1980).

The purchase of power output from the Cowlitz Falls Hydroelectric Project is part of BPA's pilot resource acquisition effort. BPA considers Cowlitz Falls, which is an unsolicited resource offer, a cost-effective resource that might be lost to BPA unless immediate action is taken. Because of its strong interest in the Project, BPA entered into an Option Agreement with the District in May 1990 to hold the resource until BPA could evaluate the environmental impacts associated with the possible purchase of the Project's power output. BPA has until June 30, 1991, to exercise the purchase option.

The District conducted extensive public discussions on issues raised about the project by the public to reach satisfactory resolution. Subsequent to the signing of the Option Agreement, BPA held a public meeting and solicited comments to assist in the environmental evaluation of the Project.

BPA reviewed the 1981 EIS prepared by the State of Washington, the 1983 FERC Final Environmental Impact Statement (FEIS) (FERC/EIS-0032), and other Project-related documents for adequacy. BPA found the FERC FEIS, which complies with the National Environmental Policy Act (NEPA), adequately covers both its proposed action and alternatives. In December 1990, DOE adopted the FERC FEIS as a final EIS for BPA's proposed action in accordance with the Council on Environmental Quality (CEQ) procedures set forth in 40 CFR 1506.3(b). BPA's analysis leading to DOE's conclusion to adopt the FERC FEIS and that a supplemental EIS was not necessary were included in the Attachment to the EIS issued by BPA (DOE/EIS-0156).

BPA distributed the EIS and Attachment to the public for a 30-day review on December 13, 1990 and the Environmental Protection Agency Notice of Availability was published in the FEDERAL REGISTER on December 21, 1990 (55 FR 52316).

Notice of this Record of Decision will be distributed to interested and affected public, as well as through this FEDERAL REGISTER Notice.

## II. Alternatives

In arriving at a decision, BPA considered the following alternatives as evaluated in the EIS:

### A. Cowlitz Falls Project--Applicant's Proposal

The original proposal as submitted by the District. A 30.8 aMW hydrogeneration plant located approximately 13 miles downstream from the town of Randle, Washington.

### B. Alternative Design of the Proposed Alternative

This alternative makes changes to the original proposal's

location of the powerhouse, reservoir levels, and transmission facilities.

C. Wood-Fired Generating Plant

A 25 MW wood-fired generation plant located in southwestern Washington.

D. Coal-Fired Powerplant

The purchase of a 45 MW share in a 800 MW coal-fired powerplant equipped with scrubbers and cooling towers.

E. No-Action Alternative

Under this alternative, the Cowlitz Falls project would not be built.

BPA selected Alternative B under this decision. Alternatives B and C were considered the environmentally preferred alternatives. Alternative B has minimal impact because it has incorporated all practicable mitigation plans and other environmental agreements into its construction and operation for protection of fish and wildlife, water quality, wild and scenic river values, flooding, and cultural resources. Alternative C would have minimal impact due to the small land requirements and the ability to mitigate possible significant environmental impacts to the air, land, water, and wildlife.

### III. Decision Factors and Issues

In arriving at the decision to exercise its purchase option, BPA considered the Cowlitz Falls power output in light of BPA's 1990 Resource Program, July 1990 (DOE/BP-1405) and also weighed environmental, economic, and legal factors. The 1990 Resource Program describes the actions BPA will take to develop new resources to meet the power requirements of its customers. The main focus is to

determine what BPA should do in Fiscal Years 1992 and 1993.

A. Resource Program Considerations

The following eight items reflect BPA's 1990 Resource Program criteria.

1. Minimize the present value of total system costs.
2. Ensure that BPA has the ability to meet high BPA firm loads in 1994 through 2000, if necessary.
3. Minimize BPA financial risk.
4. Minimize near-term rate impacts.
5. Minimize long-term rate impacts.
6. Minimize exposure to economic risks of adjusting to unplanned changes in load growth, resource availability, and costs.
7. Minimize local and global environmental impacts from resource actions.
8. Maximize resource deliverability in view of social/political factors.

Alternative B was the only alternative that rated positively under each of these eight criteria. It was found to help meet firm loads within the 1994-2000 period (approximately 22 MW), be cost effective (approximately 30 mills per kilowatt hour levelized life cycle cost), and minimize environmental impacts through mitigation plans and other related agreements. In comparison, Alternative A did not meet the environmental criteria to minimize environmental effects (item 7) because it did not use all possible mitigations to minimize effects. Alternative C met the environmental item, number 7, but was not competitive from a cost-effectiveness standpoint (approximately twice the cost of Alternative B). Alternative D fell short in several of the items and Alternative E did not meet the need for power.

B. Environmental Permits, Licenses, Consultations, and Mitigation Agreements.

BPA reviewed all Project permits and licenses, the consultations by the District to satisfy areawide, state, and local

environmental plans and programs, and the environmental mitigation plans prepared by the District for the Project to assure that all environmental requirements are met.

1. Fish and Wildlife Conservation. The Cowlitz Falls Project is not located in a Northwest Power Planning Council Protected Area. The Washington Department of Fisheries, the U.S. Fish and Wildlife Service, and National Marine Fisheries Service all supported the licensing of the Project.

In February 1986, the District and the Washington Department of Game (now the Department of Wildlife) signed a Fish and Wildlife Mitigation Plan (FWMP) to mitigate, protect, and enhance the fishery and wildlife in the area of the Cowlitz Falls Project. The U.S. Fish and Wildlife Service (USFWS) and the Washington State Department of Fisheries agreed in writing to the FWMP.

The wildlife components of the 1986 FWMP preserve total habitat values by the implementation of mitigation, the purchase and management of about 330 acres of land, the establishment of a shoreline/riparian zone around the reservoir, and the creation of shallows for waterfowl.

The FWMP also settled a number of issues relating to anadromous and resident fisheries in the Cowlitz River that had been debated since the completion of the Mossyrock Dam in 1968. Key components of the FWMP include a trout stocking program, construction of sub-impoundments within the reservoir to provide habitat for largemouth bass and black crappie, habitat enhancement on tributary creeks, and spillway design to minimize nitrogen supersaturation.

The Project design also includes the future

construction of downstream migrant fish collection facilities. These facilities may present the only currently feasible means of restoring anadromous fish (salmon and steelhead) to the upper Cowlitz River Basin.

2. Endangered and Threatened Species and Critical Habitat.

The EIS addressed potential impacts to bald eagles. Since the FWMP was prepared, a District 1989-90 wintering survey conducted at the request of the USFWS and the Washington Department of Wildlife confirmed winter eagle usage upstream of the confluence with the Cispus River. Section 3 of the FWMP includes measures for the protection and enhancement of bald eagles, including restrictions on reservoir clearing in the upstream area during the winter months, planting and preservation of shoreline perch trees, and construction of artificial perches.

The USFWS procedures for addressing the northern spotted owl issue are not final. However, a study by the District showed no northern spotted owls or habitat suitable for spotted owls in the Project area.

No rare plants were found on the Project site, and the USFWS lists no rare plant species for Lewis County, Washington.

3. Wetlands. While the Project license preceded all Washington wetlands plans, the Project will nonetheless be consistent with the State of Washington 1987 Wetlands Priority Plan. The FWMP provides for the construction of subimpoundments, shallows, and riparian zones. Under this plan the proposed Project will create a net gain in wetland areas. The project, therefore, is also consistent with Executive Order 11990.



4. Water Quality. The U.S. Army Corps of Engineers has issued a Section 404 (Clean Water Act) permit for the Project and the Washington Department of Ecology has issued a Water Quality Certification for the Project pursuant to Section 401 of the Clean Water Act.

The National Pollutant Discharge Elimination System permit was issued in April 1990. This permit covers the conditions for operating facilities such as a concrete batching plant during construction.

5. Wild and Scenic Rivers. In both 1989 and 1990 Washington legislative sessions, the state Parks and Recreation Commission submitted legislation recommending that six rivers be considered for the state's scenic river program. The 1990 bill, ESHB 1291, included the Cispus River from its headwaters to a point two and one-half miles upstream from its confluence with the Cowlitz River. This bill does not affect the Cowlitz Falls development. Additions to the state scenic river programs were not approved in 1989 or 1990.

On the national level, the Cowlitz and Cispus rivers have not been designated as wild and scenic, but they have been recognized in the Nationwide Rivers Inventory, prepared by the National Park Service (NPS), as having the potential to be designated. They are, therefore, protected by the 1980 Executive Order on the Protection of Rivers in the Nationwide Rivers Inventory. In recognition of the potential for loss of wild and scenic river values on the Nationwide Rivers Inventory segments of the Cowlitz and Cispus rivers, the NPS and the District negotiated a mitigation agreement in April 1990. In return for this settlement,

the NPS waived additional challenges to the issuance of the Section 404 (Clean Water Act) permit or other permits or governmental actions required for construction of the Project, and any government actions for sale or purchase of Project power prior to construction completion.

The Cispus River will be proposed for National Wild and Scenic River status, but 1.5 miles of backflow into the Cowlitz is exempted for the proposed Project in the U.S. Forest Service Land Resource Management Plan - Gifford Pinchot National Forest, FEIS, June 1990.

6. Floodplains. The Project would inundate 12.3 miles of the Cowlitz and 1.7 miles of the Cispus River. The proposed action, the impact on the floodplain, and steps taken to minimize environmental impacts to the floodplain are discussed in the FEIS and Attachment. DOE finds that there is no practicable alternative to locating the project within the floodplain, consistent with the policy set forth in Executive Order 11988.

7. Flooding and Sedimentation. A major concern of the local residents in the Randle area is that the Project would cause increased water levels by the presence of sedimentation and debris during flood situations. This concern is addressed by operating plans and a sediment monitoring plan approved by FERC.

Local residents of the Randle area are also concerned about the ability of the Cowlitz Falls dam to draw down water in the Randle area in advance of a flooding situation. However, the impact of drawing down the project on Riffe Lake is negligible because the lake is so large in comparison with the Cowlitz Falls reservoir. If all 4,400 acre feet were dumped instantaneously into Riffe Lake, the water level would only rise approximately four inches.

8. Heritage Conservation. In consultation with the Washington State Historical Preservation Officer (SHPO), Cowlitz Indian Tribe and the National Advisory Council on Historic Preservation, the District completed a Cultural Resources Mitigation Plan in September 1983 to mitigate and protect cultural resources throughout the Project license period. The plan was agreed to by the Cowlitz Indian Tribe and endorsed by the Washington SHPO.

One property eligible for listing on the National Register of Historic Places (Cowlitz Falls South Site - Koapk) is within the boundary of the proposed Project and would be adversely affected by the Project. In conjunction with the recovery effort at the site, the Cowlitz Indian Tribe and the District negotiated a reburial and disinterment agreement for the handling of human remains should any be discovered at the site. An archaeological data recovery program at the Koapk site has been completed. It will fully mitigate the disturbance caused by the Project.

9. Recreation. A study of recreational needs in the vicinity of the proposed Project and consultation with the Lewis County Parks and Recreation Department resulted in the selection of a number of recreational facilities to be developed in conjunction with the Project. The District will also replace a raft takeout facility on the Cispus River that will be inundated by the Project.

10. Air Quality. The Project does not affect air quality except during construction, when there may be fugitive dust emissions, vehicle exhaust emissions, and open burning of clearing debris. The FERC license required a Reservoir Clearing Plan which provided for obtaining a Washington Department of Natural Resources burning permit,

in compliance with the State Smoke Management Plan to minimize impact on visibility, and an Erosion Control Plan to reduce dust.

11. Other Consultation, Review and Permit Requirements.

The Project is not expected to affect any element of the National Trails System; wilderness areas; areas of ecological, scenic, recreational, or aesthetic importance; properties acquired or developed with assistance under the Land and Water Conservation Fund; coastal zones; or farmlands. It does not contribute to global warming. No permits for rights-of-ways on public lands or structures in navigable waters are required. The District will follow all regulations for solid and hazardous waste.

C. Economic Factors

1. Transmission System. One of BPA's primary responsibilities is the safe, reliable, and efficient operation and maintenance of the Federal Columbia River Transmission System (FCRTS). BPA therefore participates in the interconnection and integration of all resources with FCRTS, regardless of whether the resources are acquired by BPA or another utility.

BPA has adopted trial standards for the interconnection of generating resources to assure system reliability, the safety of BPA employees and others, and the efficient delivery of power. Any resource to be interconnected/integrated with FCRTS shall be in compliance, as applicable, with the trial standards, the Western Systems Coordinating Council and Northwest Power Pool minimum operating reliability criteria, the BPA reliability criteria, the National Electrical Code (ANSI C1), National Electrical Safety Code (ANSI C2), State and local electrical codes, and the general

contract provisions of the power purchase agreement between BPA and the District, concerning the Cowlitz Falls Hydroelectric Project.

2. BPA Rates. BPA is concerned with keeping the rates charged to regional ratepayers as low as possible. In the event the Project becomes operational, the cost to reimburse up to approximately \$180 million in bonds issued by the District to finance the project until 2030 will not be distinguishable within BPA's rates. The Project construction costs of about \$130 million results in a resource with a levelized life cycle cost of about 30 mills which is considered cost-effective for the region. In the event fish screens are required to be emplaced at a later date, the expected cost of up to \$5 million may result in a 1 mill increase in the levelized project cost. The Northwest Power Planning Council has also determined that the Project is a cost-effective resource available to the region and that the Project has mitigatable environmental consequences.

D. Legal Factors

Section 6(i) of the Northwest Power Act describes BPA's oversight responsibilities for resources it acquires. The acquisition contract for the Cowlitz Falls Project will include provisions for timely construction, scheduling, completion, and operation of resources (6(i)(1)); and for insuring that the costs are as low as reasonably possible, consistent with sound engineering, operating, and safety practices, and the protection, mitigation, and enhancement of fish and wildlife, including related spawning grounds and habitat affected by development of such resource (6(i)(2)).

BPA will exercise oversight, inspection, audit, and review of all aspects of construction and operation (6(i)(3)). Also in

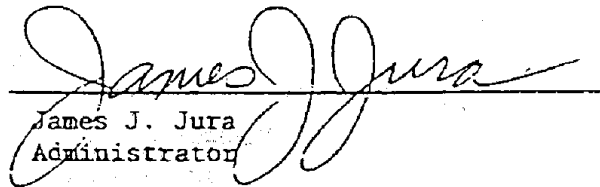
accordance with the Northwest Power Act, the contract will contain provisions assuring that BPA has the authority to approve all costs of, and proposals for, major modifications in Project construction, scheduling, or operations, including major contract awards or modifications, and assuring that BPA is provided with all necessary current information to evaluate such construction and operation (6(1)(4)).

Since BPA expects that its oversight activities will directly reflect its share of Project risk, the nature and extent of BPA oversight will be described in the Cowlitz Falls Project purchase agreement.

The assessment of Project risk was incorporated in the resource evaluation process, including the assessment of both price and non-price factors. The placement of various Project risks among BPA and the sponsor (the District) and the costs associated with the assumption of such risks, were part of the determination of both cost-effectiveness and desirability of the Project.

Issued in Portland, Oregon, on

*January 28, 1991*

  
James J. Jura  
Administrator