
United States
Department of Energy

Office of Electricity Delivery and Energy Reliability

Sea Breeze Pacific Regional
Transmission System, Inc.
OE Docket No. PP-299



Presidential Permit
No. PP-299

June 11, 2008

SEA BREEZE PACIFIC REGIONAL TRANSMISSION SYSTEM, INC.

PRESIDENTIAL PERMIT NO. PP-299

I. BACKGROUND

The Department of Energy (DOE) has the responsibility for implementing Executive Order (EO) 10485, as amended by EO 12038, which requires the issuance of a Presidential permit for the construction, operation, maintenance, and connection of electric transmission facilities at the United States international border.¹ DOE may issue the 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.

On December 20, 2004, Sea Breeze Pacific Regional Transmission System, Inc. (Sea Breeze) applied to DOE for a Presidential permit for the construction of a $\pm 150,000$ -volt (150-kV) direct current (DC) electric transmission line that would cross the U.S.-Canadian border. Sea Breeze is a British Columbia corporation with its principal place of business in Vancouver, British Columbia. Although Sea Breeze is the sole applicant for the Presidential permit, Sea Breeze is a joint venture between Sea Breeze Power Corporation, a publicly traded Canadian corporation, and Boundless Energy, a limited liability company of the State of Maine.

Sea Breeze proposes to develop a direct current transmission interconnection that would cross the U.S.-Canadian border and connect to the Federal Columbia River Transmission System, which is owned and operated by the Bonneville Power Administration (BPA), at BPA's Port Angeles Substation. The project would originate on Vancouver Island in the vicinity of Victoria, British Columbia, Canada, cross the Strait of Juan de Fuca via submarine cable, and proceed via terrestrial underground cable to a converter station to be constructed immediately adjacent to BPA's existing Port Angeles Substation. The converter station would convert the direct current back to alternating current. In April 2005, Sea Breeze submitted a request to BPA to connect the cable into the Federal Columbia River Transmission System.

The entire length of the proposed transmission facilities would be 22 miles, consisting of 1 1/2 miles of land-based underground cable in Canada, 19 miles of submarine cable crossing the Strait of Juan de Fuca, and 1 1/2 miles of land-based underground cable inside the United States. The project is intended to transmit up to 550 megawatts of power in either direction between the two countries.

Notice of the Sea Breeze application for a Presidential permit was published in the *Federal Register* on February 18, 2005, (70 FR 8350) requesting that comments, protests, and petitions to intervene be submitted to DOE by March 21, 2005. None were received.

¹ The authority to administer the International Electricity program through the regulation of electricity exports and the issuance of Presidential permits has been delegated to the Assistant Secretary for the Office of Electricity Delivery and Energy Reliability (OE), in Redlegation Order No. 00-002.10C issued on May 29, 2008.

DOE determined that the appropriate level of environmental review under the National Environmental Policy Act of 1969 (NEPA) was an environmental impact statement (EIS)² which was completed in October 2007. The EIS assesses the potential environmental impacts from two proposed Federal actions: (1) OE granting a Presidential permit to Sea Breeze to construct and operate the proposed transmission line across the U.S. international border; and (2) BPA allowing connection of the proposed project to the Federal Columbia River Transmission System. Based in part on the information in the EIS, DOE issued a Record of Decision (ROD) which was published in the *Federal Register* (73 FR 32686) on June 10, 2008.

II. DISCUSSION

The analysis in the EIS and the conclusions reached in the ROD were predicated upon the implementation of the mitigation measures that have been incorporated into a Mitigation Action Plan (MAP) and made a part of the ROD. Accordingly, a condition has been placed in this Permit requiring the applicant to implement and adhere to the mitigations contained in the MAP.

As part of its Presidential permit application, Sea Breeze submitted technical studies that modeled the operation of the U.S. electric power supply system with the proposed international transmission line in service. These studies demonstrated that the proposed international transmission facility could be reliably operated up to its rated capacity of 550 MW for a large potential range of pre-contingency system conditions for both summer and winter load levels. However, the studies identified several sets of post-contingency system conditions involving load levels and/or facility outages under which power transfers over the Sea Breeze project would need to be limited in order to prevent violation of one or more reliability criteria. For these post-contingency conditions, any system overloads or voltage violations could be mitigated by development of a “ramp back” scheme under which the power flowing through the DC converter (in either direction) would be instantaneously reduced (*i.e.*, ramped back) to a level that would eliminate the reliability violation. The details of the ramp back scheme will be developed in future studies in response to specific requests for transmission service by shippers.

The Sea Breeze project is a merchant transmission line. Sea Breeze will own the transmission facilities but will not transmit electric energy for its own account. Sea Breeze will offer the capacity of its proposed facility to anyone wishing to transmit electric energy over it. As the balancing authority in the region, BPA will establish the limits on the amount of power that may be transmitted over the Sea Breeze line at any instant for various system operating conditions consistent with reliability criteria established by the Western Electricity Coordinating Council and the North American Electric Reliability Corporation. Prior to commercial operation of the proposed international facilities, Sea Breeze will enter into agreements with BPA which will specify how the Sea Breeze facilities must be operated in order to assure the reliable operation of the regional electric system. A condition has been placed in this Permit which requires Sea Breeze to enter into appropriate agreements with the balancing area authority and to provide copies of those agreements to DOE prior to commercial operation of the facilities

²The EIS was prepared jointly by OE and BPA.

permitted herein. With adherence to this condition, the Sea Breeze project is not expected to adversely impact the reliability of the U.S. electric power supply system.

DOE has consistently expressed its expectation that owners of international transmission facilities provide access across the border in accordance with the principles of comparable open access and non-discrimination contained in the Federal Power Act and articulated in the Federal Energy Regulatory Commission's Order No. 888 (Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; FERC; Stats. & Regs. ¶31,036 (1996)), as amended. In a related proceeding, FE Docket No. 99-1 (64 FR 40580, July 27, 1999), DOE indicated its intention to amend certain Presidential permits to require permit holders to provide non-discriminatory open access transmission services over their international transmission lines. This proceeding has not yet been concluded. However, in its permit application Sea Breeze asserts that it intends to operate the proposed transmission facilities in an "open access" mode making them available for use by other parties to transmit electric energy between the United States and Canada.

III. FINDING AND DECISION

In determining whether issuance of a Presidential permit is in the public interest, DOE considers the environmental impacts of the proposed project pursuant to the National Environmental Policy Act of 1969 (NEPA), determines the project's impact on electric reliability, and any other factors that DOE may also consider relevant to the public interest.

DOE has assessed the impact that the issuance of this Permit would have on the environment pursuant to NEPA. This assessment is documented in the "Port Angeles-Juan de Fuca Final Environmental Impact Statement" (DOE/EIS-0378) and in the ROD issued on June 10, 2008. Because the findings and determinations in the ROD are predicated in part on the implementation of the MAP and the mitigation measures contained therein, implementation of the MAP has been made a condition of this Permit.

DOE also has assessed the impact that the operation of the proposed international transmission facilities would have on the reliability of the U.S. electric power supply system. Based on the information in the docket and as discussed above, DOE has determined that the installation and operation of the proposed international transmission facilities by Sea Breeze, as conditioned herein, would not adversely impact the reliability of the U.S. electric power supply system.

The Secretary of State and the Secretary of Defense have concurred with the issuance of a Presidential permit to Sea Breeze for the proposed facilities.

Based upon the above discussion and analysis, DOE has determined that the issuance of a Presidential permit to Sea Breeze is consistent with the public interest.

DOE notes that any party to a Presidential permit proceeding, including the applicant, has an opportunity to apply for a rehearing within thirty (30) days of the issuance of a final decision should they have concerns over any aspect of the decision.

IV. ORDER

Pursuant to the provision of EO 10485, as amended by EO 12038, and the Rules and Regulations issued thereunder (Title 10, Code of Federal Regulations, section 205.320 *et. seq.*), permission is granted to Sea Breeze to construct, operate, maintain, and connect electric transmission facilities at the international border of the United States and Canada, as further described in Article 2 below, upon the following conditions:

Article 1. The facilities herein described shall be subject to all conditions, provisions and requirements of this Permit. This Permit may be modified or revoked by the President of the United States without notice, or by DOE after public notice, and may be amended by DOE after proper application thereto.

Article 2. The facilities covered by and subject to this Permit shall include the following facilities and all supporting structures within the right-of-way occupied by such facilities:

- a direct current (DC) submarine cable operating at ± 150 kV and extending approximately 10.5 miles (17 km) from the international boundary in the Strait of Juan de Fuca to the Port Angeles Harbor.
- a DC terrestrial cable operating at ± 150 kV and extending approximately 0.8 miles (1.3 km) from the landing of the submarine cable to a converter station located adjacent to the site of BPA's Port Angeles Substation.
- a converter station located just north of BPA's Port Angeles Substation. The converter station will convert power from DC to alternating current (AC) in order to be able to connect to the Federal AC transmission system.
- a 230,000-volt underground AC cable extending approximately 1,250 feet (380 m) from the converter station to BPA's Port Angeles Substation.

These facilities are more specifically shown and described in the application filed in this docket and in the Final EIS (DOE/EIS-0378).

Article 3. The facilities described in Article 2 above shall be designed and operated in accordance with the applicable criteria established by the Western Electricity Coordinating Council and the regional control area operator, and consistent with that of the North American Electric Reliability Corporation or their successors. Sea Breeze shall participate in the development of, and adhere to the requirements of, a ramp back scheme for the DC converter and shall enter into other appropriate operating agreements with the balancing area authority and

shall submit copies of those agreements to DOE prior to commercial operation of the facilities permitted herein.

Furthermore, the permitted transmission facilities shall be operated in such a manner that the maximum instantaneous rate of transmission of electric energy over the permitted transmission line shall not exceed 550 MW.

Article 4. No change shall be made in the facilities covered by this Permit or in the authorized operation or connection of these facilities unless such change has been approved by DOE.

Article 5. Sea Breeze shall at all times maintain the facilities covered by this Permit in a satisfactory condition so that all requirements of the National Electric Safety Code in effect at the time of construction are fully met.

Article 6. The operation and maintenance of the facilities covered by this Permit shall be subject to the inspection and approval of a properly designated representative of DOE, who shall be an authorized representative of the United States for such purposes. Sea Breeze shall allow officers or employees of the United States, with written authorization, free and unrestricted access into, through, and across any lands occupied by these facilities in the performance of their duties.

Article 7. Sea Breeze shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this Permit. Sea Breeze shall take appropriate action as necessary to mitigate such situations. Complaints from individuals residing within one-half mile of the centerline of the transmission line are the only ones which must be resolved. Sea Breeze shall maintain written records of all complaints received and of the corrective actions taken.

Article 8. The United States shall not be responsible or liable: for damages to or loss of the property of, or injuries to, persons; for damages to, or loss of the facilities covered by this Permit; or for damages to, or loss of the property of, or injuries to the person of Sea Breeze officers, agents, servants or employees or of others who may be on said premises; any of which may arise from or be incident to the exercise of the privileges granted herein; and Sea Breeze shall hold the United States harmless from any and all such claims.

Article 9. Sea Breeze shall arrange for the installation and maintenance of appropriate metering equipment to record permanently the hourly flow of all electric energy transmitted between the United States and Canada over the facilities authorized herein. Sea Breeze shall make and preserve full and complete records with respect to the electric energy transactions between the United States and Canada. Sea Breeze shall furnish annual reports to DOE, by the 15th of February each year, detailing for each month of the previous year: (1) the gross amount of electricity imported into and exported from the United States, in kilowatt hours; (2) the consideration received or paid for such imports and exports; and (3) the maximum hourly rate of transmission, in kilowatts. Annual reports must be filed regardless of current activity and

whether or not deliveries of electric energy have been made. If no transactions have been made, a one-sentence report indicating “no activity” for the previous year is sufficient.

Reports shall be submitted to the U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, OE-20, 1000 Independence Avenue, SW, Washington, D.C. 20585. Properly identified reports will also be accepted via facsimile at (202) 586-8008 to meet time requirements, but original copies should still be filed at the above address.


Article 10. Neither this Permit nor the facilities covered by this Permit, or any part thereof, shall be transferable or assignable, except in the event of the involuntary transfer of the facilities by the operation of law. In the case of such an involuntary transfer, this Permit shall continue in effect for a period of 60 days and then shall terminate unless an application for a new permit pursuant to Title 10, Code of Federal Regulations, section 205.323, has been received by DOE. Upon receipt by DOE of such an application, this existing Permit shall continue in effect pending a decision on the new application. During this decision period, the facilities authorized herein shall remain substantially the same as before the transfer.

In the event of a proposed voluntary transfer of the facilities, the existing permit holder and the party to whom the transfer would be made shall file a joint application with DOE for a Presidential permit together with a statement of the reasons for the transfer.

Article 11. Upon the termination, revocation or surrender of this Permit, the permitted facilities which are owned, operated, maintained, and connected by Sea Breeze and described in Article 2 of this Permit, shall be removed and the land restored to its original condition within such time as DOE may specify and at the expense of Sea Breeze. If Sea Breeze fails to remove such facilities and/or any portion thereof authorized by this Permit, DOE may direct that such actions be taken for the removal of the facilities or the restoration of the land associated with the facilities at the expense of Sea Breeze. Sea Breeze shall have no claim for damages by reason of such possession, removal or repair. However, if certain facilities authorized herein are useful for other utility operations within the bounds of the United States, DOE will not require that those facilities be removed and the land restored to its original condition upon termination of the international interconnection.

Article 12. The MAP, which includes the mitigation measures identified in the Final EIS (DOE/EIS-0378), is incorporated as a condition of this Permit.

Issued in Washington, D.C. on June 11, 2008.



Anthony J. Como
Director, Permitting and Siting
Office of Electricity Delivery and
Energy Reliability