(6450-01-P)

## **DEPARTMENT OF ENERGY**

(Docket No. PP-299)

# Record of Decision Port Angeles-Juan de Fuca Transmission Project

**AGENCY**: Bonneville Power Administration and the Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy

**ACTION**: Record of Decision (ROD).

SUMMARY: The Department of Energy (DOE) announces its decision to implement its Proposed Action and Preferred Alternative as identified in the Port Angeles-Juan de Fuca Transmission Project Final Environmental Impact Statement (DOE/EIS-0378, October 2007). Sea Breeze Olympic Converter LP (Sea Breeze) applied to DOE for authorizations and approvals necessary to construct the United States (U.S.) portion of an international electric power transmission cable from the greater Victoria area, British Columbia, Canada, across the Strait of Juan de Fuca to Port Angeles, Washington, United States. Under the Proposed Action, the Bonneville Power Administration (BPA), an organizational element within DOE, will offer contract terms to Sea Breeze for interconnection of the cable with the Federal Columbia River Transmission System, which is owned and operated by BPA. Additionally, the Office of Electricity Delivery and Energy Reliability (OE), another organizational element within DOE, will issue a Presidential permit to Sea Breeze to construct, operate, maintain, and connect the ±150,000-volt (150-kV) direct current (DC) submarine cable that crosses the U.S.-Canadian border.

BPA's Proposed Action includes the expansion of BPA's Port Angeles Substation to accommodate the interconnection. The interconnection will allow power flow over BPA's transmission system to the extent that capacity on the system is available. The Proposed Action does not include transmission service over BPA's system, which must be requested separately. The Proposed Action included two short routing options (A and B) for the transmission cable as it enters BPA's substation property; BPA has chosen the Option A route.

In reaching this decision, DOE considered the low potential for environmental impacts in the United States from constructing, operating, maintaining, and connecting the project, the lack of adverse impacts to the reliability of the U.S. electric power supply system, and the lack of major issues of concern to the public.

ADDRESSES: This ROD will be sent to interested parties and affected persons and agencies who requested a copy. Project documents, including the Draft and Final EIS, are available on the DOE National Environmental Policy Act (NEPA) Web site at <a href="http://www.eh.doe.gov/nepa/eis/eis0378/index.html">http://www.eh.doe.gov/nepa/eis/eis0378/index.html</a> and on the BPA project Web site at <a href="http://www.efw.bpa.gov/environmental\_services/Document\_Library/PortAngeles/">http://www.efw.bpa.gov/environmental\_services/Document\_Library/PortAngeles/</a>. The Supplement Analysis, Record of Decision, and Mitigation Action Plan will soon be available on these sites. These documents may be obtained from BPA's Public Information Center, P.O. Box 3621, Portland, Oregon, 97208-3621; or by using BPA's nationwide toll-free document request line at 800-622-4520. The documents may also be obtained by contacting Dr. Jerry Pell at the Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy, OE-20, 1000 Independence Avenue, SW, Washington, DC 20585; by telephone at 202-586-3362; by facsimile at 202-318-7761; or by electronic mail at Jerry.Pell@hq.doe.gov.

**FOR FURTHER INFORMATION CONTACT:** For further information about the EIS, contact Ms. Stacy Mason, Environmental Coordinator, Bonneville Power Administration – KEC, P.O. Box 3621, Portland, Oregon 97208-3621, by telephone at 503-230-5455, by facsimile at 503-230-5699, or by electronic mail at <a href="mailto:slmason@bpa.gov">slmason@bpa.gov</a>; alternatively, contact Dr. Jerry Pell as indicated in the **ADDRESSES** section above.

For general information on the DOE NEPA process, contact Carol Borgstrom, Director, Office of NEPA Policy and Compliance, GC-20, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585, by telephone at 202-586-4600, or leave a message at 800-472-2756.

## **SUPPLEMENTARY INFORMATION:**

## **Background**

BPA is an organizational unit within DOE that owns and operates most of the high-voltage electric transmission system in the Pacific Northwest. BPA has adopted an Open Access Transmission Tariff that is 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 Federal Columbia River Transmission System, which is owned and operated by BPA, to all eligible customers on a first-come, first-served basis, subject to an environmental review under NEPA.

<sup>&</sup>lt;sup>1</sup> Although BPA is not subject to the 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.

OE is the organizational unit within DOE that administers the Presidential permit process pursuant to Executive Order (E.O.) 10485 (September 9, 1953), as amended by E.O. 12038 (February 7, 1978). The E.O. requires that a Presidential permit be issued by DOE before electric transmission facilities may be constructed, operated, maintained, or connected at the U.S. international border. DOE may issue or amend a permit if it determines that the permit is in the public interest and after obtaining favorable recommendations from the U.S. Departments of State and Defense. In determining whether issuance of a permit for a proposed action is in the public interest, DOE considers the environmental impacts of the proposed project pursuant to NEPA, the project's impact on electric reliability by ascertaining whether the proposed project would adversely affect the operation of the U.S. electric power supply system under normal and contingency conditions, and any other factors that DOE may consider relevant to the public interest.

Sea Breeze, a private company, is proposing to construct 32 miles (52 kilometers [km]) of DC transmission cable from the greater Victoria area (View Royal), British Columbia, Canada, across the Strait of Juan de Fuca, to Port Angeles, Clallam County, Washington, United States. The cable would cross both land and sea under Canadian and U.S. jurisdictions, would be converted to alternating current (AC) at a new converter station in Port Angeles, and would interconnect with the Federal Columbia River Transmission System at BPA's Port Angeles Substation.

In December 2004, Sea Breeze applied to OE for a Presidential permit for the international border crossing of the cable. In April 2005, Sea Breeze submitted a request to BPA to connect the cable into the Federal transmission system. DOE prepared an EIS to evaluate the

environmental effects of the proposed cable and interconnection, issuing the Final EIS (DOE/EIS-0378) in October 2007.

## **Description of the Proposed Action**

The project, as defined in this ROD and evaluated in the EIS, is a ±150 kV DC transmission cable that would extend from a point at the U.S.-Canadian border to Port Angeles, Washington. The cable would be capable of carrying up to 550 megawatts of power. BPA's Proposed Action is to allow Sea Breeze's transmission cable to connect into the Federal transmission system at BPA's Port Angeles Substation. OE's Proposed Action is to grant Sea Breeze a Presidential permit for the project. With the interconnection, the Presidential permit, and other Federal and state approvals granted, Sea Breeze can construct and operate its proposed cable project. There are six main components of the U.S. portion of Sea Breeze's project as described below.

- Marine DC cable about 10.5 miles (17 km) of cable trenched in the sea floor from the international boundary to the Port Angeles Harbor. Sea Breeze will use a sea plow, hydro-jetting machine, or hydroplow to trench into the sea floor, and a specialized cable-laying ship will be used to install the marine cable in the trench. The proposed trench will typically be 3 to 5 feet (1 to 1.5 meter [m]) deep and about 4 feet (1.2 m) wide for most of its length across the Strait.
- Horizontal Directionally Drilled (HDD) hole a 3,465-foot (1.06 km) long hole<sup>2</sup> to transition the cable from the marine environment in the Harbor to land. The HDD hole

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<sup>&</sup>lt;sup>2</sup> At the time of the EIS, the HDD hole was proposed to be 3,300 feet (1.0 km) long and exit into the Harbor at a point 1,340 feet (408 m) offshore. Pursuant to subsequent Section 7 consultation with National Oceanic and Atmospheric Administration (NOAA), and NOAA's recommendation to decrease potential impacts to macroalgae habitat, Sea Breeze moved the proposed HDD hole exit point about 165 feet (50 m) seaward. This measure has been

will extend generally southwest from a point about 1,505 feet (460 m) offshore, under the shoreline and bluff, to a point along North Liberty Street just south of Caroline Street in Port Angeles. All drilling for this hole will take place at the land end of the hole on North Liberty Street.

- Terrestrial DC cable about 0.8 miles (1.3 km) of cable trenched from the Liberty

  Street HDD hole to Sea Breeze's converter station site near BPA's Port Angeles

  Substation. This cable will be placed in a trench under Liberty Street. The trench will be about 4 to 8 feet (1 to 2.5 m) deep and about 6 feet (2 m) wide at the surface. Standard utility trenching methods will be used to dig the trench, and Liberty Street will be repaired and repaved following cable installation.
- Converter Station a 3.8-acre (1.5 hectares [ha]) station, located on about 5 acres (2 ha) of land owned by Clallam County Public Utility District across East Park Avenue from BPA's Port Angeles Substation. The station will convert power from DC to AC in order to be able to connect to the Federal AC transmission system. This converter station will include a building about 100 feet (30 m) wide, 200 feet (60 m) long, and 40 feet (12 m) tall, and an electrical yard, with a combination of decorative and chain-link fence enclosing the property.
- AC cable about 1,250 feet (380 m) of underground 230-kV AC transmission cable
   trenched under Porter Street from the converter station to BPA's Port Angeles Substation.

incorporated into the project. BPA prepared a Supplement Analysis (DOE/EIS-0378-SA-01) to review this change. The Supplement Analysis found that the hole extension would not substantially change the proposal nor create significant new circumstances or information relevant to environmental concerns, and therefore, no further NEPA documentation is required.

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Two routing options (A and B) were considered for the AC cable entrance into BPA's substation. Option A has been selected. Trench dimensions and construction methods will be largely the same as those for the terrestrial DC cable.

• Interconnection at BPA's Port Angeles Substation – a 2-acre (1-ha) expansion of the existing electrical yard, a new relay house, and realignment of an existing 115-kV transmission line on BPA property. The expansion will occur south of the substation's existing fence line on an undeveloped portion of BPA's substation property. The interconnection will allow power flow over BPA's transmission system to the extent that capacity on the system is available, but does not include transmission service over BPA's system. Transmission service must be requested separately.

Sea Breeze or its successors will be responsible for operating and maintaining all aspects of the project except for the Port Angeles Substation equipment, which will be operated and maintained by BPA.

## **Alternatives Considered**

DOE considered the Proposed Action with two short AC cable routing options (A and B), and the No Action Alternative.

Cable routing Options A and B for entering the BPA substation property would have differed little in the environmental impacts created. Option A will be about 250 feet (76.2 m) longer than Option B, but the amount of tree clearing, soil disturbance, and visual impacts will be similar to what would have occurred under Option B. Option A will have less impact on BPA property, allowing potential future use of the area that Option B would have encumbered.

Under the No Action Alternative, BPA would have denied Sea Breeze's request to connect to the Federal transmission system, and OE would have denied issuance of the Presidential permit. Because the requested interconnection is essential to the viability of Sea Breeze's proposed project, it is likely that Sea Breeze would not build its transmission cable project under the No Action Alternative. Since the cable would not be built, implementation of the No Action Alterative would not have caused impacts to the environment (water resources, vegetation, marine habitat and wildlife, land uses, noise, visual resources, etc.) that the construction and operation of the transmission cable will have. The No Action Alternative thus is the environmentally preferable alternative.

#### **Public Comment**

Early in the development of the EIS, DOE solicited input from the public (Federal, state and local agencies, Indian tribes with interest in the area, individuals along the project route, and interest groups) to help determine what issues should be studied in the EIS. DOE requested comments by publishing a Notice of Intent to prepare an EIS in the *Federal Register* (70 FR 23855) on May 5, 2005, sending a letter to about 415 people, conducting a public open-house style scoping meeting in Port Angeles, Washington, and establishing a project Web site with information about the project and the EIS process. Thirty-two people came to the public open-house scoping meeting and 14 individuals sent written comments.

The Draft EIS was made available for a 45-day period of public review and comment via mailings and the Web site; a Notice of Availability of the Draft EIS was published by the U.S. Environmental Protection Agency (EPA) in the *Federal Register* (72 FR 10749) on March 9, 2007. Notices that the Draft EIS was available for review were sent to about 750 potentially

interested parties of record; about 130 Draft EISs were distributed; and DOE held a public open house and hearing in Port Angeles on April 10, 2007. Thirteen people came to the Draft EIS public meeting/hearing and 14 individuals sent written comments.

The Final EIS addressed comments received on the Draft EIS. DOE made the Final EIS available to the public, and sent it to interested parties of record; a Notice of Availability of the Final EIS was published by the EPA in the *Federal Register* (72 FR 58081) on October 12, 2007.

DOE received three written comments on the Final EIS. One letter, from the Skokomish Indian Tribe, informed DOE that the Tribe is unaware of the presence of any sites of cultural or religious significance to the Skokomish Tribe within the proposed project area. The tribe requested that DOE contact the Lower Elwha Tribe. DOE has been in contact with the Lower Elwha Tribe throughout this project's environmental process. The Lower Elwha Tribe commented on the Draft EIS; those comments, which primarily requested additional protection for tribal resources and cultural resources, were addressed in the Final EIS. Under the Mitigation Action Plan that is incorporated into this Record of Decision, the Tribe will continue to be involved in the project for geoduck clam mitigation and cultural resource monitoring.

The EPA submitted written comments on the Final EIS that included acknowledgment of BPA's responses to EPA's comments on the Draft EIS. EPA also recommended that accountability measures be incorporated into the Clean Water Act 401 certification and 404 permit. The Washington State Department of Ecology and the U.S. Army Corps of Engineers are reviewing Sea Breeze's application under these sections of the Clean Water Act and will impose appropriate measures to ensure implementation. EPA also recommended that the ROD include information to assure that environmental measures would be adjusted to meet

Washington State water quality standards. In response, DOE is requiring Sea Breeze to follow the city, state, and Federal requirements regarding water quality standards, as described in Chapter 4 of the EIS, reiterated in the required mitigation measures identified in the EIS, and included in the Mitigation Action Plan that is incorporated into this Record of Decision.

EPA also restated concerns regarding the public need for the project. In response, DOE notes that this project is proposed by a private entity and, therefore, public need is outside DOE's purview. In deciding whether BPA will allow an interconnection and whether OE will grant a Presidential permit for a project proposed by a private entity, neither BPA nor OE has a criterion that requires a demonstration of need for the project. As addressed in the EIS, BPA's need for action is to respond to Sea Breeze's request for interconnection, and OE's need for action is to respond to Sea Breeze's application for a Presidential permit. In addition, the Purpose and Need section of the EIS contains a statement of Sea Breeze's reasons for developing the project and provides links to various Web sites that present Sea Breeze's identified needs.

Written comments were received also from the Olympic Environmental Council

Coalition working on the Rayonier Hazardous Waste Cleanup Project, which expressed concern
that the proposed cable route would go through a hazardous waste site undergoing cleanup,
through potential shoreline and salt marsh restoration areas, and in a recommended protected
area for orca whales. As described in the EIS, the former Rayonier pulp mill site and shoreline
(which would include any potential salt marsh restoration areas) will be avoided because the
cable will be routed through a HDD hole in bedrock well below these areas. The EIS addresses
contaminated sediment concerns, and identifies required mitigation measures, including
specifically the requirement for Sea Breeze to implement any actions identified by the

Washington State Department of Ecology for sediment control. The EIS also analyzes potential impacts to whales and identifies mitigation measures required to lessen possible impacts. DOE considers these mitigation measures, as incorporated into this ROD and enforceable upon Sea Breeze, to be adequate to address the expressed concerns.

#### **BPA's Rationale for Decision**

Under BPA's adopted Open Access Transmission Tariff, BPA offers new interconnections to the transmission system to all eligible customers, consistent with all BPA requirements and subject to environmental review. BPA has completed this environmental review and has considered and understands the environmental implications of its Proposed Action and alternatives. BPA analyzed the environmental impacts of the Proposed Action, the short routing options for the AC cable entering BPA property, and the No Action Alternative, and considered public comments received on the Draft EIS, as documented in the Final EIS, and comments on the Final EIS. BPA also considered that implementation of the Proposed Action is more consistent with the interconnection provisions of BPA's open access tariff than implementation of the No Action Alternative. Accordingly, by deciding to take actions that allow for interconnection of Sea Breeze's project, BPA is acting consistently with its tariff.

In addition, BPA considered how well the various alternatives would meet the following purposes (i.e., objectives) identified for this project in the EIS:

- Maintenance of transmission system reliability;
- Consistency with BPA's environmental and social responsibilities; and
- Cost efficiencies.

BPA believes that implementation of the Proposed Action will meet these objectives.

## **System Reliability**

The Proposed Action will maintain transmission system reliability by ensuring that the interconnection design will meet applicable reliability criteria and standards. Also, because Sea Breeze proposed that its project be connected to BPA's transmission system without improvements to increase capacity of the system, any transmission service provided to Sea Breeze across the transmission system will be limited in order to maintain reliability. These restrictions will include limiting power flow to or from the new interconnection through the BPA transmission system on the Olympic Peninsula at certain times of the day and year. If BPA receives transmission service requests from cable users that exceed system capacity, appropriate environmental review will be conducted and separate decisions made on the system improvements that will be necessary to accommodate those requests.

# **Environmental and Social Responsibilities**

The Proposed Action is consistent with BPA's environmental and social responsibilities. Sea Breeze worked to lessen potential environmental and social impacts through the design of the project and the development of mitigation measures. The use of the HDD hole to transition the cable from the Port Angeles Harbor to land will avoid impacts to the shoreline, including impacts to potential cultural resources in the vicinity, beach and shoreline habitats, and areas prone to erosion on the bluff. It will also help avoid contaminated sediments known in the area.

With the erosion control measures proposed by Sea Breeze and incorporated in this ROD, construction impacts to water and soil resources will be short term, and low-to-moderate. In

addition, Sea Breeze will ensure that turbidity levels during seabed trenching and disturbance will remain within state standards of no greater than 5 nephelometric turbidity units. Sea Breeze is working with the Washington Department of Ecology and with the Department of Natural Resources to address disturbance of contaminants in the Harbor.

Vegetation impacts will be limited to about a mile-long strip along the sea bottom, at the converter station site, and at the area affected by interconnection at BPA's Port Angeles Substation. NOAA's recommendation to decrease potential impacts to macroalgae habitat has been adopted by Sea Breeze by moving the proposed HDD hole exit point about 165 feet (50 m) seaward. The new location avoids an area of algae density cover of 50 percent to an area where the algae density cover lessens to 25 percent. The overall impacts to vegetation will be low, except at BPA's substation where impacts to vegetation will be low-to-moderate. No wetlands were identified in the affected area, so wetlands will not be affected.

Impacts to marine habitat and wildlife will be low-to-moderate. Most impacts will occur during construction and will be temporary. Measures to protect marine species include implementing work windows to avoid species during migrations (Endangered Species Act [ESA]-listed salmonids), monitoring for unexpectedly high concentrations of priority species (crabs, urchins, and geoduck clams), and using trained marine mammal observers during cable-laying operations to determine the presence of species (sea otters, porpoises, sea lions, seals, gray whales and ESA-listed humpback whales and Southern Resident killer whales) and if work should be slowed or stopped to protect those species. Habitat changes due to the warming of sediments along the seabed cable route will create localized moderate impacts, but only a small portion of the overall seabed will be affected.

Because the cable route will run along existing city streets, there will be no-to-low impacts to terrestrial wildlife and freshwater fish. In addition, at the converter station no high-quality terrestrial habitat will be removed. Because the expansion of BPA's substation will be located next to a forested area, tree removal for the interconnection work will have low-to-moderate effects on habitat. However, this type of forest habitat is abundant and common in the area.

Project construction will disturb residents and businesses in the vicinity and create short-term high impacts. The cable will be located in city streets and, after construction, will not encumber existing uses and will not create any long-term land use impacts. Although the new converter station and the expansion of BPA's Port Angeles Substation yard for the interconnection will limit existing casual recreational uses of the existing open space and incrementally increase utility-related uses in the area, these additional electrical facilities will not be out of place next to the existing Port Angeles Substation.

Because the cable will be placed underground through city streets, the cable will not be visible and will not create the visual impacts typical of overhead transmission lines (towers, wires, cleared right-of-way, and access roads). Although the converter station and the substation yard expansion will produce moderate-to-high visual impacts to residents in the immediate vicinity, Sea Breeze will soften the visual impacts of the converter station by installing decorative walls, fencing, and landscaping, and by seeking and incorporating input from local residents and planning officials about the exterior design of the converter station's building.

The route of the cable on the seabed has been designed to avoid potential cultural resources. To ensure resources potentially uncovered on land are protected, archaeological

monitors will be on site during soil disturbance activities in areas where there is a moderate-tohigh potential to encounter resources.

HDD hole construction will create short-term high noise impacts to local residents near the construction site during the 23 days of continuous (night and day) drilling operations. Sea Breeze will use sound dampening techniques at the HDD construction site to reduce noise levels as close to the source as possible. The operation of the cable will not generate noise, and noise from the converter station will be mitigated with design features, equipment layout, and insulation. Health and safety impacts associated with potential shocks or fire will be avoided with mitigation measures. Magnetic field exposure concerns are limited to the short (1,250 feet [380 m]) AC cable; DC lines do not induce currents into surrounding objects. Field levels of the AC cable will be lessened, as appropriate, by the configuration of the conductors of the cable.

Socioeconomics impacts will be low, and Sea Breeze will ensure that the location of the marine cable is recorded on navigational charts. Sea Breeze will continue to work with the Washington State Department of Ecology to minimize the risk that the cable could be snagged or hit by ship anchors.

## **Cost Efficiencies**

Costs associated with the cable and converter station will be the responsibility of Sea Breeze. Sea Breeze will also be responsible for costs associated with the interconnection work; however, if the interconnection work were to be considered a network upgrade, then those equipment and construction costs could be reimbursed to Sea Breeze.

#### **OE's Rationale for Decision**

In arriving at its decision, OE has considered the lack of adverse impacts to the reliability of the U.S. electric power supply system, the low potential for environmental impacts in the United States, the nature of potential impacts of the alternatives, and the lack of major issues of concern to the public.

OE has determined, and agrees with BPA, that the potential environmental impacts from the Proposed Action are expected to be small, as discussed above. OE also has determined that, based on BPA's interconnection standards and its restrictions on any requested transmission service to and from the proposed interconnection, the proposed project would not have an adverse impact on the reliability of the U.S. electric power supply system. Finally, the Departments of State and Defense have concurred in the issuance of a Presidential permit to Sea Breeze for the proposed project. OE did not select the No Action Alternative because the Proposed Action has been determined to be consistent with the public interest based on the consideration of environmental impacts, the impacts on electric reliability, and the favorable recommendations of the Departments of State and Defense.

For the foregoing reasons, OE has decided to issue Presidential Permit PP-299 to authorize Sea Breeze to construct, operate, maintain, and connect the Port Angeles-Juan de Fuca transmission line as defined by the Proposed Action in the EIS.

## **Mitigation**

All the mitigation measures described in the Draft EIS, updated in the Final EIS, and further refined through consultations with the National Marine Fisheries Service of NOAA have been incorporated into the Mitigation Action Plan. A complete list of these measures is in the

Mitigation Action Plan incorporated herein. Sea Breeze will be responsible for executing most of the mitigation measures, while BPA will be responsible for executing the mitigation measures associated with work at the Port Angeles Substation. Additional measures may be required through permitting processes with Federal, state, and local agencies.

# **Conclusions**

The following decisions are based on the project description as detailed in the EIS and the Supplement Analysis, and implementation of the mitigation measures listed in the Mitigation Action Plan.

BPA has decided to interconnect the Port Angeles-Juan de Fuca cable to the Federal Columbia River Transmission System. BPA will, therefore, offer Sea Breeze contract terms for interconnection. BPA also will expand the Port Angeles Substation yard and construct necessary interconnection facilities to allow for interconnection of the project as described in this ROD and the Port Angeles-Juan de Fuca Transmission Project EIS.

OE will issue Presidential Permit PP-299 to Sea Breeze, allowing the Port Angeles-Juan de Fuca electric transmission facilities to be constructed, operated, maintained, and connected at the U.S. international border with Canada.

Issued in Washington, DC, on May 27, 2008

/s/ Kevin M. Kolevar
Kevin M. Kolevar
Assistant Secretary
Office of Electricity Delivery and
Energy Reliability

Issued in Portland, Oregon, on May 30, 2008

/s/ Stephen J. Wright
Stephen J. Wright
Administrator and
Chief Executive Officer
Bonneville Power Administration