

# Record of Decision for the Electrical Interconnection of the Summit/Westward Project July 2003

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## INTRODUCTION

The Bonneville Power Administration (BPA) has decided to offer contract terms for interconnection of the proposed Summit/Westward Project (“Project”) into the Federal Columbia River Transmission System (FCRTS) at BPA’s Allston Substation. The Project, which has been proposed by Westward Energy, LLC (Westward Energy), involves construction and operation of a 520-megawatt (MW) natural-gas-fired, combined-cycle generating facility. The facility will be located in Columbia County, Oregon, about 4.5 miles north of Clatskanie, Oregon. The decision to offer terms to interconnect the Project is consistent with BPA’s Business Plan Final Environmental Impact Statement (BP EIS) (DOE/EIS-0183, June 1995), and the Business Plan Record of Decision (BP ROD, August 1995). This decision thus is tiered to the Business Plan ROD.

## BACKGROUND

BPA is a federal agency that owns and operates the majority of the high-voltage electric transmission system in the Pacific Northwest. This system is known as the FCRTS. BPA has adopted an Open Access Transmission Tariff for the FCRTS, consistent with the Federal Energy Regulatory Commission’s (FERC) *pro forma* open access tariff.<sup>1</sup> Under BPA’s tariff, BPA offers transmission interconnection to the FCRTS to all eligible customers on a first-come, first-served basis, with this offer subject to an environmental review under the National Environmental Policy Act (NEPA).

In January 2001, Westward Energy submitted a transmission interconnection request to BPA for interconnection of the proposed Project at the BPA Allston Substation. Consistent with its tariff, BPA needs to respond to this request. In considering this request, BPA reviewed the environmental analysis in the BP EIS and considered whether offering contract terms was consistent with the Market-Driven alternative adopted by the BPA Administrator in the BP ROD. BPA also reviewed and relied on environmental information contained in the State of Oregon Energy Facility Siting Council (EFSC) October 3, 2002 Final Order and Site Certificate for the Project, as well as environmental information contained in EFSC’s November 8, 2002 Final Order and Site Certificate for the Port Westward Project.

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<sup>1</sup> Although BPA is not subject to FERC’s jurisdiction, BPA follows the open access tariff as a matter of national policy. This course of action demonstrates BPA’s commitment to non-discriminatory access to its transmission system and ensures that BPA will receive non-discriminatory access to the transmission systems of utilities that are subject to FERC’s jurisdiction.

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## **RELATIONSHIP TO BUSINESS PLAN EIS**

In response to a need for a sound policy to guide its business direction under changing market conditions, BPA explored six alternative plans of action in its BP EIS. The six alternatives were: Status Quo (No Action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. The BP EIS examined each of these six alternatives as they relate to meeting the regional electric energy need in the dynamic West Coast energy market. The analysis focused on the relationships among BPA, the utility market, and the affected environment. The evaluation, which included transmission as well as generation, compared BPA actions and those of other energy suppliers in the region in meeting that need (BP EIS, section 1.7).

In the BP ROD, the BPA Administrator selected the Market-Driven Alternative. Although the Status Quo and the BPA Influence Alternatives were the environmentally preferred alternatives, the differences among alternatives in total environmental impacts were relatively small. Other business aspects, including loads and rates, showed greater variation among the alternatives. BPA's ability to meet its public and financial responsibilities would be weakened under the environmentally preferred alternatives. The Market-Driven Alternative strikes a balance between marketing and environmental concerns, including those for transmission-related actions. It is also designed to help BPA ensure the financial strength necessary to maintain a high level of support for public service benefits, such as energy conservation and fish and wildlife mitigation and recovery activities.

The BP EIS was intended to support a number of decisions (BP EIS, section 1.4.2), including contract terms BPA will offer for transmission interconnection services. The BP EIS and ROD documented a strategy for making these subsequent decisions (BP EIS, Figure 1.4-1 and BP ROD, Figure 3, page 15). BPA's decision to offer terms for interconnecting the Project is one of these subsequent decisions and the subject of this ROD for the Project. BPA reviewed the BP EIS to ensure that offering contract terms for interconnecting this Project was adequately covered within its scope and that it was appropriate to issue a ROD tiered to the BP ROD. This tiered ROD, which summarizes and incorporates information from the BP EIS, demonstrates this decision is within the scope of the BP EIS and ROD. This ROD describes the specific information applicable to this decision to offer contract terms for transmission interconnection of the Project at BPA's Allston Substation, and provides a summary of the environmental impacts associated with the decision with reference to appropriate sections of the BP EIS and BP ROD. This tiered ROD also references information that was incorporated by reference into the BP EIS from BPA's Resource Programs (RP) EIS (DOE/EIS-0162, February 1993). The RP EIS contains an analysis of environmental effects and mitigation for combustion turbines, gas pipelines, and associated transmission. Lastly, this ROD summarizes and references information as appropriate from the EFSC Site Certificates and Final Orders referenced above to clarify where and how the site-specific environmental consequences described in the BP EIS will occur.

## **PROJECT DESCRIPTION**

Westward Energy proposes to construct and operate the proposed Project, which is a 520-MW natural-gas-fired, combined-cycle, combustion-turbine power generation plant. The Project site is located in Port Westward, which is an industrial area on property owned by the Port of St. Helens (the “Port”), and contained within the Port’s service boundaries. The site is located in Sections 15 and 22, Township 8 North, Range 4 West, Willamette Meridian, Columbia County, Oregon. It is about 4.5 miles north of the town of Clatskanie, Oregon and about 0.25 miles south of the Columbia River. The parcel to be leased from the Port includes up to 53 acres, about 20 acres of which would be occupied by the Project and switchyard. The site is essentially flat, with an average elevation of approximately 25 feet above mean sea level.

The Project’s generation facility would consist of two Siemens Westinghouse 170-MW combustion turbine (CT) generators, two heat recovery steam generators (HRSG) with duct burners, and one Siemens Westinghouse 180-MW steam turbine generator.

Natural gas fuel for the plant would be delivered to the site via interconnection with the existing Kelso-Beaver Pipeline located about one-half mile west of the facility site. The proposed interconnecting pipeline would be approximately 16 inches in diameter and would be located in a 25 foot right-of-way about 5,100 feet long in existing roadways in Sections 15 and 22. The natural-gas pipeline corridor would occupy an area of about three acres.

Water for operation of the Project would be obtained from new wells to be installed by the Port under an existing Oregon Water Right Permit held by the Port. Connection to the facility would be by means of a buried pipeline 16 to 20 inches in diameter and about 7,500 feet long from the wells to the point of interconnection with the supporting water supply pipeline serving the Project. The water supply pipeline corridor would occupy an area of about one-half acre.

The Project would achieve zero discharge of process wastewater by installing a brine crystallizer system on site. This system would treat concentrated brine from a circulating water treatment plant. This treatment plant would be designed to recover essentially all water for reuse and to direct the waste stream to the brine crystallizer. Two storage ponds would be constructed on site to provide temporary storage of wastewater in the event the brine crystallizer was to become inoperative. One pond would be about 2.71 acres, and the other would be about 0.9 acres. When the brine crystallizer was again operational, any wastewater stored in the ponds would be recirculated back to the brine crystallizer system for treatment. There are no plans to use the storage ponds for long-term storage.

The Project would deliver electric power to the regional transmission grid at BPA’s Allston Substation, located about 10 miles south of the site, by interconnecting with a 230-kV transmission line to be constructed by Portland General Electric (PGE). This PGE transmission line would be constructed to serve PGE’s proposed Port Westward Generating Project, which is PGE’s own proposed generation facility to be located at Port Westward. PGE’s line would extend from BPA’s Allston Substation to Port Westward. In addition to interconnecting PGE’s

Port Westward project, the PGE line would terminate at a “dead-end” structure on the Project site. The Project would construct a single-circuit 230-kV transmission line, about 1000 feet long, entirely on the 53-acre parcel leased from the Port, to establish a connection to the PGE constructed line.

### **Potential Project Design Changes**

Since the issuance of the EFSC Site Certificate for the Project on October 3, 2002, Westward Energy has identified three possible design changes to the Project. While Westward Energy considers the Project as currently permitted by EFSC to be commercially and economically viable, these possible changes would be intended to potentially incrementally enhance the economics of the Project. These proposed changes are considered to be speculative at this time and would require amendments to Summit’s current EFSC Site Certificate before they could occur. Because of the uncertainty surrounding whether these design changes will actually occur, BPA is making a decision in this ROD based on the currently permitted project. If the potential changes identified by Westward Energy do occur, BPA would conduct additional environmental evaluation under NEPA of these changes as appropriate, and could potentially reconsider and/or revise this ROD as necessary. The potential changes to the project, as described in a June 6, 2003 letter from Westward Energy to BPA, are summarized below.

### **Wastewater Discharge**

The currently permitted Project describes a zero discharge plant that would recycle process wastewater through a brine crystallizer system. The Port has since been granted a National Pollutant Discharge Elimination System (NPDES) permit by the Oregon Department of Environmental Quality (DEQ), which allows discharge of process wastewater of Port industrial facilities into the Columbia River. Although uncertain at this point, use of the Port’s wastewater disposal system is under consideration by Westward Energy. There are other Port industrial facilities that intend to rely on this wastewater disposal system, including PGE’s Port Westward Generating Project and the Cascade Grain Products ethanol plant.

The Port’s wastewater disposal system would include a pipeline that would collect wastewater from the various industrial users, a pump station, and an outfall structure. The pipeline would be about 5,200 feet long and would be constructed of 18- and 21-inch polyvinyl chloride (PVC) pipe. The system would be capable of carrying approximately 7 cubic feet per second of wastewater. The outfall structure would be located in the Columbia River, at approximately River Mile 53. The structure would be composed of a pipe, diffuser, and concrete support saddles. The entire length of the structure from the pump station to the end of the diffuser would be approximately 2,800 feet. Roughly 2,400 feet of this structure would be located on land, with the remaining 400 feet located in the water. No domestic sewage would be discharged to the Port system. The Project is not proposing to alter the plant for treatment or disposal of sanitary wastes, as set forth in its existing site certificate.

### **Wetland Fill and Removal Area**

The Project's current site certificate authorizes the fill of 0.48 acre of jurisdictional wetlands and other waters on the Project site. The Oregon Division of State Lands (DSL) and the U.S. Army Corps of Engineers (Corps) have both authorized this fill amount. Since then, concerns have been raised by Project engineers that the current site plan does not allow sufficient room to move equipment and materials on the site without encroaching on wetland areas. In addition, the site is bounded on two sides by drainage ditches with steep banks, and increasing the buffer between those ditches and the construction area likely would help protect worker safety. Finally, possible improvements to the on-site transmission "collector" yard would require a slightly larger yard, potentially requiring additional fill. Each of these design issues could be solved through engineering or operational measures that do not require additional fill. Such measures would, however, increase the risk that construction may inadvertently encroach upon protected wetlands.

Although uncertain at this point, Westward Energy may apply to DSL and the Corps for authorization to increase the fill and removal area for the Project by a total of 1.25 acres, from 0.48 acre to 1.73 acres. Westward Energy has indicated that additional impacts to wetlands would be fully mitigated by an increase in the size of the dedicated wetland acreage on the Project site. To maximize the avoidance of wetlands if a request for authorization of additional fill is pursued, Westward Energy has indicated that it likely would move the overall Project footprint approximately 50 feet to the south.

### **Alternative Water Supply Source**

The current EFSC Site Certificate for the Project describes the proposed water supply coming from new "Ranney" wells adjacent to the Columbia River to be constructed by the Port. The Port has a permit from the Oregon Water Resources Department authorizing the Port to draw up to 30 cubic feet per second for municipal and industrial purposes from various diversion points identified in the permit. The Project would require up to seven cubic feet per second.

Because of concerns over the potential silica content of water from the Ranney wells, the Port is now considering an alternate raw water intake design that would include direct surface water withdrawals from the Columbia River. Such withdrawals are authorized by the Port's existing water right permit. Implementing direct surface water withdrawals would involve demolition of an existing structure in the River, and construction of a new pump station and delivery system. The surface water intake system would be sized to meet the needs of the Project, the PGE Port Westward Generating Project, the Cascade Grain ethanol plant, and a future fourth industrial plant to be located at Port Westward. However, it is uncertain at this time whether the Port will be able to permit the new intake structure, and the existing permitted water supply option remains viable for supplying water to the Project.

### **Potential Transmission Interconnection Option**

On July 10, 2003, Westward Energy submitted a request to EFSC to amend its October 3, 2002, Site Certificate to include an option of using a different transmission service provider and route, which would result in a different interconnection point for the Project than is currently provided for in the Site Certificate. However, it is uncertain whether this request to amend the Site Certificate will be approved by EFSC, and BPA has not received a similar request to allow for an optional interconnection point for the Project. BPA's decision in this ROD thus is based on the transmission interconnection that is provided for in the Site Certificate--i.e., interconnection into the FCRTS at BPA's Allston Substation--and does not include the possible optional interconnection point. If EFSC approves Westward Energy's request to amend its Site Certificate and BPA receives a request from Westward Energy for an optional interconnection point, BPA would need to conduct an additional interconnection facility study to examine the system requirements and costs associated with the optional interconnection. If such a change proves feasible, BPA would conduct additional environmental evaluation under NEPA of this change as appropriate. In order to make a decision concerning whether to allow this optional interconnection, BPA would need to prepare and issue a new ROD after appropriate consideration of potential environmental effects. A summary description of the possible optional interconnection for the Project is provided below.

The optional transmission interconnection would involve the interconnection of the Project into the FCRTS at BPA's Driscoll switchyard, located approximately 17 miles from the Project. Under this option, the Clatskanie People's Utility District (CPUD) would construct a new substation (the "Bradbury Substation") near the Project in the Port Westward industrial area, as well as a new 230 kV line from the Bradbury Substation to an existing CPUD substation that interconnects to the FCRTS. The Bradbury Substation would be located adjacent to the temporary laydown area for the Project on land that the CPUD would acquire. CPUD would use the Bradbury Substation to provide service to new industrial loads (such as the Project) that are being located in the Port Westward industrial area and to provide reinforcement for the existing CPUD electric distribution system in the Clatskanie and Delena areas. In order to connect the Project, an approximately 850-foot-long transmission line would be strung from the Project to the Bradbury Substation; this line would not require the construction of any poles or towers.

The new 230 kV line included in this option would connect to the CPUD's existing 230 kV Wauna Substation near BPA's Driscoll switchyard. The Wauna Substation is interconnected to the FCRTS through the BPA Driscoll switchyard.

## **PUBLIC PROCESS AND CONSIDERATION OF COMMENTS**

Consistent with BPA's strategy for tiering appropriate subsequent decisions to the BP ROD, a public process for the Project was conducted. Review processes for EFSC's Site Certificate and other permits for the Project generated site-specific environmental information about the Project and provided several opportunities for public comment. Site-specific impacts that would result from the Project are of the type and magnitude reported in the BP EIS and the RP EIS.

Public participation opportunities included:

- The Oregon Office of Energy (OOE) held an informational public meeting on the proposed Project on April 2, 2001, in Clatskanie, Oregon.
- On April 3, 2002, OOE sent written notice to adjacent property owners and interested persons, requesting comments on Westward Energy's completed Site Certificate Application for the Project, and announcing a public information meeting on April 18, 2002. This written notice also included a "Notice of BPA Review" describing BPA's role and interconnection decision to be made.
- OOE held a public information meeting April 18, 2002, at Clatskanie High School. BPA participated in this meeting with a presentation and request for comments on BPA's interconnection decision. No comments were received by BPA.
- The Oregon DEQ held a separate formal hearing, April 18, 2002, at the Clatskanie High School, (prior to the OOE public meeting) to take comments on Westward Energy's application for an Air Contaminant Discharge Permit for the Project.
- On August 27, 2002, OOE conducted a formal public hearing on the proposed order for the Project.

## **ENVIRONMENTAL ANALYSIS**

Consistent with the BP ROD, the BP EIS was reviewed to determine whether offering terms to interconnect the Project is adequately covered within its scope. The BP EIS alternatives analyzed a range of marketing actions and response strategies to maintain a market-driven approach. The BP EIS showed that environmental impacts are determined by the responses to BPA's marketing actions, rather than by the actions themselves. These market responses include resource development, resource operation, transmission development and operation, and consumer behavior. .

BPA's RP EIS described generating resource types, their generic environmental effects on a per-average-MW (per-aMW) basis, and potential mitigation. The discussion for combustion turbines (including gas extraction, pipelines, and generation) is included in section 3.2.2.2. The RP EIS also described the environmental effects and potential mitigation associated with the construction or upgrade of transmission facilities to integrate the resources with the existing transmission system (section 3.5). The per-aMW impacts for combustion turbines (RP EIS, Table 3-26) were incorporated and updated in the BP EIS (Table 4.3-1). The BP EIS contains an analysis of generic environmental impacts, including resource development and operation (section 4.3.1) and transmission development and operation (section 4.3.2).

The Market-Driven Alternative anticipated unbundling of products and services, constructing transmission facilities for requests for non-federal power transmission, and providing transmission access to wholesale power producers (section 2.2.3). The BP EIS also noted that, under the Market-Driven Alternative, new transmission requests would depend more on customer requests than on new resource development by BPA (section 4.2.3.3).

In light of these analyses contained in the BP EIS and RP EIS, the interconnection of the Project clearly falls within the scope of the BP EIS. The following describes the site-specific impacts of the Project related to the transmission interconnection as well as the plant itself, and provides additional information on potential cumulative air quality impacts from the Project.

### **Site Impacts**

As discussed above, BPA's RP EIS and BP EIS provided general information about the environmental impacts of combustion turbines and their associated pipelines and transmission facilities. Clarifying information from the Oregon OOE process and subsequent EFSC Site Certificates and Final Orders shows that the potential impacts of the Project are within the parameters projected in BPA's RP EIS and BP EIS and are consistent with Federal, State, and local environmental regulations.

### **Transmission Line Impacts**

For delivery of the power to BPA's Allston Substation approximately 10 miles south of the site, Westward Energy would construct a single-circuit 230-kV transmission line about 1,000 feet long, entirely on the parcel leased from the Port, to establish connection with a 230-kV transmission line to be constructed by PGE for potential use for its Port Westward energy facility. Site-specific environmental impact information for the PGE transmission line to BPA's Allston Substation was included in the EFSC site certificate for PGE's Port Westward Project, dated November 8, 2002.

Land Use – The proposed PGE transmission line would be in an existing 250-foot wide transmission corridor with currently operational lines that were installed in the early 1970s. The new line would be routed on the unused north half of the right-of-way. The proposed line extends through land that is predominantly zoned as Resource Industrial Planned Development and Primary Forest, although small portions are zoned for agriculture and residential use. Included with the Port Westward Site Certificate is a Land Use Standard Analysis, which addresses the consistency of the transmission line with local zoning and statewide planning goals. Before beginning construction of the new line, PGE would apply for and obtain all appropriate land use permits from Columbia County.

Fish, Wildlife, and Vegetation – A Biological Assessment (BA) was prepared for the Port Westward Project that includes the transmission line corridor. The BA provides potential impact information on threatened or endangered fish, wildlife, and plants species listed and proposed for listing under the Endangered Species Act (ESA). The BA determination was that the Port Westward Project and supporting facilities “may affect, but is not likely to adversely affect” any of the listed or proposed species. The U.S. Fish and Wildlife Service concurred with these findings in a letter dated March 20, 2003.

The vicinity of the proposed transmission line is known to be used by raptors and great blue heron. Although this wildlife is not known to be present within the transmission corridor, the Port Westward Site Certificate requires that pre-construction surveys be conducted, that Oregon Department of Fish and Wildlife (ODFW) be consulted with if any potential impacts are identified, and that ODFW-approved mitigation be provided as necessary.



The proposed transmission line would be located within an existing transmission corridor that has largely been cleared for the existing line within the corridor. As such, impacts to vegetation would be expected to be minimal. The Port Westward Site Certificate requires that the transmission line avoid and minimize potential impacts to riparian shrub and forested habitats. For unavoidable impacts to these habitats, compensatory mitigation through revegetation is required.

Wetlands – Delineation field studies were conducted for the Port Westward to BPA’s Allston Substation transmission line corridor in October 2001, with follow-up visits in February 2002, and for the BPA Allston Substation area in February 2002. Nine wetlands along the transmission corridor were identified. DSL concurred with the final delineation on April 3, 2002 (DSL Determination #01-0459). Although the majority of wetland areas would be avoided by selectively placing transmission towers and other facilities, construction of the proposed line would be expected to affect approximately 0.02 acres of wetlands. Before beginning construction of the Port Westward to BPA Allston Substation Transmission Line, Port Westward must obtain a Corp/DSL Joint Removal/Fill Permit. Attached to the Port Westward Site Certificate is a draft DSL permit, which authorizes fill of wetlands for the proposed line and identifies appropriate compensatory mitigation for these wetlands impacts.

Historic/Archeological Resources – Portions along the transmission line corridor between PGE’s site and BPA’s Allston Substation were surveyed in 1974, and archaeological site 35CO15 was recorded along the alignment. More recently, in 2001, Oregon State Historic Preservation Office (SHPO) archeologist Dr. Leland Gilson, walked portions of the existing corridor. Although the area was heavily overgrown, Dr. Leland submitted a comment in October 2001, that the area was “surveyed for archaeological sites—negative.” Dr. Leland also noted in a subsequent comment in April 2002 that while there is a nearby site (presumably site 35CO15), the corridor is covered with dredge fill to a substantial depth, and that auger probes failed to hit cultural fill.

However, to protect any potential cultural resources that may be present, EFSC included specific conditions, which include completion of an archaeological survey of the transmission corridor in consultation with the SHPO and appropriate tribes, before construction of the line began. In light of the stated conditions, EFSC determined that construction of the energy facility and its related or supporting facilities would have no effect on identified cultural resources and that the applicant meets the historic, cultural and archaeological resources standard.

Visual Aesthetics – The transmission line would be constructed parallel to existing transmission lines in the existing corridor. This transmission corridor incorporates several roadway crossings. Forest cover, steep terrain, and the steep winding nature of most of the roadways all serve to limit views from the roadway crossings. The proposed transmission line would not significantly alter existing visual aesthetics.

## **Project Site Impacts**

Information about potential environmental impacts from construction and operation of the proposed generation plant was obtained primarily from the EFSC October 3, 2002 Final Order and Site Certificate for the Project.

Land Use - The proposed project site is located in the Port Westward industrial area. Existing and adjacent land uses near the proposed plant site are zoned primarily for industrial use. The Project complies with the substantive criteria from Columbia County's acknowledged comprehensive land use plan.

The natural-gas pipeline would interconnect with the existing Kelso-Beaver Pipeline located about one-half mile west of the facility site. The proposed interconnecting pipeline would be located in a 25 foot right-of-way about 5,100 feet long. All ground disturbance activities in connection with the gas pipeline would be limited to the ground area occupied by existing roadways.

The proposed water supply pipeline would supply water to the facility from new wells to be installed by the Port. Connection to the wells would be by means of a buried pipeline about 7,500 feet long from the wells to the point of interconnection with the supporting water supply pipeline serving the Project. All ground disturbance activities in connection with construction of the water supply pipeline would be limited to the ground area occupied by existing roadways, except for a small portion (about 600 feet) of the pipeline that extends from the well sites to the roadway.

Air Quality – Temporary emissions would occur during construction of the Project. These emissions will include particulates (dust) and exhaust from construction vehicles and equipment. Similar emissions will result from gas pipeline and transmission line construction activities. These emissions would be of limited duration and minimized by use of Best Management Practices (BMPs).

The energy facility has the potential to emit criteria air pollutants greater than federally established Significant Emission Rates, therefore plant operating emissions would be controlled using the Best Available Control Technology (BACT). Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) will be controlled at the CT combustor and HRSG duct burners with state-of-the-art combustion technology. A Selective Catalytic Reduction (SCR) unit will be used to control NO<sub>x</sub> concentrations in the exhaust gas emitted to the atmosphere. The SCR process will use aqueous ammonia to reduce the NO<sub>x</sub> to Nitrogen and water. Ammonia slip, or the concentration of unreacted ammonia in the exiting exhaust gas, will be limited to levels that are unlikely to cause nuisance conditions. The SCR equipment will include a reactor chamber, catalyst modules, ammonia storage system, ammonia vaporization and injection system, and monitoring equipment and sensors. CO and VOC emissions will not require additional controls due to the advanced design of the combustion system and operational practices. Particulate Matter and SO<sub>2</sub> emissions will be minimized by combusting only pipeline quality natural gas. An Air Contaminant Discharge Permit (ACDP)/Prevention of Significant Deterioration Permit (PSD) was issued for the Project on July 3, 2002.

Wetlands – A wetland delineation identified 12 wetlands covering an area of 17.25 acres in the vicinity of the Project. In addition, the Project site contains several drainage and irrigation ditches. All of the wetlands are palustrine emergent wetlands that have been disturbed by grazing and/or haying. Based on the delineation, the facility would have an impact on 0.35 acre of palustrine emergent wetlands and 0.13 acre of drainage ditches. The impacts would be permanent and would be associated with the construction of the energy facility. Summit estimated that a total of about 5,000 cubic yards of material would be placed within a wetland located in the southwest corner of the property. Summit proposes to compensate for 0.48 acre of unavoidable impacts to wetlands by creating 0.75 acre of palustrine emergent-depressional wetlands on the site.

Socioeconomics and Public Facilities – The Project would be located in the Port Westward industrial area and the analysis area was the area within 20 miles of the project site, particularly communities along the Columbia River and U.S. Highway 30. Communities most likely to be affected by construction and operation of the proposed energy facility include Clatskanie, Columbia County, and the Kelso/Longview area.

Construction of the project is expected to take 18 to 22 months. The construction work force would range from 40 to 130 employees during the first several months of mobilization and site preparation. The peak work force would comprise about 385 employees. Operation of the energy facility would require about 20 permanent workers. Significant increases in permanent population as a result of construction and operation of the facility is not expected. There are about 17 motels in the area with a total of 350 rooms. During construction, a large number of workers are expected to commute to the site on a daily or weekly basis from other communities. During the peak construction period, some temporary housing shortages could occur if a large number of workers attempted to acquire residences within 20 miles of the project site. Trip generation during the peak construction period, is expected to be 555 daily trips and 260 outbound trips during the weekday PM peak hour. When operation begins, the proposed facility would generate 30 daily worker trips and 6 daily truck trips.

During construction, Westward Energy estimates the Project would produce about 310 tons of solid waste. About 296 tons of this waste would be recycled. During operation, the Project would produce about 20 to 30 tons of solid waste per year. The proposed zero-discharge facility would produce about 3,000 gallons of sludge per day (five truckloads per week), which would be shipped to an approved landfill.

Fish, Wildlife and Vegetation – A Biological Assessment (BA) was prepared for the Project to evaluate impacts on species listed and proposed for listing as endangered or threatened under the Endangered Species Act (ESA). Of the listed species, only two species, Columbian white-tailed deer and the bald eagle, were the only species existing in the vicinity of the project. The BA determined that the project and supporting facilities “may affect, but is not likely to adversely affect” these listed or proposed species. In a letter dated June 14, 2002, the U.S. Fish and Wildlife Service concurred with these findings. In addition, the project will have no effect on ESA-listed salmonids or Essential Fish Habitat since it is designed as a “zero discharge” facility and would neither draw water from, nor discharge wastewater or sediment into the Columbia River.

Historic/Archaeological Resources – Six archaeological sites have been identified in the Port Westward industrial area, although no archaeological sites have been found within the Project site or in corridors for related or supporting facilities. The archaeological site nearest the Project is a Native American campsite located about one kilometer to the west. The cultural resources report prepared for the Project concludes that due to the presence of dredge spoil and low-lying ground, the project site is not an area likely to contain archaeological sites. Nearly all of the archaeological sites previously recorded in the analysis area were found on higher ground and close to the Columbia River. None of the previously recorded sites are close to the project area, no prehistoric or historic-period artifacts were found during a pedestrian survey of the site, and there was no evidence of archaeological deposits. Related and supporting pipelines would be installed largely in existing roadways.

During preparation of the cultural resources report for the Project, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indian Reservation of Oregon, and the Chinook Tribe in Washington were contacted regarding any potential cultural resources in the vicinity of the proposed project site. None of these tribes identified any Native American cultural resources within the analysis area.

Visual Aesthetics – The proposed facility would be in an area zoned primarily for industrial use and would not be visible from any scenic or aesthetic resources identified in the area. The Project would be visible from some homes along the Columbia River in Washington and, like other industrial activities at Port Westward, would decrease the rural character of the view from those homes.

### **Cumulative Impacts**

During the energy crisis of 2000 and 2001, a number of generation developers began discussing generation projects that could possibly be integrated into the FCRTS. These projects ranged from the highly speculative to the near certain to occur. In 2001, BPA initiated a Regional Air Quality Modeling Study<sup>2</sup> (Air Study) to provide clarifying information about the potential cumulative impacts of these potential projects on air quality. The scope of the Phase I Air Study included proposed and under consideration power plants in Washington, the northern half of Oregon, and the northern portion of Idaho. The highly-conservative evaluation addressed potential air quality impacts of more than 45 natural-gas-fired combustion turbines representing more than 24,000 MW in capacity. The analysis assumed that all plants, including peaking plants, were operating at peak load with their primary fuel for the entire simulation period. The CALPUFF model was used to assess power plant sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), and particulate matter nominally 10 microns and less (PM<sub>10</sub>). Results were compared against established criteria for human health, *i.e.*, the National Ambient Air Quality Standards (NAAQS) and the Prevention of Significant Deterioration (PSD) Significant Impact Levels (SILs), and the environment (nitrogen and sulfur deposition as well as visibility in sensitive areas<sup>3</sup>).

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<sup>2</sup>Regional Air Quality Modeling Study, Bonneville Power Administration, July 2001. The Air Study can be found at <http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2>.

<sup>3</sup> Sensitive areas include NW class I areas, wilderness areas, and the Columbia River Gorge National Scenic Area.

The Phase I Air Study suggested that the proposed power projects would probably not significantly contribute to sulfur and nitrogen deposition in Class I areas, the Class I PSD Increments, regional Class II PSD Increments or regional concentrations in excess of the NAAQS. The model simulations did suggest that the proliferation of proposed projects in the study area could potentially degrade visibility within Class I and Scenic Areas if all the projects become operational. Of all the parameters evaluated in the study<sup>4</sup>, visibility was the only criteria consistently exceeded.

When the 28 projects proposed as of 2001, to be energized before 2004 (approximately 11,000 MW in total capacity), were modeled, regional haze from particulate and NOx emissions potentially affected the majority of Class I/Scenic/Wilderness Areas. However, haze is not currently regulated, although some Federal Land Managers have issued guidelines for haze<sup>5</sup>. In addition, the Phase I Air Study substantially overestimated potential effects to regional visibility and haze because many of the modeled projects have subsequently been cancelled, and only a handful have been or will be constructed and energized by 2004. Furthermore, as the regional need for resources grows in future years, it is likely that a portion of this need will be met with renewable resources such as wind energy, rather than combustion turbine plants. There are also transmission limitations for the number of resources that can be reliably integrated. Therefore, actual impacts will not be as frequent or adverse as those predicted in the Phase I Air Study.

Phase II of the Air Study, examining the Summit Project's contribution to the overall regional haze impacts predicted for the larger group of proposed power projects, found that the Project would not noticeably contribute to regional haze at any of the Class I areas within the BPA Service Area, the Columbia River Gorge National Scenic Area, or the Mt. Baker Wilderness when the facilities considered in the analysis are fired by natural gas. However, the nearby Chehalis Generation Facility, which is currently under construction, may use #2 fuel oil as a backup fuel supply on an infrequent and intermittent basis. Emissions from these two projects could result in noticeable regional haze in Mt. Rainier National Park when the Chehalis Facility is using fuel oil. Because fuel oil would be used infrequently, such occurrences are similarly expected to occur infrequently. In addition, the Phase II analysis did not consider whether meteorological conditions causing the greatest impacts actually coincide with good "natural" background visibility, and visibility-obscuring background aerosol concentrations will likely be higher than considered in the analysis. Furthermore, fog, low clouds, precipitation, and other obscuring weather phenomena often further reduce visual ranges. Thus, in practicality, the effect of the Project in combination with other projects considered in the analysis on regional haze likely would not be perceptible.

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<sup>4</sup> Other study criteria include: National Ambient Air Quality Standards, New Source Review/Prevention of Significant Deterioration (NSR/PSD) increment consumption, NSR/PSD Significant Impact Levels, and nitrogen and sulfur deposition.

<sup>5</sup> Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report, December 2000. U.S. Forest Service, National Park Service, U.S. Fish and Wildlife Service.

### **Mitigation**

The Council on Environmental Quality's Regulations for Implementing NEPA (40 CFR 1505.2 C) require a ROD to "state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not."

Specific resource mitigation conditions to avoid or minimize environmental harm have been identified through the EFSC site certification process, and also summarized in site specific impacts listed above. The Project has adopted all identified feasible mitigation measures to avoid or minimize environmental impacts from the Project.

### **PUBLIC AVAILABILITY**

This ROD will be distributed to all interested parties and affected persons and agencies. Copies of the BP EIS, BP ROD, and additional copies of this Summit/Westward Project ROD are available from BPA's Public Information Center, P.O. Box 12999, Portland, Oregon, 97212. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520, or by accessing website [www.efw.bpa.gov](http://www.efw.bpa.gov).

### **CONCLUSION**

BPA has decided to offer contract terms for interconnection of the Summit/Westward Project into the FCRTS at BPA's Allston Substation. These contracts will include a Generation Interconnection Agreement that provides for interconnection of the Project with the FCRTS, the operation of Summit in the BPA Control Area (including control area services such as generation imbalance service), the maintenance of reliability of the FCRTS and interconnected systems, and a Construction, Operation and Maintenance Agreement that provides for the construction of the interconnection facilities and their operation and maintenance.

As described above, BPA has considered both the economic and environmental consequences of taking action to integrate power from the Project into the FCRTS. This decision is:

- within the scope of environmental consequences examined in the BP EIS;
- in accordance with BPA's transmission access tariff; and
- in accordance with BPA's statutory authority to make available to all utilities any capacity in this system determined in excess to that required by the United States (16 U.S.C. 838d).

BPA will take measures to ensure the continuing safe, reliable operation of the FCRTS. This ROD identifies all practicable means to avoid or minimize environmental harm that might be caused by the integration of the Project into the FCRTS. BPA adopts and will undertake, or require the Project to undertake, the mitigations identified in this ROD, including mitigations imposed in the permits and decision documents of regulatory agencies such as FERC.

The Project has or will soon fulfill all Federal, State, and local requirements for environmental compliance such as air emissions, water, wetlands, wildlife species, cultural/historic resources, and land use. Appropriate mitigation measures, such as BACT for air emissions and compensatory wetlands for impacts wetlands, are included.

BPA contracts providing for integration of power from the Project into the FCRTS at BPA's Allston Substation shall include terms requiring that all pending permits be approved before the contract is implemented. The Project will comply with terms and conditions of all permits issued pertaining to the Project. BPA's contracts 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.

Issued in Portland, Oregon.

<u>/s/ Stephen J. Wright</u>	<u>July 25, 2003</u>
Stephen J. Wright	Date
Administrator and	
Chief Executive Officer	

Attachment:  
Project Location Map