

April 22, 2009

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Mr. Jerry Lein
North Dakota Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, North Dakota 58505

Re: Information Request, Border Winds Wind Energy Project
Case No. PU-08-797
File 20071163

Dear Jerry Lein:

In your initial staff review of Sequoia Energy Inc.'s (Sequoia) application for a Certificate of Site Compatibility for the Border Winds project (Case No. PU-08-797), you indicated that additional information is needed before the application can be deemed complete. On behalf of Sequoia, we have prepared the following in response to questions identified in your February 18, 2009 email. As such, we anticipate that the NDPSC will deem Sequoia's application complete, pending NDPSC's receipt of the final planned location of the collector substation, O&M building and interconnection site (see item 6). If this is the case, then Sequoia is prepared for an November 2009 public hearing date for the Border Winds project.

1. **Table 3-2. Avoidance Areas** – We will remove the reference to unique/rare animal and plant communities from Table 3-2 (Avoidance Areas) and include it only in Table 3-1 (Exclusion Areas). In addition, prairies and CRP lands will be removed from Exhibit 6 (Avoidance Areas) as they do not qualify as 'avoidance areas' under Chapter 69-06-08 and will be presented in a revised Exhibit 15 (USFWS Land Use, CRP Lands, and Prairies).
2. **Minimum Turbine Setbacks** – These are listed in Table 4-1 on page 20 of the application. The application indicated that 460 feet is the proposed (minimum) setback from property boundaries, transmission lines, roads and railroads. This 460-foot distance equals 1.1 x maximum turbine blade tip height. Exhibit 7 of the application shows that the maximum turbine height for the turbine models under consideration equals 127.5 meters (127.5 m = 418.3 ft; 418.3 x 1.1 = 459.8 ft). In addition, all turbines will be setback at least one turbine length from the outside project boundary and setback at least a 0.25 miles from WPAs.
3. **Noise/Sound** – The sound attenuation modeling provided in Exhibit 12 of the application was based on previous studies of Siemens 2.3 MW turbines that were conducted in Minnesota and Denmark (studies attached). These studies indicated the sound level produced at the nacelle was 107 to 109 dBA, for the turbine model SWT-23-93. In the Minnesota study (which recorded the lower sound level of 107 dBA at the nacelle), noise levels were shown to reach 50



dBA at a distance of 804 feet from the turbine. The model provided in Exhibit 12 of the application was based on the more conservative sound level of 109 dBA at the nacelle. Based on typical sound attenuation properties, it was predicted that the sound level will fall below 50 dBA at a distance of 1,000 feet. The setback distance listed in Table 4-1 of the application (1,000 feet from occupied residences) was to allow for flexibility in turbine layout should it be necessary. As described in item 4 below, Sequoia has maintained a setback of 1,600 feet from most occupied residences. Based on the modeling previously described, this minimum setback should comply with generally accepted average noise impact levels for wind turbines and will be less than 50 dBA.

4. **Occupied Residence Setback** – Sequoia used 500 meters (1,640 feet) as the setback from occupied residences when planning the initial turbine layout. After subsequent layout revisions, 63 out of the total 66 proposed turbines remain at least 1,600 feet from occupied residences. The three turbines that are less than 1,600 feet from building sites are C1, K1, and M1 (measured from 1,515 feet, 1,040 feet, and 690 feet, respectively). The building site nearest to M1 is a storage facility associated with the adjacent farm. Because it is not considered a residence, the 1,600 foot setback was not applied to this structure. Turbine K1 has been moved north and is now located 1,600 feet from the nearest occupied residence (it should be noted that the revised location for K1 has necessitated realigning K2 and K3 to the north as well. However, this realignment has not resulted in additional turbines closer than 1,600 feet from residences). Turbine C1 occurs near the project boundary north of St. John. While there is an occupied residence within 1,600 feet of turbine C1, it is well outside the setback identified for noise, as described in item 3 above, and the PSC's requested minimum setback of 1,400 feet. No revisions to the location of C1 has occurred.
5. **County Ordinances** – Copies of the Rolla Municipal Airport Zoning Ordinance, the Rolette County Zoning Resolution, and the Towner County Zoning Regulations are attached as requested.
6. **Substation, O&M Facility, and Transmission Interconnection** – Sequoia is still in the process of finalizing the locations of the collector substation, O&M building, turbines, and plans for the transmission line grid interconnection. In an effort to maximize efficiency, only the finalized site plan will be provided to the NDPSC as opposed to iterative locations of project facilities. NDPSC has requested this information be supplied at least one week prior to the public hearing to allow for sufficient review. This information will be provided in at least this amount of time and in doing so, it is our understanding that the application will be deemed complete by NDPSC.
7. **Schedule for Cultural/Natural Resource Field Studies** – It is our understanding that the field studies do not need to be completed prior to the



acceptance of the application and scheduling of the NDPSC hearing. As such, some of the field studies are in the process of being conducted and some are proposed to occur at more appropriate times of the year (i.e., growing season for the prairie inventory and wetlands delineation, etc.).

- a. Wetland Delineation – The areas proposed for disturbance by turbines and other project facilities will be delineated for wetlands. This study can be conducted after the site plan is finalized and the growing season is initiated.
- b. Woodland and Prairie Inventory – This will be conducted during the growing season along with the wetland delineation.
- c. Pre-Construction Avian Survey – A 10-week study will be conducted during spring migration. The spring migration period typically starts in late March and extends through May. Recent flooding and blizzards have delayed initiation of the avian survey. However, since roads across the Red River Valley and other parts of North Dakota have recently become clear of flood waters and snow, Westwood has initiated this field study. The first week of collecting data on spring migration began April 1, 2009. For a 10-week study, data on spring migration use of avian species within the project will be conducted through the first week of June.
- d. Class III Archaeological Investigation – This was recommended based on the results of the Class I Investigation, and the NDSHPO agreed with the recommendation. Optimum conditions for conducting this survey occurs after soils thaw and prior to mid-June. These conditions allow for greater soil surface visibility and data recovery.

8. **Other** –

- a. Sequoia is working with the U.S. Fish and Wildlife Service to avoid regulated wetlands on U.S. Fish and Wildlife wetland easements within the project boundaries. This language will be explicitly stated within the application text.
- b. The North Dakota Game and Fish Department manages the WRAs (see p. 63 of the application).
- c. The Turtle Mountains are the area to the west of the project and show up as green on the exhibits, such as Exhibit 3 (Project Location and Preliminary Site Layout (aerial)).

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We appreciate your careful review of the initial application. Should there be further questions or if you require additional assistance, please do not hesitate to contact me.

Please contact me at 952-906-7423 or amy.linnerooth@westwoodps.com if you have any questions.

Sincerely,

WESTWOOD PROFESSIONAL SERVICES

A handwritten signature in black ink that reads 'Amy Linnerooth'.

Amy Linnerooth
Environmental Scientist