BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PRAIRIEWINDS SD1, INC., A SUBSIDIARY OF BASIN ELECTRIC POWER COOPERATIVE, FOR A WIND ENERGY FACILITY PERMIT FOR THE PRAIRIEWINDS SD1 WIND FARM AND ASSOCIATED FACILITIES	))))))	**STIPULATION** **EL09-028**

It is hereby stipulated and agreed by and between PrairieWinds SD 1, Inc. (Applicant), a wholly-owned subsidiary of Basin Electric Power Cooperative, and the Staff of the South Dakota Public Utilities Commission (Staff) that the following Findings of Fact, Conclusions of Law and an appropriate Order consistent with such Findings and Conclusions may be adopted by the South Dakota Public Utilities Commission (Commission) in the above-captioned matter. In support of its Application for a Wind Energy Facilities Permit (Permit) for the 165 megawatt (MW) wind energy facility and ancillary facilities (Project), the Applicant hereby offers this Stipulation, the Application filed December 30, 2009, and all of the responses submitted by the Applicant to the Staff's data requests. Staff offers no answering testimony or exhibits subject to the Commission's acceptance of the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. PURPOSE

The Applicant proposes to construct and operate a wind energy electric generating facility and ancillary facilities, approximately one half mile south of the area defined as Crow Lake, South Dakota. The purpose of this Project is to develop the wind resource in Aurora, Jerauld and Brule counties of South Dakota to meet a portion of the regional demand for renewable power. Project construction is scheduled for mid-2010. A delay in the construction schedule would result in additional costs, including charges for double handling and/or storing project components, additional contractor charges, and incremental costs relating to an increase in the amount of winter weather construction.

2. PROJECT AND SITE DESCRIPTION

2.1 GENERAL OVERVIEW

The Project will be located on a footprint (Project Site) that will encompass approximately 37,000 acres of land in southern Jerauld County, northwestern Aurora County and northeastern Brule County, South Dakota (located approximately one half mile south of the unincorporated community of Crow Lake). The Project Site will include approximately 58 square miles in Patten and Pleasant Valley Townships in Aurora County; Logan, Crow Lake, and Anina Townships in Jerauld County; and Willow Lake and Plummer Townships in Brule County, South Dakota. General legal descriptions for the Project Site are shown below:

County	Township Name	Township	Range	Sections
Aurora	Patten	105 N	66 W	1-11, 14-22, 28-32
	Pleasant Valley	105 N	65 W	4, 5, 6
Brule	Willow Lake	104 N	67 W	1-4
	Plummer	105 N	67 W	1-3, 11, 12, 25, 26, 34, 35, 36
Jerauld	Anina	106 N	65 W	20-23, 26-33
	Crow Lake	106 N	66 W	25-36
	Logan	106 N	67 W	25, 26, 35, 36

2.2 PROJECT COMPONENTS AND FACILITIES

The Project will consist of up to 110 1.5 MW Wind Turbine Generators (WTGs) with an aggregate nameplate capacity of 165 MW and a net operating capacity of between approximately 563,706 and 621,522 megawatt-hours per year (MWh/yr), assuming a capacity factor of 39 to 43 percent. The Project will also include electric collector lines, the Crow Lake Collector Substation (CLCS), an operations and maintenance building, access roads connecting to each WTG, one to two permanent meteorological towers, a SODAR unit or LIDAR unit and SCADA system. The Project also will include a 230 kilovolt (kV) transmission line approximately 13 miles in length (originating at the CLCS) to provide an interconnection to the Wessington Springs Substation owned by the Western Area Power Administration (Western).

The Application has been prepared and submitted utilizing a preliminary layout shown in Figure 3 of Appendix A of the Application. The final layout may change based upon field conditions, construction obstacles encountered, landowner accommodations, environmental considerations and other requirements. Applicant will submit a final preconstruction layout to the Commission as soon as it is completed and not less than thirty days prior to construction. The final design and layout will adhere to the conditions set forth in the Permit and all other legal and regulatory requirements applicable to the Project.

2.3 WIND TURBINE GENERATORS

Applicant plans to install up to 110 General Electric 1.5sle model wind turbines for the Project. Each WTG will have a nameplate capacity output of 1.5 MW. Each WTG will have a hub height of 80 meters (262 feet) and a turbine rotor diameter of 77 meters (252 feet). The total height of each WTG will be 118.5 meters (389 feet) with a blade in the vertical position. Specifications for the turbines are shown below:

GE 1.5 MW Characteristics	
Cut-in wind speed[1]	3.5 meters per second (7.8 miles per hour)
Rated capacity wind speed[2]	12 meters per second (27 miles per hour)
Cut-out wind speed[3]	25 meters per second (56 miles per hour)
Maximum sustained wind speed[4]	Over 45 meters per second (100 miles per hour)
Rotor speed	10.1 to 20.4 revolutions per minute

The turbines will be active yaw- and pitch-regulated machines with power and torque control capabilities. Each WTG has three blades. As the wind passes over the blades of a WTG, it creates lift and causes the rotor to turn. The rotor is connected by a hub and main shaft to a gearbox, which is connected to a generator.

Other turbine specifications include:

- Gearbox with three-step planetary spur gear system;
- Programmable logic controller (PLC);
- Double fed three-phase asynchronous generator;
- A braking system for each blade and a hydraulic parking brake (disc brake); and
- Yaw systems that are electromechanically driven.

2.4 WIND TURBINE TOWERS

The tower that supports the wind turbine is a tapered monopole (as shown in Figure 4 of the Application) approximately 80 meters (262 feet) in height. The towers will be constructed of tubular steel, approximately 17 feet in diameter at the base, with internal joint flanges. The color of the tower will be standard white or off-white. Welds are made in automatically controlled power welding machines and ultrasonically inspected during manufacturing per American National Standards Institute (ANSI) specifications. Surfaces are sandblasted and multi-layer coated for protection against corrosion. Access to the turbine is through a lockable steel door at the base of the tower. Four platforms are connected with a ladder and a fall arresting safety system for access to the nacelle. Tower lighting will meet Federal Aviation Administration (FAA) requirements. A controller cabinet will be located inside each tower base. Towers are typically fabricated in three sections and assembled on-site.

2.5 WIND TURBINE FOUNDATIONS

The turbine foundations will be mat foundations (inverted T-foundations) or concentric-

[1] Cut-in wind speed = wind speed at which turbine begins operations
[2] Rated capacity wind speed = wind speed at which turbine reaches its rated capacity
[3] Cut-out wind speed (600 second average) = wind speed above which turbine shuts down operation
[4] Maximum sustained wind speed = wind speed up to which turbine is designed to withdtand

ring-shell foundations. The actual foundation design for each turbine will be determined based on site-specific geotechnical information and structural loading requirements for the turbine. The pedestal diameter for an 80 meter tower (262 feet) is approximately 5.2 meters (17 feet). In some cases, for step-and-touch voltage compliance, an area around a turbine may be covered in 4 inches of gravel, river rock or crushed stone.

The excavated area for the turbine foundations will typically be approximately 70 feet by 70 feet (approximately 0.1 acre). During construction, a larger area will be used to lay down the rotors and maneuver cranes during turbine assembly. During construction, a 190-foot by 210-foot work/staging area at each turbine will include the crane pad and rotor assembly area.

A generator step up transformer (GSU) will be installed at the base of each wind turbine to increase the output voltage of the wind turbine to the voltage of the power collection system (34.5 kV). The transformers will be mounted on concrete pads and will be placed next to each WTG.

2.6 ACCESS ROADS

Approximately 70 miles of new or upgraded roads will be required to facilitate construction, operation and maintenance of the WTGs. Approximately 30 to 40 miles of the anticipated access roads will be constructed in connection with the construction of the Project. The rest will be existing roads, which will be improved and/or upgraded if necessary. These roads will be designed to minimize length and construction impact. The access roads will be approximately 25 feet in width to accommodate the safe operation of construction equipment. Upon completion of construction, the access roads will be reclaimed and narrowed to an extent allowing for the routine maintenance and operation of the Project. The access roads will utilize existing state, county and section line roads and right-of-way (ROW) where possible, and will follow fence lines, field lines and existing field access roads to the extent possible. Access roads will include appropriate drainage controls including culverts and will be constructed in a manner to allow farm and/or land owner equipment to cross. The roads will be surfaced with Class 5 gravel and other road base designed to allow passage under inclement weather conditions. The access road cross sections will consist of graded soil, overlain by geotextile fabric (if needed), and surfaced with compacted aggregate base course.

2.7 OPERATIONS AND MAINTENANCE FACILITIES

An operations and maintenance (O&M) building of approximately 5,500-square foot (50 feet by 110 feet) will be built on private land owned by Applicant. The current proposed location of the O&M facility is in the southeast corner of Section 3 of Patten Township. The O&M building will house equipment to operate and maintain the Project. A gravel parking pad will be constructed adjacent to the O&M building.

2.8 METEOROLOGICAL TOWERS AND SODAR UNITS

Applicant has erected four temporary meteorological towers on the Project Site. These temporary meteorological towers will be removed within one year of completion of Project construction. Applicant anticipates that the Project will include one to three permanent towers to locate wind measurement equipment consisting of Light Detection and Ranging (LIDAR) or Sonic Detection and Ranging (SODAR) units, or one or two permanent 60-meter (197 feet) or 80-meter (262 feet) meteorological towers to house anemometers to measure the wind speed. The permanent towers will not have guy wires and will be lighted as necessary to comply with

FAA guidelines. Each meteorological tower will result in a permanent impact of approximately 6.2 meters by 6.2 meters (20.5 feet by 20.5 feet), or 39 square meters (420 square feet).

2.9 UNDERGROUND 34.5 kV ELECTRIC SYSTEM

Each WTG within the Project Site will be interconnected by communication and electrical power collection circuit facilities. These facilities will include underground collector lines that will deliver wind-generated power to the CLCS, where the electrical voltage will be stepped up from 34.5 kV to 230 kV. The underground collector lines will consist of three power cables contained in an insulated jacket and buried at a minimum depth of 1.2 meters (4 feet) that will not interfere with farming operations. Access to the underground lines will be obtained at each turbine site, via junction boxes located at points where the underground collector system cables are spliced and where the cables enter the CLCS. The underground electrical collection and communication systems generally will be installed by plowing or trenching the cables. The estimated trench length, including parallel trenches, is 317,000 feet (approximately 60 miles). Topsoil will be segregated and temporarily stockpiled prior to trenching. Reasonable efforts will be made to replace the disturbed soils and topsoil over the buried cable within one to three days to restore the drainage patterns and surface topography to pre-existing conditions. In rangeland prairie areas, Applicant will revegetate the disturbed soils with a weed-free native plant seed mix.

The fiber optic communication lines for the Project will be installed in the same trenches as the underground electrical collector cables and will connect each turbine to the O&M building and CLCS.

3. TRANSMISSION FACILITIES

3.1 230 kV TRANSMISSION LINE

A new single circuit 230 kV transmission line will be required to deliver the power from the CLCS to a new point of interconnection at the 230 kV Wessington Springs Substation owned by Western. The Wessington Springs Substation is located approximately 13 miles from the proposed CLCS. The line will be built using steel single-pole structures. The single-pole transmission line structures will range in height from approximately 95 to 120 feet depending on span distances between structures and area topography. The span between structures would range from 700 feet to 950 feet depending on topography; taller structures might be used for crossing existing distribution and transmission lines or where unusual terrain exists.

The transmission line route will exit the CLCS located in the northwest corner of Section 9 through the extreme northeastern corner of the neighboring section to the west, Section 8, and then proceed northward along the eastern boundary of Section 5. Once at the northeast corner of Section 5, the transmission line will turn eastward and continue east approximately 5 miles along the boundary between Jerauld and Aurora Counties. The route then turns north for two miles, east for about 2.5 miles, and then northeastward about one-half mile toward the Wessington Springs Substation.

This transmission line route will require a 125-foot ROW. The poles will be located on easements obtained from landowners on private land just outside of road ROW, except in the cross-country segments where the line may be placed within public ROW along the section lines. The conductor type for the 230 kV line is expected to be 1272 kcmil 45/7 Aluminum Conductor, Steel Reinforced (ACSR).

Applicant will use due diligence to avoid significant deviations from the alignment described above. However, deviations from the route might be necessary to accommodate landowner preferences, cultural resource considerations, requirements of township, county and state road departments and engineering requirements. The final pre-construction design plans will be submitted to the Commission no later than thirty days before the start of construction.

3.2 COLLECTOR SUBSTATION

A new collector substation, the CLCS, will be constructed in the center of the Project Site in the northwest corner of Section 9 of Patten Township of Aurora County. The 34.5 kV collection grid and fiber optic communication network will terminate at the CLCS. The CLCS will include a transformer to step up the voltage of the collection grid from 34.5 kV to 230 kV. Additional facilities located within the CLCS include above ground bus structures to interconnect the substation components, breakers, a building for relays, switchgear, communications and controls and other related facilities required for delivery of electric power to the 230 kV transmission line. It is anticipated that the CLCS components will include the following items:

Substation Equipment	Installation (Total)
Control Building	1
34.5 kV Switchgear	1
34.5 kV Capacitor Banks	1
230/34.5 kV Transformer-kV1A	1
230 kV Circuit Breaker	1

The CLCS will be enclosed by a chain link fence with dimensions of roughly 400 feet by 160 feet. The substation components will be placed on concrete and steel foundations. The preliminary CLCS layout is included in Figure 7 of the Application.

The CLCS will be designed in compliance with federal, state and local regulations, National Electrical Safety Code (NESC) standards and other applicable industry standards and will be interconnected to Western's Wessington Springs Substation via the overhead 230 kV transmission line.

3.3 IMPROVEMENTS TO WESSINGTON SPRINGS SUBSTATION

The Project facilities described above will be interconnected with the Wessington Springs Substation via the 230 kV transmission line described above. A 230 kV circuit breaker (SF6 gas-insulated) and associated switches, bus work and metering will be installed at the Wessington Springs Substation to facilitate the interconnection. These improvements will occur within the existing footprint of the Wessington Springs Substation.

3.4 SITE CLEARING FOR TRANSMISSION CONSTRUCTION AND MAINTENANCE

Minimal tree and brush clearing will be required in connection with the construction of the 230 kV transmission line because the majority of the line will be constructed in cultivated agricultural fields, pastures and existing ROWs. In some isolated cases, limited grading could be required at structure locations if there is sloping or uneven ground. Grading may be necessary in that situation to level an access route and/or provide a working area. Temporary

disturbance areas will be restored to their original condition to the extent practical and with input from each landowner. Reclamation activities will include removing and disposing of debris, dismantling temporary facilities, leveling or filling tire ruts and controlling erosion. Reseeding areas disturbed by construction activities will be done with a seed mix free of noxious weeds, similar to that which was removed.

The ROW defines the area where the transmission line can be operated safely and reliably. Maintenance crews will perform inspections, maintain equipment and make repairs over the life of the transmission line. Inspection will occur by aerial or ground patrol. Routine maintenance will be performed as necessary. Vegetation will be removed that may interfere with the safe and reliable operation of the transmission line.

4. ENVIRONMENTAL FACTORS AND PHYSICAL ENVIRONMENT

4.1 GEOLOGICAL FACTORS

The Project Site's topography is characterized by gently rolling hills with low to moderate relief. Site elevation ranges from approximately 1,500 to 1,900 feet above mean sea level (AMSL). The Project Site is located within the Missouri Plateau of the Coteau (a treeless plain) du Missouri Division of the Great Plains physiographic province.

The South Dakota Geological Survey (SDGS) 2004 Geologic Map of South Dakota indicates that the uppermost bedrock unit underlying the Project Site is the Upper Cretaceous-aged Pierre Shale. The Pierre Shale is characteristic of blue-gray to dark-gray fissile to blocky shale with persistent beds of bentonite, black organic shale, and light-brown chalky shale and contains minor sandstone, conglomerate and abundant carbonate and ferruginous concretions (SDGS 2004).

4.2 ECONOMIC DEPOSITS

Commercially viable deposits of oil and gas and other mineral resources have not been identified in Aurora, Jerald and Brule Counties. Sand and gravel deposits associated with the Upper Wisconsinan glaciation are the predominant geological resources mined in Aurora, Jerald and Brule Counties in South Dakota. Uneven spatial distribution of these deposits makes large-scale development of sand and gravel mining operations in this area economically impractical.

Review of United States Geological Survey (USGS) 7.5 minute quadrangle mapping, aerial photography and a field review of the Project area revealed gravel pits within the Project Site. The WTGs, access roads, collector lines and transmission lines have been sited to avoid these identified resource areas, and adverse effects to this land use activity (example: rendering the resources inaccessible) are not anticipated.

4.3 SOIL TYPES

Soils within the Project Site consist primarily of loams (silt loams, clay loams, stony loams, silty clay loams) and clays derived from underlying glacial tills (USDA SCS 1985), (USDA SCS 1994). The loamy soils within the Project Site are not highly susceptible to erosion. Most of these soils are conducive to agricultural activities including crop production and livestock grazing. Hydric soils located within the Project Site are isolated and generally

associated with small prairie pothole-type wetlands and drainage ways. Approximately 94 percent of the soils within the Project Site are well-drained soils. Approximately 6 percent of the soils are comprised of moderately well-drained soils, and significantly less than 1 percent of the soils are comprised of somewhat excessively well-drained soils. Potential frost action was noted as low to moderate in all soils.

4.4 SEISMIC RISKS

Seismic activity in South Dakota is low, especially in the eastern portions of the State. The Project Site is depicted as having a possibility of exceeding shaking forces of approximately 8 percent of *g* for 2 occurrences out of 100 times in a 50-year period.

4.5 EROSION, SLOPE STABILITY AND SEDIMENTATION

The Project has been designed to minimize construction cut and fill work and to minimize construction in steep slope areas. The WTGs generally will be located at higher elevations to maximize exposure to wind and avoid steep slope areas for foundation installation. The access roads and the underground collector lines will avoid steep slopes as much as possible. In general, the 230 kV transmission line and other overhead lines will be routed parallel to roadways, section lines, or across areas that have gently rolling topography (an exception is the descent of a relatively steep slope at the extreme northeast corner of the Project Site along the southern boundary of Section 22 of the Anina Township) heading toward the Wessington Springs Substation.

Applicant will develop a Storm Water Pollution Prevention Plan (SWPPP) when final, detailed engineering information on grading and final design is developed for the Project. The SWPPP will mandate Best Management Practices (BMPs) to control erosion and sedimentation. BMPs may include silt fencing, erosion control blankets, re-vegetating side slopes, temporary storm water sedimentation ponds, or other methods of controlling storm water runoff and minimizing erosion and sedimentation. The SWPPP and National Pollution Discharge Elimination System (NPDES) Notice of Intent (NOI) will be developed after final civil design is completed.

During construction, BMPs will be implemented to control erosion and to ensure that drainage ways and streams are not impacted by sediment runoff from exposed soils during precipitation events. In steeper areas, care will be taken to minimize cuts and/or fills and to employ appropriate erosion prevention measures. During operation (and after reseeding and stabilization), the Project facilities and 230 kV transmission line are not expected to increase soil erosion rates, and the relatively small amount of permanent areas of disturbance (133 acres of the approximate 37,000-acre Project Site) are not expected to impact the soil resources of the area.

4.6 GEOLOGICAL CONSTRAINTS

Although soil characteristics might impact design requirements of individual wind turbine tower foundations, there are no known significant geological constraints likely to affect the overall development and operation of the Project Prior to construction, soil borings will be performed at all turbine locations to ensure that the foundation design is suitable for the physical conditions. If unsuitable soils are found, the center point of the foundation may be shifted or the turbine may be dropped from construction.

4.7 HYDROLOGY

The Project Site is located within the Missouri River Basin surface water drainage system, which has a total drainage area of approximately 529,350 square miles. The Project Site receives approximately 15 to 25 inches of precipitation annually, is located within the prairie pothole region of the northern Great Plains and is characterized by a combination of hilly well-drained and poorly-drained topography, The poorly-drained prairie pothole areas (water-holding sloughs) are mainly located along the Site's northeast-southwest trending axis. The well-drained, hilly terrain is predominately located at the northwestern portion of the Project Site and along the eastern boundary where the topography drops in elevation toward the southeast. Intermittent streams are prevalent in the well-drained hilly areas of the Project Site. Shallow, localized sand and gravel aquifers associated with Pleistocene glacial deposits (Wisconsinan glaciation) are located within the Project Site.

4.8 EFFECT ON CURRENT OR PLANNED WATER USE

The Project will not have impacts on either municipal or private water uses in the Project Site. Water storage, reprocessing, or cooling is not required for either the planned construction or operation of the Project. The Project facilities will not require deep well injection. The Project operation will not require the appropriation of surface water or permanent dewatering.

It is likely that a connection to the rural water supply will be necessary for the O&M facility. Alternatively, a water supply well may be required if rural water service is not available. Water usage at the O&M facility will be similar to household volume: less than 5 gallons per minute. Applicant will coordinate with Aurora-Brule Rural Water System (RWS) Inc. to avoid impacts to rural water lines in the Project area during construction.

In the case of any other potential water supply well locations (e.g., a livestock water supply well) located near potential dewatering activities, appropriate action will be taken to ensure that an adequate supply of water is provided until dewatering activities have been completed. The Project will have no impact on surface water availability or use for communities, schools, agriculture, recreation, fish or wildlife.

4.9 SURFACE AND GROUND WATER IMPACTS

Potential impacts to water resources from the construction and operation of wind projects include deterioration of surface water quality through sedimentation, impacts to drainage patterns, impacts to flood storage areas and increased runoff due to the creation of impervious surfaces. The Project is not expected to cause major changes in runoff patterns or volume of runoff, nor is it expected to have adverse impacts on existing hydrology.

During construction, BMPs will be implemented to control erosion and ensure that drainage ways are not impacted by sediment runoff from exposed soils during precipitation events. Care will be taken in the eastern and northeast portions of the Project Site to minimize cuts and/or fills and to employ appropriate erosion prevention measures.

Groundwater dewatering is not anticipated to be a major concern with the Project since WTGs are most likely to be placed at higher elevation where the water table tends to be deeper. Similarly, it is anticipated that the 230 kV transmission line structures will be placed to span wetlands and water features, thereby generally avoiding low areas where the water table may be closer to the surface. Should dewatering be required, the necessary permits will be obtained

and the duration of dewatering will be minimized to the extent possible. Dewatered groundwater will be properly handled to allow sediments to settle out and be removed before the water is discharged to minimize soil erosion and sedimentation of surface waters.

Because the Project will disturb more than 1 acre, a National Pollution Discharge Elimination System (NPDES) permit will be required. It is estimated that approximately 1,405 acres will be temporarily disturbed as a result of construction. In addition, the South Dakota Department of Environment and Natural Resources (DENR) has issued a General Storm Water Permit for Construction Activities; an application for coverage under this permit will be needed for the Project. One of the conditions of this permit is the development of a SWPPP. The SWPPP will mandate BMPs to control erosion and sedimentation. BMPs may include containing excavated material, use of silt fences, protecting exposed soil, stabilizing restored material and revegetating disturbed areas, temporary storm water sedimentation ponds, or other methods of controlling storm water runoff and minimizing sedimentation. Since erosion and sediment control will be in place for construction and operation of the Project, no impacts to water quality are expected.

In general, because WTGs will be located at higher elevations within the Project Site to maximize wind exposure, impacts to ephemeral streams and drainage ways are not anticipated from the turbine sites. The underground collection system may temporarily impact surface drainage patterns during construction if the collection system is trenched through drainage ways; however, these impacts will be short-term, and existing contours and drainage patterns are expected to be restored within 24 hours of trenching. Where stream/drainage way crossings cannot be avoided, appropriately designed culverts or low water crossings will be placed to maintain the free flow of water. Permanent disturbances (approximately 133 acres) will be dispersed throughout the Project Site and are not expected to change existing drainage patterns.

The 230 kV transmission line will be designed to span surface water stream features, and the areas of permanent disturbance associated with the transmission structures (0.3 acres) are not expected to change existing drainage patterns.

No FEMA-mapped floodplains have been identified within the Project Site and the Project is not expected to impact any significant floodplains.

The Project is not expected to cause significant changes in runoff patterns or volume. Appropriate storm water management BMPs will be implemented during construction and operation of the Project and transmission line facilities to mitigate the effects of increases in runoff volume due to the increase in impervious surface attributable to construction of Project facilities.

4.10 WILDLIFE

Species present within the Project Site are those typically found in aquatic habitats, wetlands, grasslands, prairie, deciduous woodlands, agricultural and developed settings. Agricultural practices have reduced the amount and continuity of prairie and wetland habitat over the past 150 years and wildlife now shares the region with cattle and other livestock in intermixed habitats. Hunting is a popular recreational activity in and around the Project Site. Game species pursued most often in and around the area include pheasants and other upland game birds, white-tailed deer, fox, coyotes and waterfowl.

There is no known occurrence of protected or sensitive invertebrate or mammalian species within the Project Site. Avian species are the primary wildlife potentially affected by a project within the terrestrial ecosystem located in the Project Site. The Project Site is located within the Central Flyway migration corridor and Prairie Pothole Region. The Project area contains both wetland and upland bird habitat. Birds, including passerines, raptors and waterfowl, migrate through the Project Site. There are two Federal threatened and endangered (T&E) avian species listed for Aurora, Brule and/or Jerauld Counties in South Dakota, the whooping crane (*Grus americana*) and the piping plover (*Charadrius melodus).*

Construction of the Project could impact wildlife by causing temporary or permanent loss of or changes to habitat and mortality. Temporary impacts would be associated with the construction phases of the Project and permanent impacts (example: mortality to birds and bats resulting from collisions with wind turbines) may be associated with the operation of the Project. Approximately 1,405 acres of habitat would be temporarily disturbed, while approximately 133 acres would become permanently unavailable. The areas of temporary disturbance will be reclaimed and reseeded with an approved seed mix. Permanent habitat loss will be minimal.

Temporary disturbance (noise, habitat destruction, increased vehicle traffic) related to the construction phase will be localized and minimal. Construction crews will be instructed to avoid disturbing or harassing wildlife. Potential mortalities due to the construction phase are not expected to impact populations. Following construction, wildlife species would be expected to become accustomed to the routine facility operation and maintenance activities and return to continued use of the Project area.

During construction, prudent waste management practices will be employed in order to minimize the production of loose wastes that could temporarily attract scavengers to the Project area. Avoiding an increased presence of scavengers by removing trash from the Project area will reduce impacts to nesting species and other wildlife sensitive to scavengers.

Construction personnel will be instructed to report any bald eagle sightings. Construction activities would be modified or curtailed when bald eagles are present to reduce disturbance.

A variety of measures will be used to avoid and minimize bat and bird fatalities that may result from the Project. The Project will use tubular structures and newer generation turbines (GE 1.5sle WTGs) to eliminate the creation of perching sites and pose a lower risk of avian collisions. A post-construction monitoring program to assess avian mortality will be designed and implemented in coordination with the United States Fish & Wildlife Service (USFWS), Western, Rural Utilities Service (RUS) and South Dakota Game, Fish & Parks (SDGFP). Applicant will construct overhead power lines in accordance with the current Avian Power Line Interaction Committee (APLIC) guidelines for raptor-safe design.

Baseline surveys have been initiated to assess pre-construction avian abundance and habitat use in the Project site. Applicant will complete pre-construction and post-construction monitoring in accordance with the directive from USFWS to determine avian and bat use of the Project Site before and after construction and to determine mortality rates associated with Project operation.

4.11 AQUATIC ECOSYSTEM

To minimize indirect impacts due to increased sedimentation from construction in areas up flow of the Topeka shiner habitat, Applicant will limit potential trenching activities in

ephemeral tributaries to trenching during the dry periods (avoiding any remaining pools from wet periods that may contain species) or by directional boring.

Wetlands will be avoided to the extent reasonably possible when locating access roads, collection feeder lines and the overhead 230 kV transmission lines. The primary potential for impact to aquatic ecosystems will be from increased sedimentation or increased total suspended solids due to soil erosion from construction sites. Care will be taken to avoid or minimize excavation in steep slope areas. Where reasonably possible, access roads will be sited to avoid steep slopes. During construction, BMPs will be implemented to ensure that drainage ways and streams are not impacted by sediment runoff from exposed soils during precipitation events. Overhead transmission poles will not be placed in streambeds.

5. LAND USE

5.1 EXISTING LAND USE

The predominant land use within the Project Site is agricultural (a combination of rangeland and cultivated row crops). Soils in the Project Site consist of a variety of loams, silt loams, silty clay loams and sandy loams derived from underlying glacial tills that are considered rich agricultural soils. Approximately 60 percent of the real estate within the Project Site is considered farmland of statewide importance. Approximately 3 percent is considered prime farmland, 4 percent is considered prime farmland if irrigated and the remaining 33 percent is not considered prime farmland.

Other land uses within the Project Site are scattered rural residences, farmsteads, roads, stock ponds, woodlands, lakes, mixed-prairie grasslands, rangelands, wetlands, gravel pits, transmission lines and the Wessington Springs Substation. The Project Site is zoned agricultural. Existing transmission lines are located along the northeast Project boundary, and power distribution lines and telephone lines also are found throughout the Project Site.

5.2 LAND USE IMPACTS ANALYSIS

5.2.1 DISPLACEMENT

There are approximately 20 occupied residences out of 27 residences identified in the Project Site. Applicant anticipates that there will be no displacement of residences or businesses due to construction or operation of the Project. The 230 kV transmission line route has been designed to avoid and minimize direct impacts to occupied residences. There will not be any displacement of residences or businesses attributable to construction of the transmission line.

5.2.2 RECREATIONAL IMPACTS

Walk-in hunting areas were not identified within the Project Site and impacts to recreational land uses are not anticipated. Impacts to recreational uses of the lakes and streams located within or downstream of the Project Site are not anticipated.

5.3 LOCAL LAND USE CONTROLS

The Project will be constructed on agricultural land in South Dakota regulated by Aurora,

Jerauld and Brule Counties. Applicant will coordinate with the respective county zoning offices to comply with all applicable ordinances and zoning requirements (e.g. setback distances), and applications will be filed for the appropriate permits.

6. NOISE

There will be noise associated with the construction phase of the Project and the operation of the Project facilities. Examples of construction and decommissioning related noise-emitting sources include: heavy equipment used in earthmoving, foundation preparation and demolition, structure assembly and other activities. When in motion, the wind turbines will emit a perceptible sound. The level of this noise varies with the speed of the turbine and the distance of the listener from the turbine. Operational noise-emitting sources also include a low, continuous "hum" from the active transmission lines and the CLCS facility. It is not anticipated that the CLCS or overhead transmission lines will noticeably increase the noise levels at the occupied residences.

The maximum predicted turbine-generated noise level at any existing, occupied residence will not exceed 50 dBA.

7. AESTHETIC IMPACTS

The placement of turbines within the Project Site will have a combination of effects on the visual quality and rural character of the area. However, a wind farm does not generate much traffic or generate a noticeable increase in day-to-day human activity in the area. Therefore, the Project Site will retain the rural sense and remote characteristic of the vicinity. Moreover, the Project will not involve any ongoing industrial use of non-renewable resources or emissions into the environment, and wind turbines already exist near the Project that have altered the landscape from agricultural to wind farm/agricultural.

The turbines will require lights on top of the nacelle for aircraft safety, and those lights potentially will be visible from nearby rural residences and roadways. The regional landscape is generally uniform, does not contain highly distinctive or important landscape features and is not densely populated or used. Therefore, impacts to the existing visual character or quality will be slight.

8. RADIO AND TELEVISION INTERFERENCE

There are a number of underground and overhead telecommunications lines located within the Project Site. Applicant has conducted a Comsearch in order to minimize the potential for interference problems. If, after construction, interference with communications infrastructure is detected, Applicant will work with the communication firm to mitigate or eliminate problems. Similarly, Applicant will use good faith and due diligence reasonably to mitigate or eliminate any incremental television interference attributable to the Project.

9. WATER QUALITY

Because Applicant will implement the conditions of the General Storm Water Permit process (SWPPP mandated BMPs), the Project is not expected to have detrimental impact on water quality within the Project Site during construction or operation of the Project.

10. AIR QUALITY

During construction of the Project, fugitive dust emissions will increase due to truck and equipment traffic in the area. Additionally, there will be short term emissions from diesel trucks, construction equipment and the batch plant, if used. Air quality effects caused by dust would be short-term, limited to the time of construction or decommissioning, and would not exceed South Dakota Ambient Air Quality Standards (SDAAQS) for particulate matter. The Project is not located in a non-attainment area for particulate matter. Construction and operation of the Project will not result in exceedance of any federal, state or local air quality standards. The operation of the Project will not produce air emissions that would impact the surrounding ambient air quality. Potential complaints regarding fugitive dust emissions will be addressed by Applicant in an efficient and effective manner.

Potential air emissions from a transmission line result from corona, which can produce ozone in the air surrounding the conductor. Studies designed to monitor the production of ozone under transmission lines have generally detected no measurable increases. Accordingly it is anticipated that there will be no measurable impacts relating to ozone for the facility.

Circuit breakers in the CLCS and the addition to the Wessington Springs Substation likely will contain small amounts of SF6. Release of SF6 from a breaker or other electrical device can occur during the initial filling process or due to leaks after filling. The very small amounts of SF6 used in the proposed CLCS components are not anticipated to cause an air quality impact.

11. TIME SCHEDULE

Applicant plans to commence preliminary permitting and construction of the Project in mid-July 2010. Applicant plans to have the Project fully operational by March 2011.

12. COMMUNITY IMPACTS

12.1 SOCIOECONOMIC IMPACTS

No long-term adverse impact from construction to the socioeconomics of the area is expected; any short-term effects likely will be beneficial to local businesses. The Project will have no lasting adverse impact on the industrial sector, housing, labor market, health facilities, sewage and water systems, existing energy facilities, solid waste facilities, schools, law enforcement, other community and government facilities, or recreation facilities.

Construction impacts to social and economic resources should be short-term. Revenue will increase for some local businesses, such as hotels, restaurants, gas stations and grocery stores. Other local businesses, such as ready-mix concrete and gravel suppliers, hardware stores, welding and machine shops, packaging and postal services and heavy equipment repair and maintenance service providers will also likely benefit from Project construction. Adverse impacts to social services will be unlikely because of the short-term nature of the construction. Given the short-term duration of construction activities, no significant increase in permanent population of local communities is expected. The Project will not result in significant increased need for public services, including fire protection. There will be no discernible impact on local utilities, government or community services attributable to the Project.

Project construction crews will include personnel needed for installation of each of the facility components (WTGs, CLCS, 230 kV transmission line, collector line installations, O&M building). The number of construction jobs is anticipated to peak around 250, provided there is not a requirement for a major acceleration due to a late start. Assuming a 9-month construction schedule and an average of 175 employees over that time, labor expenditures are estimated to be on the order of 10 to 15 million dollars.

The most direct beneficial impact would be the net economic benefit to participating landowners from lease and easement payments, which would provide a supplementary source of income.

The operation and maintenance of the Project will result in several long-term positions, which will likely have a positive impact on income levels in the Project area. The Project will be operated by ten individuals, including an O&M Supervisor, a lead wind technician, and eight additional wind technicians. Employee compensation will amount to approximately $550,000 per year, plus an additional 40 percent for benefits. Salaries are expected to increase by about 3 percent per year, based on inflation. These positions will likely remain steady through the life of the Project. The Project will have no impact on population, overall occupation distribution or the integration and cohesion of communities.

12.2 TAXATION

There will be beneficial long-term impacts to the counties' tax base for the life of the Project. Aurora, Brule and Jerauld Counties will receive revenues from property taxes, fees and permits. There could also be economic benefits for the counties from added taxes paid on real property.

12.3 AGRICULTURAL IMPACTS

Minimal existing agricultural land will be taken out of crop and forage production by the Project. Areas affected will generally be limited to WTG foundations, access roads and electric collection and interconnection facilities. Landowners will be compensated by Applicant for losses to crop production during construction. Agricultural activities can occur up to the edge of access roads and turbine pads. The buried underground collection system will not alter agricultural activities. The impacts to agriculture from the 230 kV transmission line structures will be minimized by aligning the transmission line along and near the field edge where practicable.

Approximately 391 acres of cropland will be temporarily impacted by Project construction. It is estimated that approximately 36 acres of agricultural cropland will be permanently impacted, which impacted area constitutes less than 0.3 percent of the total cultivated cropland in the Project Site. Acres temporarily disturbed due to construction will be re-vegetated with crops matching the surrounding agriculture landscape.

12.4 TRANSPORTATION IMPACTS

The Project will not result in any permanent impacts to the area's ground transportation resources. The Project Site contains several gravel roads and local two-lane asphalt paved roads. During construction, it is anticipated that several types of light, medium and heavy-duty construction vehicles will travel to and from the site, as well as private vehicles used by the construction personnel. The movement of equipment and materials to the site during construction will cause a relatively short-term increase in traffic on local roadways during the construction period. Shipments of materials, such as gravel, concrete and water would not be

expected to substantially affect local primary and secondary road networks.

There may be some improvements to gravel roads and temporary impacts to local roads during the construction phase of the Project. Applicant will work with the South Dakota Department of Transportation (SD DOT), Aurora, Jerauld and Brule Counties, and the local townships to obtain the appropriate access and use permits, and to minimize and mitigate impacts to area transportation.

Prior to construction, Applicant will consult with the FAA and the South Dakota Aeronautics Commission (SDAC) to identify applicable lighting requirements and to assure the FAA and SDAC that the Project does not cause significant impacts to air traffic. The Project will not impact an FAA-designated air safety zone. The construction, operation and decommissioning of the Project will result in less than significant impacts to aviation through the implementation of the measures as prescribed by the FAA. The final layout and design of the Project will be submitted to the FAA for approval prior to construction. The Applicant will provide the Commission a copy of the No Hazard letter received from the FAA.

12.5 CULTURAL RESOURCE IMPACTS

Applicant will physically avoid recorded resources during Project construction and operation activities.

In addition, in recognition that Project activities may encounter additional archaeological resources not identified as of the date of this Stipulation, Applicant is currently sponsoring an evaluation of archaeological properties that may exist within construction limits in the Project footprint. This archaeological investigation is ongoing and will be documented in a technical report that will meet Federal and State technical standards.

13. FUTURE ADDITIONS AND MODIFICATIONS

Applicant seeks Commission approval of up to 110 WTGs with the understanding that fewer than 110 WTGs might actually be constructed.

14. DECOMMISSIONING OF WIND ENERGY FACILITIES

Applicant has entered into long term lease and easement agreements for placement of the WTGs and other Project infrastructure with private landowners within the Project Site. Applicant anticipates that the life of the Project will be no less than 20 years and might be more depending upon future decisions regarding maintenance and upgrades. Applicant will begin decommissioning the Project facilities within 12 months from the time the Project ceases to operate. Decommissioning will be completed within 18 months from the time the Project ceases to operate. Applicant will be responsible for the costs to decommission the Project and associated facilities.

Decommissioning will involve removal of towers, turbine generators, transformers, overhead and underground cables, foundations, buildings and ancillary equipment down to a depth of 4 feet below grade. The access roads will be removed unless the affected landowner provides written notice that the road or portions of the road will be retained. Additionally, disturbed surfaces will be graded, reseeded and restored as nearly as possible to preconstruction condition within 18 months of Project decommissioning.

15. RELIABILITY AND SAFETY

15.1 GENERATORS

Reliability is defined as the ability of the turbine to generate electricity when sufficient wind is available. As of June 2008, over 8,500 GE 1.5 MW turbines were in use worldwide (with more than 5,200 installed in the U.S.). Reliability was greater than 98 percent.

Construction and operation of the Project will have minimal impacts on the security and safety of the local populace. The following safety measures will be taken to reduce the chance of physical and property damage, as well as personal injury, at the site:

- The towers will be placed at distances away from existing roadways and residences per the applicable planned setback requirements described in Section 9.4. of the Application.
- Security measures will be implemented during the construction and operation of the Project, including temporary (safety) and permanent fencing, warning signs and locks on equipment and wind power facilities.
- Turbines will sit on solid steel enclosed tubular towers. Each tower will be accessible only through a solid steel door that will be locked. Tower exteriors are designed to be unclimbable.
- Turbines will conform to applicable industry standards.

15.2 230 kV TRANSMISSION LINE

To ensure safety and reliability, the transmission line will be constructed according to standards of the RUS, the National Electric Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), the American Society of Civil Engineers (ASCE), the American Institute of Steel Construction (AISC), the American Concrete Institute (ACI) and the standards of the Applicant. The transmission line will be constructed on self-supporting galvanized steel single-pole structures. The line will be three-phase, meaning it uses three current-carrying conductors. The conductors will be 1.3 inches in diameter. Above the conductors will be one ½-inch diameter optical ground wire. This wire will provide lightning protection and optical fibers for communications. To ensure reliable and safe operation, the minimum clearances over various features are as follows:

- Cultivated Land or Pasture - 26 feet
- Roads - 28 feet
- Highway - 31 feet
- Railroad - 38 feet
- Line Crossings - 2 to 16 feet, depending on voltage of the line.

These clearances are provided at a maximum conductor temperature of 212°F. The clearance at lower temperatures will be greater.

The 230 kV transmission line ROW will be 125 feet wide. Applicant will comply with requirements of the Federal Energy Regulatory Commission and North American Energy

Reliability Council regarding vegetation that could cause a line outage. Applicant will also clear vegetation that exceeds a maximum height of 12 feet within the ROW.

The transmission line will be equipped with protective devices to safeguard the public should a structure or conductor fall to the ground. The protective devices will consist of breakers and relays located where the transmission line connects to the CLCS. The protective equipment will de-energize the transmission line should such an event occur. In addition, the CLCS will be fenced and access limited to authorized personnel.

16. PERMITS AND APPROVALS

The Project will comply with all federal, state and local laws, rules, regulations and ordinances requiring permits or approvals.

17. WASTE DISPOSAL

Applicant will diligently, timely and at its sole expense remove and properly dispose of waste generated by construction, operation and maintenance of the Project, including but not limited to all hazardous materials, which will primarily be comprised of lubricating materials. All cleanup, removal, storage and disposal activities will be conducted in accordance with all applicable federal, state and local laws, rules, regulations and ordinances.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject matter and parties to this proceeding pursuant to SDCL Chapter 49-41B and ARSD 20:10:22. Subject to the findings made on the four elements of proof under SDCL 49-41B-22, the Commission has the authority to grant, deny, or grant upon reasonable terms, conditions or modifications, a permit for the construction, operation, and maintenance of the Project.

2. Administrative rules have the force of law and are presumed valid. *Feltrop v. Department of Social Svcs.*, 559 N.W.2d 883, 884 (SD1997). An administrative agency is bound by its own rules. *Mulder v. Department of Social Svcs.*, 675 N.W.2d 212, 216 (SD 2004).

3. The standard of proof is by the preponderance of evidence. The Applicant met its burden of proof pursuant to SDCL 49-41B-22 and is entitled to a permit as provided in SDCL 49-41B-25.

4. PrairieWinds SD 1, Inc., a wholly owned subsidiary of Basin Electric Power Cooperative, will be the permitted owner of the Project.

5. The Commission concludes that it needs no other information, other than that required in the Terms and Conditions, to assess the impact of the facility or to determine if Applicant has met its burden of proof.

6. The Commission concludes that the Application and all required filings have been filed with the Commission in conformity with South Dakota law and that all procedural requirements under South Dakota law, including public hearing requirements, have been met or exceeded.

7. The Commission concludes that it possesses the authority under SDCL 49-41B-25 to impose conditions on the construction, operation and maintenance of the Project, that the Conditions set forth below are supported by the record, are reasonable and will help ensure that the Project will meet the standards established for approval of a construction permit for the Project set forth in SDCL 49-41B-22 and that the Conditions are hereby adopted.

8. The Applicant's Permit Application, as amended and supplemented by responses to Staff's data requests, complies with the applicable requirement of SDCL Chapter 49-41B and ARSD 20:10:22.

9. The Project constitutes a wind energy facility as defined in SDCL 49-41B-2(13) and a transmission facility as defined in SDCL 49-41B-2.1(1).

10. Because a federal EIS is required for the Project and because the federal EIS complies with the requirements of SDCL Chapter 34A-9, the Commission appropriately exercised its discretion under SDCL 49-41B-21 in determining not to prepare or require the preparation of a second EIS.

11. The Project, if constructed and operated in accordance with the terms and conditions of this permit, will comply with all applicable laws and rules, including all requirements of SDCL Chapter 49-41B and ARSD 20:10:22.

12. The Project, if constructed and operated in accordance with the terms and conditions of this permit, will not pose an unacceptable threat of serious injury to the environment nor to the social and economic conditions of inhabitants or expected inhabitants in the siting area.

13. The Project, if constructed and operated in accordance with the terms and conditions of this permit, will not substantially impair the health, safety or welfare of the inhabitants of the Project area.

14. The Project, if constructed and operated in accordance with the terms and conditions of this permit, will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.

15. The Commission has the authority to revoke or suspend any permit granted under the South Dakota Energy Facility Permit Act for failure to comply with the terms and conditions of the permit pursuant to SDCL 49-41B-33 and must, pursuant to SDCL 49-41B-29, approve any transfer of the permit that is granted.

16. The Applicant has met its burden of proof pursuant to SDCL 49-41B-22 and is entitled to a permit as provided in SDCL 49-41B-25, subject to the following:

STIPULATION TO FOLLOWING TERMS AND CONDITIONS:

1. The Applicant will obtain all governmental permits which reasonably may be required by any township, county, state or federal agency or any other governmental unit for construction and operation activity prior to engaging in the particular activity covered by

that permit. Copies of any permits obtained by the Applicant shall be sent to the Commission.

2. The Applicant shall comply with all other terms and conditions as set forth in the Findings of Fact and Conclusions of Law.

3. The terms and conditions of the Permit shall be made a uniform condition of construction, subject only to an affirmative written request for an exemption addressed to the Commission. A request for an exemption shall clearly state which particular condition should not be applied to the property in question and the reason for the requested exemption. The Commission shall evaluate such requests on a case-by-case basis.

4. If construction of any portion of the Project commences more than four years after the date the Permit is granted, Applicant must certify to the Commission before the construction commences that such facilities will meet the permit conditions.

5. Applicant shall comply with and implement the Commitments set forth in the Final Environmental Impact Statement.

6. The Permit granted by the Order in this matter shall not be transferable without the approval of the Commission pursuant to SDCL 49-41B-29.

7. Applicant shall construct, operate and maintain the Project in a manner consistent with: 1) descriptions in the Application, 2) responses to data requests, and 3) the conditions of the Permit to Construct, Operate and Maintain the Project.

8. The Applicant shall ensure that its employees, contractors and agents involved in ROW negotiations and acquisitions, ROW clearing, construction and ROW maintenance understand fully and comply with the terms and conditions of this Permit.

9. Applicant agrees that the Commission's complaint process as set forth in ARSD 20:10:01 shall be available to landowners, other persons sustaining or threatened with damage as the result of Applicant's failure to abide by the conditions of the Permit or otherwise having standing to seek enforcement of the conditions of the Permit.

10. Not later than one month prior to commencement of construction, Applicant shall commence contacts with state, county and municipal emergency response, law enforcement and highway, road and other infrastructure management agencies serving the Project Site in order to educate such agencies concerning the planned construction schedule and the measures that such agencies should begin taking to prepare for construction impacts and the commencement of Project operations.

11. Applicant shall conduct a pre-construction conference prior to commencement of any construction, which shall include an Applicant representative, its construction supervisor and a representative of the commission staff to ensure that Applicant fully understands the conditions set forth in the Order.

12. Not less than thirty days prior to commencement of construction work in the field, Applicant will provide to Staff the most current preconstruction design, layout and plans relating to the following items: WTG locations, laydown and WTG site preparation, location and size, access road locations and dimensions, O&M building location and

description, and underground collector, overhead lines and substation locations and specifications. Applicant also will provide such additional Project preconstruction information as Staff requests.

13. The Applicant, not less than fifteen days prior to construction, shall provide each landowner on whose property the Project is to be constructed with the following information:

- A copy of the Commission Order;
- A written description of reasonable safety precautions for existing activities on or near Project facilities;
- The Commission's address, website and phone number;
- The name and phone number of contact persons for Applicant; and
- A preconstruction layout of Project facilities with information showing the proposed location of Project facilities to be placed on the landowner's land.

14. Prior to construction, Applicant shall file with the Commission its "Notification of Intent" ("NOI") and appropriate contractor's certification forms for coverage under the general SWD permit for storm water discharges associated with Project construction activities..

15. Applicant shall advise Staff of the final location of permanent meteorological towers located within the Project Site.

16. Upon completion of construction, Applicant shall submit maps and/or drawings depicting the approximate location of the WTGs, access roads, and collector and feeder lines. The Applicant shall also supply an "as-built" survey performed by surveyors and/or professional engineers licensed in the State of South Dakota showing the WTGs to be in compliance with the setbacks required by SDCL 43-13-24, Aurora, Brule and Jerauld Counties. Applicant also shall provide the following:

- Information demonstrating that: 1) the WTGs are located not less than 1000 feet from any occupied residence, business or public buildings (as of the time of commencement of construction) and that the modeled, incremental noise attributable to any WTG at any of the noise receptors described in the Findings of Fact, Section 6, should not exceed 50 dBA; or 2) Applicant retains written consent from the property owner to lesser distance or greater noise levels..

17. Applicant shall seek local input to properly and effectively coordinate an emergency response plan consistent with local resources and response abilities. Upon completion of construction, a Project operation emergency response plan shall be provided to Staff to make available to the general public in the manner they choose.

18. Applicant shall seek approval from the Commission prior to making any material deviations to the Project. For purposes of this paragraph, the term "material deviations" shall mean any action or activity outside the reasonable parameters of this Permit.

19. Except as otherwise provided in the conditions of this Stipulation, Applicant shall comply with all mitigation measures set forth in the Application. Material modifications to the mitigation measures shall be subject to the prior approval of the Commission.

20. Numerous conditions in this Stipulation relate to construction and its effects upon affected landowners and their property. Applicant may encounter physical conditions during construction which make compliance with certain conditions impracticable. If, after providing a copy of the permit, including the conditions, to the landowner and advising Commission Staff, Applicant and landowner agree in writing to modifications of one or more requirements specified in this Stipulation, Applicant may follow the alternative procedures and specifications agreed to between it and the landowner.

21. The Applicant shall, upon Commission request, conduct field surveys verifying compliance with requisite noise levels.

22. The Applicant shall take appropriate action to mitigate wind-blown particles created throughout the construction process, including but not limited to implementation of dust control measures such as road watering, covering of open haul trucks when transporting material subject to being wind-blown, the use of paved roads wherever possible to access the construction site, and the removal of any soils or mud deposits by construction equipment when necessary.

23. Applicant shall comply with the following conditions regarding road protection:

- Applicant shall coordinate road closures with state and local governments and emergency responders and shall acquire all necessary permits authorizing crossing of county and township roads.
- Applicant shall implement a regular program of road maintenance and repair through the active construction period to keep paved and gravel roads in an acceptable condition for residents and the general public.
- After construction Applicant shall repair and restore, or compensate governmental entities for their repair and restoration of any deterioration caused by construction traffic such that the roads are returned to at least their preconstruction condition.

24. Applicant shall use appropriate preventative measures to prevent damage to paved roads and to remove excess soil or mud from such roadways. Before commencing construction, the Applicant shall furnish an indemnity bond in the amount of $1,500,000 to comply with the requirements of SDCL 49-41B-38. Such bond shall be issued in favor of, and for the benefit of, all such townships, counties, and other governmental entities whose property is crossed by the transmission facilities. Applicant shall, at the request of Staff, increase the face amount of the bond (or shall post a second bond) in the event Staff determines (in accordance with the principles and methodologies described in SDCL 49-41B-38) that such action is necessary to provide reasonable assurance of repairs to all South Dakota roads and bridges likely to be impacted by construction of the Project. The bond shall remain in effect until released by the Commission, which release shall not be unreasonably denied following completion of the construction and repair period. Applicant shall give notice of the existence and amount of this bond to all counties, townships and other governmental entities whose property is crossed by the transmission facilities.

25. All pre-existing public roads and lanes used during construction must be restored to at least their pre-construction condition, and privately owned areas used as temporary roads during construction must be restored to their original condition, except as otherwise requested or agreed to by the landowner or any governmental authority having jurisdiction over such roadway.

26. Applicant shall promptly report to the Commission the presence of any critical habitat of threatened or endangered species in the Project Site that Applicant becomes aware of and that was not previously reported to the Commission.

27. If during construction, Applicant or its agents discover what may be an archaeological resource, cultural resource, historical resource or gravesite, Applicant or its contractors or agents shall immediately cease work at that portion of the site and notify the affected landowner(s) and the State Historical Preservation Office (SHPO). If the SHPO determines that a protectable resource is present, Applicant shall develop a plan that is acceptable to the SHPO to salvage, avoid or protect the archaeological resource.

28. In order to mitigate interference with agricultural operations during and after construction, Applicant shall locate all structures, to the extent feasible and prudent, to minimize adverse impacts and interferences with agricultural operations, shelterbelts and other land uses or activities. Applicant shall take appropriate precautions to protect livestock and crops during construction. Applicant shall repair all fences and gates removed or damaged during construction or maintenance unless otherwise agreed with the landowner or designee. Applicant shall be responsible for the repair of private roads damaged when moving equipment or when obtaining access to the right-of-way.

29. Applicant shall take all prudent steps to mitigate damages to rangeland and pastureland. Such actions shall include but not be limited to revegetation and weed control.

30. Applicant shall separate and segregate topsoil from subsoil in agricultural areas, including grasslands and shelter belts.

31. Applicant shall restore all areas temporarily disturbed by construction of the WTGs and the transmission line to their preconstruction condition, including their original preconstruction topsoil, vegetation, elevation, and contour, or as close thereto as is feasible, except as otherwise agreed to by the landowner.

32. Grading and topsoil replacement and installation of permanent erosion control structures shall be completed in non-residential areas in a prudent and diligent manner taking into account seasonal or other weather conditions, extenuating circumstances, or unforeseen developments beyond Applicant's control.

33. Applicant's obligation with respect to reclamation and maintenance of the ROW shall continue throughout the life of the WTGs and transmission line for disturbances caused by Applicant's or its agent's actions.

34. Applicant shall work closely with landowners or land management agencies to determine a plan to control noxious weeds.

35. Applicant shall repair or replace all property removed or damaged during all phases of construction, including but not limited to, all fences, gates and utility, water supply, irrigation or drainage systems. Applicant shall compensate the owners for damages or losses that cannot be fully remedied by repair or replacement, such as lost productivity and crop and livestock losses. All repair, replacement and/or compensation described above shall be in accordance with the terms and conditions of written agreements between Applicant and affected landowners where such agreements exist.

36. Applicant shall, in the manner described in its written agreement with a landowner, indemnify and hold the landowner harmless for loss, damage, claim or actions resulting from Applicant's use of the easement, including any damage resulting from any release, except to the extent such loss, damage claim or action results from the negligence or willful misconduct of the landowner or his employees, agents, contractors or other representatives.

37. The Commission shall be notified prior to any decommissioning action.

38. Applicant will begin decommissioning the Project facilities within 12 months from the time the Project ceases to operate. Decommissioning will be completed within 18 months from the time the Project ceases to operate. Applicant will be responsible for the costs to decommission the Project and associated facilities.

    Decommissioning will involve removal of towers, turbine generators, transformers, overhead and underground cables, foundations, buildings and ancillary equipment down to a depth of 4 feet below grade. The access roads will be removed unless the affected landowner provides written notice that the road or portions of the road will be retained. Additionally, disturbed surfaces will be graded, reseeded and restored as nearly as possible to preconstruction condition within 18 months of Project decommissioning.

    The Project will not produce any hazardous material that will be stored or disposed of on-site, thus it is anticipated that removal of produced hazardous materials will not be required at decommissioning.

39. If the Project causes interference with radio, television or any other licensed communication device, the Applicant shall take all appropriate action to minimize any such interference and shall make a good faith effort to restore or provide reception levels equivalent to reception levels in the immediate areas just prior to construction of the Project. This mitigation requirement shall apply to home or other structures in place at the time of construction but shall not apply to any dwellings or other structures built after construction of the Project approved in this Permit have been completed.

40. On or before June 1, 2021, Applicant shall submit a Project status report, an updated decommissioning plan for the Project and financial information for Applicant in accordance with ARSD 20:10:22:13.01 for the Commission's review and approval. At such time, the Commission will determine whether Applicant shall be required to provide a bond, letter of credit, guarantee or other security to assure adequate funding is available to fully perform decommissioning obligations as provided in ARSD 20:10:22:13.01.

Date: June 4, 2010

PrairieWinds SD 1, Inc.

By: Kevin L. Solie

Name: KEVIN L. SOLIE

Title: Senior ENV. Analyst

Date: June 4, 2010

South Dakota Public Utilities Commission

By: Karen E. Cremer

Name: Karen E. Cremer

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