

## Environmental Assessment Determination

**Name of Project:** Wessington Springs Wind Project

**Location:** Jerauld County, South Dakota

### **Description of the Proposed Action:**

Babcock and Brown proposes to construct a wind generation facility with an output of no more than 50 megawatts (MW), averaged annually, and interconnect the facility with Western Area Power Administration's (Western) transmission system with an approximately 2.5 miles 230-kilovolt (kV) transmission line. The proposed project would be located in Jerauld County, South Dakota, and would consist of no more than 66 wind turbines. Each wind turbine would be connected by a service road for access and a 34.5-kV electrical collection system. Some access to the proposed project would be available on county township roads. Additional access roads would be constructed as necessary.

The proposed 230-kV transmission line and associated structures, equipment, and facilities would be constructed, owned, and operated by Babcock and Brown. The project would interconnect with Western's existing Fort Thompson-Sioux Falls 230-kV Transmission Line, which runs through the southern portion of the project site. Western has not yet commenced the interconnection studies for the project. Based on preliminary discussions, it is anticipated that the interconnection would consist of a 230-kV substation constructed and owned by Western near or under the existing transmission line. The project would include a collection substation, which would be constructed and owned by the project. The collection substation may be constructed immediately adjacent to the interconnection substation, in which case the connection with Western's new substation would be via a short 230-kV bus with no overhead transmission lines.

The proposed project consists of four parts:

1. Babcock and Brown would construct up to 66 wind turbines. Each turbine would be rated to generate 1.5 MW of electricity. The Wessington Springs Wind Project would produce an annual average output not to exceed 50 average MW and would be located approximately two miles south of the town of Wessington Springs, South Dakota.
2. Babcock and Brown would construct approximately 2.5 miles of transmission line between the proposed Wessington Springs Wind Project collector substation and Western's existing Fort Thompson-Sioux Falls 230-kV Transmission Line. The point of interconnection with the Fort Thompson-Sioux Falls 230-kV Transmission Line would be west of Highway 281, about 8 miles south of the town of Wessington Springs. The new transmission line would be energized at 230 kV and be a single-circuit line equipped with one overhead fiber optic line/ground wire to provide line safety and relay control communications.
3. Babcock and Brown would construct underground and overhead 34.5-kV electrical collection lines. The collection system would connect the proposed wind turbines to an

electrical collection substation near the generation facility. The 34.5-kV collection lines would include approximately 15 miles of underground line. The collection substation would include a power transformer to step up the voltage from the 34.5-kV to 230-kV, enabling the proposed new 2.5 miles of 230-kV transmission line to interconnect to the proposed new 230-kV Western substation.

4. Western would construct a 230-kV substation to connect the Wessington Springs Wind Project (and the new 230-kV transmission line) with Western's existing Fort Thompson-Sioux Falls 230-kV Transmission Line, and install communication equipment to provide remote operation of the new substation.

A local South Dakota utility has agreed to purchase all of the output from the proposed Wessington Springs Wind Project. The proposed new 230-kV transmission line would transfer the electrical energy from the proposed Wessington Springs Wind Project to the Fort Thompson-Sioux Falls 230-kV Transmission Line. The electrical energy would then be distributed to Babcock and Brown's local South Dakota utility customer to support their renewable resources portfolio for their members and customers.

Babcock and Brown submitted an interconnection application to Western to interconnect the project (Wessington Springs Wind Project via new 230-kV transmission line) to Western's transmission system. This interconnection request with associated connected actions must comply with the National Environmental Policy Act (NEPA) and consultation requirements under the Endangered Species Act and National Historic Preservation Act.

**Classes of Action To Be Applied from Subpart D, Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures:**

Subpart D of the DOE NEPA procedures requires that DOE determine the level of NEPA review necessary for a proposal. There are three classes of action in subpart D that were considered for the proposed transmission interconnection request.

The first class of action is B4.8 in appendix B, "New electricity transmission agreements, and modifications to existing transmission agreements, to use a transmission facility of one system to transfer power of and for another system, if no new generation projects would be involved and no physical changes in the transmission system would be made." This type of proposed action would normally require a categorical exclusion (CX). Since the proposed project would involve new generation projects and the proposed new Wessington Springs Wind Project and transmission line would involve physical changes beyond the previously developed facility area, class of action B4.8 does not apply.

The second class of action is B4.11 in appendix B, "Construction of electrical substations (including switching stations and support facilities) with power delivery at 230-kV or below, or modifications (other than voltage increases) of existing substations and support facilities, that could involve the construction of transmission lines approximately 10 miles in length or less, or relocation of existing transmission lines approximately 20 miles in length or less, but not the integration of major new generation resources into a main transmission system." This type of

proposed action normally requires a CX. While Western's action to construct, own, and maintain a new substation is consistent with this class of action there may be impacts to sensitive resources, including migratory birds. Therefore, B4.11 does not apply.

The third class of action is D6 in appendix D, "Integrating transmission facilities (that is, transmission system additions for integrating major new sources of generation into a Power Marketing Administration's main grid)." This type of proposed action normally requires an environmental impact statement (EIS). While the proposed action would integrate transmission facilities for new generation, the generation source would not be considered major because it would be less than 50 average MW. Therefore, class of action D6 does not apply.

**Determination:**

Based on a review of classes of action B4.8 and B4.11 in appendix B and D6 in appendix D to subpart D of the DOE NEPA Implementing Procedures, I have made a determination that the classes of action B4.8, B4.11 or D.6 of appendices B and D do not apply to the proposed action. Section 1021.321(a) requires that DOE prepare an EA for actions not described in appendices A, B, or D to subpart D. Given these findings, an environmental assessment (EA) will be prepared to assess the impacts of the proposed action, pursuant to the Council on Environmental Quality regulations implementing NEPA at 40 CFR 1500-1508, and above cited DOE regulations. Based on the analysis in the EA, Western will either prepare an EIS, if the EA reveals the potential for significant environmental impacts, or a finding of no significant impact, to support a determination that an EIS is not required.

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