# Record of Decision for the Electrical Interconnection of the BP Cherry Point Cogeneration Project

#### **DECISION**

The Bonneville Power Administration (Bonneville) has decided to implement the proposed action identified in the BP Cherry Point Cogeneration Project Final Environmental Impact Statement (FEIS) (DOE/EIS-0349, August 2004). Under the proposed action, Bonneville will offer contract terms for interconnection of the BP Cherry Point Cogeneration Project (Project) with the Federal Columbia River Transmission System (FCRTS), as requested by BP West Coast Products, LLC (BP) and proposed in the FEIS. The proposed Project involves constructing and operating a new 720-megawatt (MW) natural gas-fired, combined-cycle power generation facility at a 265-acre site adjacent to BP's existing Cherry Point Refinery between Ferndale and Blaine in northwestern Whatcom County, Washington. A new switchyard would be constructed at the Project site, connecting to a new 230-kilovolt (kV) double-circuit transmission line 0.8 miles east to Bonneville's existing 230-kV Custer-Intalco No. 2 transmission line. From there, Bonneville would add another 230-kV circuit to Custer Substation by rebuilding the single-circuit Custer-Intalco No. 2 line to double-circuit, a distance of about 5 miles.

A Large Generation Interconnection Agreement (LGIA)with BP would provide for interconnection of the BP Cherry Point Cogeneration Project with the FCRTS and electrical generation in the Bonneville Control Area. The agreement would also provide for construction of interconnection facilities (*i.e.*, adding or modifying electrical equipment at the Cherry Point Switchyard and at Custer and/or Intalco Substations, and rebuilding the Custer-Intalco No. 2 transmission line) and continued operations and maintenance of interconnection equipment at BP expense.

Bonneville has also decided to offer contract terms for firm transmission services from the point of interconnection to the Mid-Columbia trading hub in central Washington (400 megawatts) and to John Day Substation in north central Oregon (200 megawatts). No additional construction is necessary to offer these transmission services.

## **BACKGROUND**

Bonneville is a Federal agency that owns and operates the majority of the high-voltage electric transmission system in the Pacific Northwest, the FCRTS. Bonneville has adopted an Open Access Transmission Tariff for the FCRTS, consistent with the Federal Energy Regulatory Commission's (FERC) *pro forma* open access tariff.\* Under Bonneville's tariff, Bonneville offers generation interconnection to the FCRTS to all eligible customers on a first-come, first-

<sup>\*</sup> Although Bonneville is not subject to FERC's jurisdiction, Bonneville voluntarily follows an open access, non-discriminatory transmission policy. This course of action demonstrates Bonneville's commitment to non-discriminatory access to its transmission system and ensures that Bonneville will receive non-discriminatory access to the transmission systems of utilities that are subject to FERC's jurisdiction.

served basis, subject to an environmental review under the National Environmental Policy Act (NEPA).

In February 2001, BP submitted requests to Bonneville for interconnection of the proposed Project with the FCRTS and for related firm transmission services. In considering the requests, Bonneville prepared an EIS to evaluate the environmental effects of the proposed interconnection and related actions, issuing the FEIS in August 2004. Bonneville must respond to the requests consistent with Bonneville's tariff.

# PROJECT DESCRIPTION

The BP Cherry Point Cogeneration Project would be constructed on a site owned by BP adjacent to BP's existing Cherry Point Refinery near Ferndale and Blaine in northwestern Whatcom County, Washington. Generating components of the project include three combustion turbine generators fueled with natural gas, three heat recovery steam generators, and one steam turbine. Additional facilities include a new switchyard with 230-kV step-up transformers, a new 0.8-mile-long 230-kV transmission line, a new natural gas compressor station, new water supply and wastewater discharge piping, and various ponds, tanks, buildings, exhaust stacks, parking, and storage areas. Natural gas to fuel the combustion turbines would be supplied primarily through connection with an existing gas pipeline crossing BP property.

The BP Cherry Point Cogeneration Project would use between 2,244 and 2,316 gallons per minute (gpm) of water for steam production. This industrial water would be water recycled from Alcoa Intalco Works if available, or from the Public Utility District No. 1 of Whatcom County. BP would treat industrial wastewater in the refinery's wastewater treatment system prior to discharge to the Strait of Georgia. The facility would use an additional 1 to 5 gpm of potable water supplied by Birch Bay Water and Sewer District. Sanitary wastewater would be routed to Birch Bay Sewer District's treatment plant for treatment and discharge to the Strait of Georgia.

The BP and Bonneville would jointly construct a switchyard at the Project site, with Bonneville responsible for the 230-kV equipment and BP responsible for lower-voltage equipment including "step-up" transformers. Bonneville would also construct a new 0.8-mile-long double-circuit 230-kV transmission line from the switchyard to Bonneville's 230-kV Custer–Intalco No. 2 transmission line on a 150-foot-wide right-of-way encompassing about 15 acres. From there to Custer Substation about 5 miles northwest, Bonneville would remove the existing single-circuit transmission line and, within the same 125-foot-wide right-of-way, replace it with a double-circuit transmission line. The new double-circuit transmission line structures may be designed with either lattice or tubular steel.

#### **ALTERNATIVES CONSIDERED**

Two primary alternatives were evaluated in the EIS: (1) The No Action alternative and (2) the proposed action, with two options for interconnection, (a) a Remedial Action Scheme and (b) adding a new 230-kV circuit from the point of interconnection to Custer Substation using either of two design options. Other alternatives were considered but rejected for various reasons, as explained in the EIS.

# **Proposed Action**

The action proposed by Bonneville and evaluated in the EIS was to provide the generation interconnection requested by BP. A reasonably foreseeable consequence of granting this interconnection is development of the proposed BP Cherry Point Cogeneration Project. Although Bonneville has no jurisdiction or supervision over, or ownership or financial involvement in, the proposed generation facility, the potential environmental effects associated with this facility have been evaluated in the EIS and considered by Bonneville decision-makers.

Bonneville and BP would jointly construct the Cherry Point Switchyard at the project site, and Bonneville would construct a double-circuit 230-kV transmission line from there 0.8 miles east to Bonneville's existing single-circuit 230-kV Custer-Intalco No. 2 transmission line. Between that intersection and Bonneville's existing Custer Substation, about 5 miles northwest, Bonneville would replace the existing single-circuit transmission line with a double circuit line, *i.e.*, two circuits of three conductors each, all suspended by one set of transmission structures. The line would be built using structures designed with either lattice or tubular steel within the existing right-of-way. The alternative to constructing the additional circuit to Custer Substation was a Remedial Action Scheme that would have required an agreement between BP, Alcoa Intalco Works, and Bonneville; no such agreement has been reached.

# **No Action Alternative**

As an alternative to the interconnection, Bonneville considered not providing the services requested. Without the requested interconnection, the BP Cherry Point Cogeneration Project could not operate and would therefore not be built. Because there would be no change in existing conditions, the No Action alternative is the environmentally preferred alternative.

### **RATIONALE FOR DECISION**

I have decided it is in the best interest of Bonneville and the Pacific Northwest to offer an LGIA terms for interconnection of the BP Cherry Point Cogeneration Project into the FCRTS and related additional contract terms for firm transmission services. The selected alternative best satisfies relevant factors identified in the EIS:

- Provide an adequate, economical, efficient and reliable transmission system for the Pacific Northwest;
- Follow Bonneville's Open Access Transmission Tariff for non-discriminatory access;
- Comply with Federal environmental and energy laws and policies;
- Achieve cost and administrative efficiency; and
- Minimize impacts on the natural and human environment through site selection and transmission line design.

The BP Cherry Point Cogeneration Project will provide economic and reliable energy, helping to modernize the national energy supply as envisioned by the National Energy Policy. Offering a Large Generation Interconnection Agreement is in accordance with Bonneville's Open Access Transmission Tariff. The Large Generation Interconnection Agreement will include provisions as necessary to ensure the continuing safe, reliable operation of the FCRTS. While rejecting the requested interconnection would not threaten the FCRTS, it would be contrary to Bonneville's Open Access Transmission Tariff and would not enhance the power supply available to the Nation or to the Pacific Northwest.

The interconnection requires constructing an additional 230-kV line into Custer Substation (by rebuilding a section of Bonneville's existing 230-kV single-circuit Custer-Intalco No. 2 transmission line to double-circuit) for continued reliable operation of the transmission system. Bonneville cannot rely on speculation that BP will be able to reach agreement with Alcoa Intalco Works for an acceptable Remedial Action Scheme.

The BP Cherry Point Cogeneration Project EIS identified several potential environmental impacts, and also measures to mitigate those impacts. All significant environmental issues have been resolved. The most significant potential impact identified was permanent loss of approximately 31 acres of wetlands. BP has resolved this issue by developing a wetland mitigation plan in consultation with the U.S. Army Corps of Engineers, the agency responsible for issuing the requisite permit for discharges into waters of the United States. The wetland mitigation plan provides for enhancement of 110 acres of wetlands near the project. BP has also resolved concerns about greenhouse gas emissions, regional air quality, construction material reuse, and site restoration by Stipulated Agreement with the Washington Attorney General's Counsel for Environment. BP has resolved additional concerns about operational noise, heron habitat, and site restoration through a Settlement Agreement with Whatcom County. The Large Generation Interconnection Agreement will include provisions requiring BP to acquire all necessary permits before construction begins, including Washington State energy facility site certification. Bonneville expects BP and the BP Cherry Point Cogeneration Project to comply with terms and conditions of all permits issued. The Large Generation Interconnection Agreement will also include appropriate provisions for remediation of oil or other hazardous substances associated with construction and operation of related electrical facilities in a manner consistent with applicable Federal, State, and local laws. Bonneville will consult further with the Environmental Protection Agency to design and construct related transmission facilities so as to avoid potential adverse impacts to wetlands. I find no unusual environmental circumstances or inconsistencies with Bonneville's environmental and social obligations to warrant rejection of the requested interconnection.

# **MITIGATION**

All practicable means to avoid or minimize environmental harm from the alternative selected have been adopted. These mitigation measures are identified in the EIS. If and when the BP Cherry Point Cogeneration Project is constructed, it would be in accordance with permit conditions specified by appropriate regulatory agencies.

Issued in Portland, Oregon.

NOV 1 0 2004

Stephen J. Wright

Date

Administrator and

Chief Executive Officer