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October 22, 2012

Mr. Darrell Nitschke
Executive Director
NORTH DAKOTA PUBLIC
SERVICE COMMISSION
600 E. Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Nitschke:

In re: Wilton Wind IV, LLC
Case No. PU-11-646

In support of Amended Application for a Certificate of Site Compatibility, dated September 19, 2012, enclosed please find eleven copies of (1) Exclusion and Avoidance Tables with supporting data and (2) Overall Site Plan.

Very truly yours,

BRIAN R. BJELLA

bw
Enc.
cc: Jerry Lein

Wilton IV Wind Energy Center
Wilton Wind IV, LLC
Burleigh County, North Dakota

Amended Application to the North Dakota Public Service Commission for a Certificate of Site Compatibility

Prepared for:
Wilton Wind IV, LLC
700 Universe Boulevard
Juno Beach, Florida 33408

Prepared by:
Tetra Tech, Inc.
160 Federal Street
Boston, MA 02110

Table 1 summarizes the assumptions used to calculate impacts by Project facility; there has been no change in these assumptions since the PSC issued the order for the Project.

Table 1. Project Impact Assumptions

Project Component	Temporary Disturbance (Construction Only)	Permanent Disturbance (Operation)	Total Disturbance (Temporary and Permanent)
Wind Turbines a/	0.3 acres per turbine	0.2 acres per turbine	0.5 acres per turbine
Access Roads b/	14 feet per linear foot of road	36 feet per linear foot of road	50 feet per linear foot of road
Collection Lines c/	50 ft per linear foot	0 feet	50 ft per linear foot
Collection Substation d/	0 acres	5 acres	5 aces
Construction Laydown Area e/	15 acres	0 acres	15 acres

a/ Impacts during operation account for a 40-ft x 100-ft gravel pad with a 15-ft buffer. Impacts per turbine during construction are estimated at 0.5 acre, so net construction impact is 0.5 - 0.2 = 0.3 acre. For the purposes of the impact analysis using GIS software, a radius of 83.26 feet and 53.82 feet was used to approximate the 0.5 acres and 0.2 acres, respectively.

b/ Easement width necessary for construction based on turbine types. Temporary and permanent impacts represent a conservative estimate of disturbance. Roads required to support crane access to turbines during operation would remain up to 36 feet wide; other access roads may be built at 18 feet or reduced later to 18 feet. Access road impacts also assume all proposed roads are new access roads and do not consider improvements to existing roads separately.

c/ Assuming collection lines are not co-located with access roads. Where collection lines run parallel to access roads, the centerlines in the layout design include a separation distance of 150 feet, and as a result, impact buffers generally do not overlap.

d/ Acreage based on shapefiles provided by NextEra.

e/ Approximate acreage based on information provided by NextEra; location undetermined.

Permanent impacts are considered to be soil disturbance impacts that will occur due to the Project footprint during operation. Temporary impacts are considered those impacts that result during construction to accommodate equipment and temporary activities outside of the areas that will remain as the Project footprint during operation. Table 2 summarizes the impact that was estimated in the original application for each Project component for both construction (temporary) and operation (permanent). Table 3 summarizes the estimated impacts for the current Project layout.

Table 2. Project Impacts (based on layout dated October 2011)

Project Component	Temporary Impact (Construction Only)	Permanent Impact (Operation)	Total Impact (Temporary and Permanent)
Wind Turbines a/ (62 turbines, not including alternates)	18.6 acres	12.4 acres	31 acres
Access Roads b/	31.6 acres	98.4 acres	130 acres
Collection Lines c/	218.9 acres	0 acres	218.9 acres
Collection Substation	0 acres	5 acres	5 acres

Construction Laydown Area	15 acres	0 acres	15 acres
Total	284.1 acres	115.8 acres	399.9 acres

a/ Assumes 62 turbines x 0.5 acres of ground disturbance during construction, 0.2 acre/turbine of that remaining as permanent. The 2 alternate turbines were not included in the calculation.

b/ Assumes a 50-ft wide easement for roads during construction, 36 feet of that remaining during operation. Assumes total of approximately 24.6 linear miles of service roads. The overlapping area for turbines and substation were excluded from the impact calculations.

c/ The overlapping areas between the collection line corridor buffer and the access road corridor buffer were removed from impact calculation.

Table 3. Project Impacts (based on layout dated 10/12/12)

Project Component	Temporary Impact (Construction Only)	Permanent Impact (Operation)	Total Impact (Temporary and Permanent)
Wind Turbines a/ (58 turbines, not including alternates)	17.4 acres	11.6 acres	29 acres
Access Roads b/	36.2 acres	106.1 acres	142.3 acres
Collection Lines c/	218.5 acres	0 acres	218.5 acres
Collection Substation	0 acres	5 acres	5 acres
Construction Laydown Area	15 acres	0 acres	15 acres
Total	287.1 acres	122.7 acres	409.8 acres

a/ Assumes 58 turbines x 0.5 acres of ground disturbance during construction, 0.2 acre/turbine of that remaining as permanent. The 2 alternate turbines were not included in the calculation.

b/ Assumes a 50-ft wide easement for roads during construction, 36 feet of that remaining during operation. Assumes total of approximately 24.6 linear miles of service roads. The overlapping area for turbines and substation were excluded from the impact calculations.

c/ The overlapping areas between the collection line corridor buffer and the access road corridor buffer were removed from impact calculation. Approximately 13.7 miles of collection lines run parallel to the access roads, with a 150-foot distance designed between the collection line and access road centerlines. The impacts also include approximately 23.5 miles of collection lines not co-located with access roads and 8.6 miles of home run collection lines to the substation northwest of the Project Area.

In accordance with NDAC Section 69-06-08-01-1, the geographical areas listed in Table 4 shall be excluded in the consideration of a site for an energy conversion facility. The last column describes changes, if any, from the original application.

Table 4. Exclusion Areas

Exclusion Area	Present within Project Area?	Description for PSC permitted locations	Description for new Locations
Designated or registered national areas: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts; monuments; wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.	Present	Of these exclusion areas, only native prairie (grasslands) are present within the Project Area; however, native prairie as mapped during field surveys represents 10 percent of the Project Area, and as a result, are not considered unique grasslands for exclusion. They are considered avoidance areas. 10 turbines (and one alternate) are located on native prairie.	11 turbines (and one alternate) are located on native prairie.
Designated or registered state areas: parks; forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; grasslands; wild, scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.	Present	A section of state land is located within the portion of the Project Area in Ecklund Township; however, there are no proposed facilities on this property. Archeological sites have been identified through field survey and will be avoided.	Previously unsurveyed areas were surveyed in September 2012. All new sites will be avoided based on layout dated 10/12/12. All previously documented sites will be avoided.
County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.	None	N/A	No change
Prime farmland and unique farmland, as defined by the land inventory and monitoring division of the soil conservation service, United States department of agriculture, in 7 C.F.R. part 657; provided, however, that if the Commission finds that the prime farmland and unique farmland that will be removed from use for the life of the facility is of such small acreage as to be of negligible impact on agricultural productions, such exclusion shall not apply.	Present	Prime farmland has been avoided to the extent practicable. Four (4) turbines would be located in prime farmland soils. Permanent impacts to prime farmland soils from turbine placement and access roads are expected to be up to 13 acres, which is a negligible percentage of the Project Area. An estimated 13 acres of farmland of statewide importance would be permanently disturbed.	Two (2) turbines would be located in prime farmland soils. Permanent impacts to prime farmland are expected to be up to 13 acres, no change from the previous layout. Approximately 12 acres of farmland of statewide importance would be permanently disturbed, a slight decrease from the previous layout.
Irrigated land	None	N/A	No change
Areas critical to threatened or endangered animal or plant species	Present	The Project Area is within the whooping crane migration corridor, although little suitable wetland habitat is present compared to surrounding areas. No wetlands would be permanently affected by the Project. Also, there are no recorded whooping crane observations in the Project Area to date.	No change. Previously unsurveyed areas were surveyed for wetlands in September 2012. All wetlands will be avoided based on the layout dated 10/12/12.
Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.	None	N/A	No change

In accordance with NDAC Section 69-06-08-01-2, the geographical areas listed in Table 5 shall not be approved as a site for an energy conversion facility unless the applicant shows that, under the

circumstances, there is no reasonable alternative. The last column describes changes, if any, from the original application.

Table 5. Avoidance Areas

Avoidance Areas	Present within Project Area?	Description for PSC permitted locations	Description for new Locations
Historical resources which are not designated as exclusion areas	Present	A Class III cultural resources survey was completed for the Project. Sites with potential cultural significance have been avoided in designing the Project layout.	Previously unsurveyed areas were surveyed in September 2012. All new sites will be avoided based on layout dated 10/12/12. All previously documented sites will be avoided. In addition, a Class II architecture survey is currently underway. 20 properties were documented. At this time there are none that will be recommended as potentially eligible to the NRHP.
Areas within the city limits of a city or the boundaries of a military installation	None	N/A	No change
Areas within known floodplains as defined by the geographical boundaries of the 100-year flood	None	The Project Area is located in Flood Hazard Zone D: Areas in which flood hazards are undetermined, but possible.	No change
Areas that are geologically unstable	Present	Abandoned coal mines and mined areas are present adjacent to the Project Area, and associated sink holes are found within the Project Area. Subsidence hazards related to the potential presence of abandoned underground coal mines will be mitigated through field studies and geotechnical analyses and subsequent micrositing.	No change
Woodlands and wetlands	Present	Permanent impacts to wetlands will be avoided. Woodland impacts are not anticipated.	Previously unsurveyed areas were surveyed in September 2012. No permanent impacts to wetlands or woodlands would results from the revised layout.
Areas of recreational significance which are not designated as exclusion areas	None	N/A	No change

In accordance with NDAC Section 69-06-08-01-3, a site shall be approved in an area only when it is demonstrated to the PSC by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area, as they relate to the criteria listed in Table 6, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum. The last column describes changes, if any, from the original application.

Table 6. Selection Criteria

Selection Criteria	Potential Adverse Effects	Any deviations based on new turbine locations?
The impact upon agriculture:		
Agricultural production	Permanent impacts from turbines, roads, and substation: 116 acres Temporary impacts from turbine and road construction, collection line trenching, and 15-acre laydown area: 284 acres. Total impacts: 400 acres. These impacts represent a minor portion of the land area available for agricultural production. As a result, the Project will not result in significant impacts to agricultural production.	Permanent impacts: 123 acres Temporary impacts: 287 acres. Total: 410 acres
Family farms and ranches	The Project will comply with local setbacks. In Ghylin Township, turbines will be set back 1,400 feet from occupied residences. In Crofte Township, turbines will be set back 1,400 feet from occupied residences on participating properties and 1,750 feet from occupied residences on non-participating properties. Although some land area will be permanently converted to wind turbine foundations and pads, access roads, and a substation, wind lease payments to farmers will provide a supplemental source of income.	No change
Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation	Participating landowners have not expressed concerns related to economically suitable irrigation on their land. Currently no irrigation is occurring within the Project Area.	No change
Surface drainage patterns and ground water flow patterns	No impacts to surface drainage patterns or groundwater flow patterns will occur.	No change
The agricultural quality of the cropland	No impacts to the agricultural quality of the cropland are anticipated. If compaction of soils occurs during construction, Wilton IV will work with the landowners to alleviate the compaction.	No change
The impact upon the availability and adequacy of:		
Law enforcement	No impacts are anticipated.	No change
School systems and education programs	No adverse effects are expected.	No change
Governmental services and facilities	Governmental services and facilities will not be negatively affected.	No change
General and mental health care facilities	General and mental health care facilities will not be negatively affected.	No change
Recreational programs and facilities	No impacts are anticipated.	No change
Transportation facilities and networks	During construction, an increase in vehicle trips per day is anticipated for the duration of the Project construction. During facility operation, no significant impacts are anticipated.	No change
Retail service facilities	No adverse impacts are anticipated. Local services such as motels, restaurants, and convenience stores are likely to experience an increase in business during Project construction.	No change
Utility services	Wilton IV will utilize station service from Central Electric, which will suggest appropriate configurations for the electrical system, and Wilton IV will abide by the recommendations to prevent impacts to the transmission system.	No change
The impact upon:		
Local institutions	No impacts are anticipated.	No change

Selection Criteria	Potential Adverse Effects	Any deviations based on new turbine locations?
Noise sensitive land uses	The noise sensitive land uses within the Project Area are the residences near turbine locations. The noise impacts from the Project turbines will not exceed nuisance thresholds at occupied residences. Taking into account cumulative effects with the existing adjacent wind turbines, the modeling shows one exceedance at a participating occupied residence at maximum wind speed, and two additional exceedances at participating occupied residences assuming anomalous meteorological conditions.	The revised acoustic assessment is currently underway; results will be provided to the PSC when they are complete.
Rural residences and businesses	The Project will comply with local setbacks. In Ghylin Township, turbines will be set back 1,400 feet from occupied residences. In Crofte Township, turbines will be set back 1,400 feet from occupied residences on participating properties and 1,750 feet from occupied residences on non-participating properties.	No change
Aquifers	No impacts will occur.	No change
The impact upon:		
Human health and safety	No impacts to human health and safety are anticipated based on the implementation of the mitigative measures discussed in Section 7.5.3 and maintenance schedules.	No change
Animal health and safety	No impacts to livestock are anticipated from construction or operation of the facility. Based on avian surveys performed to date, mean raptor use and non-raptor avian use was generally low compared to other wind facilities. Wilton IV will implement measures to avoid and minimize effects to wildlife by siting facilities away from active raptor nests and wetlands to the extent practicable. There will be no permanent impacts to wetlands, reducing impacts to migratory birds. In addition, Wilton IV will implement a post-construction Wildlife Response and Reporting System (WRSS) for the Project in order to monitor avian/turbine interaction. If whooping cranes are observed, Wilton IV will shut down specific turbines located within 1 mile of the birds, until such time as the birds are no longer observed in the area.	No change
Plant life	The Project will result in approximately 116 acres of permanent impact. Land where the turbines will be sited is primarily undeveloped grasslands; 10 turbines are sited in native prairie.	123 acres of permanent impact; 11 turbines sited in native prairie.
Temporary and permanent housing	Temporary housing will be utilized during construction. No adverse impacts are anticipated.	No change
Temporary and permanent skilled and unskilled labor	No adverse effects are anticipated. Local contractors employed for construction will result in increased wages.	No change
The cumulative effect of the location of the facility in relation to existing and planned facilities and other industrial development	Wind energy development is anticipated to have a positive cumulative impact on air quality and minimal impacts to geology, soils, water, noise, safety and health issues, and cultural resources. Socioeconomic impacts are anticipated to be positive, as the rural economy and energy production is diversified. Wind energy development removes less total land from agricultural use than other forms of development.	No changes

In accordance with NDAC Section 69-06-08-01-4, the PSC may give preference to an applicant that will maximize benefits that result from the adoption of the policies and practices listed in Table 7, and in a proper case may require the adoption of such policies and practices. The last column describes changes, if any, from the original application.

Table 7. Policy Criteria

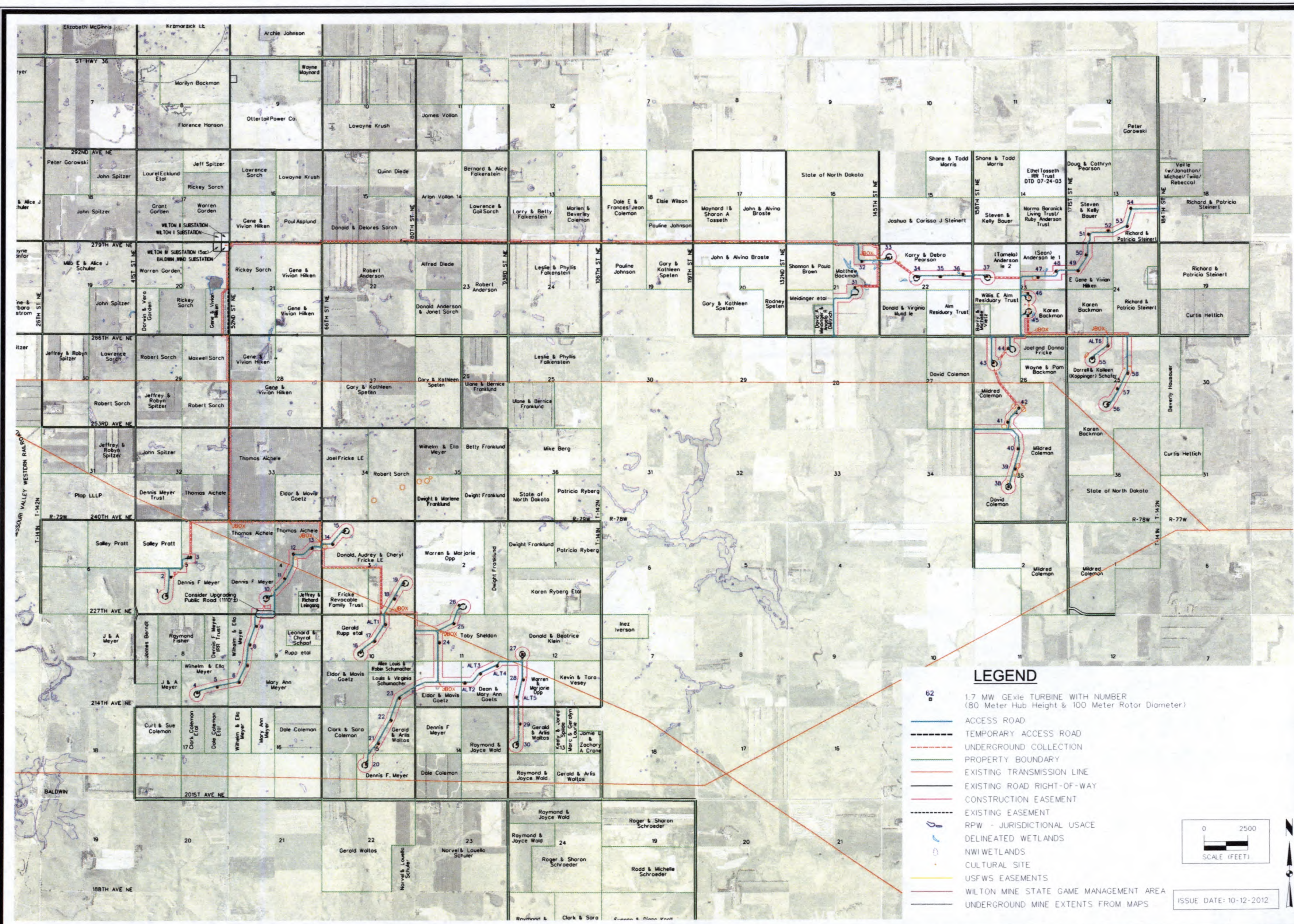
Policy Criteria	Suitable Policy or Practice of Applicant	Any deviations based on new turbine locations?
Recycling of the conversion byproducts and effluents	Not applicable.	No change
Energy conservation through location, process, and design	Wilton IV is developing the site to maximize energy output and will develop a site layout that optimizes wind resources while minimizing the impact on land resources and any potentially sensitive areas. Wind-powered electric generation is entirely dependent on the availability of the wind resource at a specific location. The energy available from the wind increases at the third power of the wind speed. In other words, a doubling of the wind speed will increase the available energy by a factor of eight times.	No change
Training and utilization of available labor in this state for the general and specialized skills required	Wilton IV will use local labor to the extent practicable.	No change
Use of a primary energy source or raw material located within the state	The energy generated at the site will utilize the wind resources of the State of North Dakota.	No change
Non-relocation of residents	No residents will be relocated as a result of the Project.	No change
The dedication of an area adjacent to the facility to land uses such as recreation, agriculture, or wildlife management	The Project will not interfere with adjacent land uses. As such, it is not anticipated that areas adjacent will be dedicated to recreation, agriculture, or wildlife management issues.	No change
Economies of construction and operation	Wilton IV will utilize local contractors to the extent practicable.	No change
Secondary uses of appropriate associated facilities for recreation and enhancement of wildlife	None.	No change
Use of citizen coordinating committees	Wilton IV will continue to work with landowners of properties for the Project.	No change
A commitment of a portion of the energy produced for use in this state	Energy transmitted will be injected into Western's 230 kV line at the Hilken Substation via the existing transmission infrastructure constructed for Baldwin Wind farm and will be produced entirely for use in the State of North Dakota.	No change
Labor relations	No labor relations will be affected.	No change
The coordination of facilities	Existing facilities and facility corridors were considered in the location of the wind farm and associated facilities.	No change
Monitoring of impacts	Wilton IV and the EPC contractor will employ best management practices (BMPs) during construction to monitor soil impacts and segregate topsoil. Storm water prevention plans will be prepared for all disturbance sites exceeding size threshold. Environmental monitors will be onsite during construction to ensure there will be no impacts to wetlands and documented archeological sites that require avoidance.	No change

Noise and Shadow Flicker Studies

Tetra Tech revised the shadow flicker study based on the latest turbine layout dated September 20, 2012 and the GE 1.6 MW turbine with 100-meter rotor diameter. Two occupied receptors had expected shadow flicker impacts predicted for more than 30 hours per year at 36 hours, 23 minutes per year and 31 hours, 8 minutes per year, respectively. One is a participating landowner and one is not. When including the existing turbines in the model, the predicted cumulative impacts were four occupied residences with predicted shadow flicker hours over 30 hours per year; the maximum predicted impact did not change at 36 hours, 23 minutes at the same receptor.

The modeling for the previous layout predicted no occupied receptors with over 30 hours of shadow flicker from the planned turbines. The cumulative impacts when including the existing turbines resulted in two occupied receptors with over 30 hours of shadow flicker (31:47 and 32:57 hours, respectively). Both of these receptors are participating landowners. As noted in the PSC Order, while there are no established standards, the siting recommendation of the American Wind Energy Association is 30-40 hours per year, therefore these results fall within the acceptable range.

The update to the acoustic assessment is currently underway; results will be provided to the PSC upon completion.



NEXTERA ENERGY - WILTON IV

PRELIMINARY OVERALL SITE PLAN

BURLEIGH COUNTY, NORTH DAKOTA

SNYDER & ASSOCIATES

1751 MADISON AVENUE
COUNCIL BLUFFS, IOWA 51503
712-322-3202

ATLANTIC, IA 712-243-6505 | ANKENY, IA 515-964-2020 | MARYVILLE, MO 660-582-8888
CEDAR RAPIDS, IA 319-362-9394 | ST. JOSEPH, MO 816-364-5222

MARK	REVISION	DATE	BY
24	UPDATED TURBINES WITH ARRAY DATED 9-20-12 FROM MIKE ROYER	10/12/12	DW
23	UPDATED WETLANDS & CULTURAL WITH FILES FROM TETRA TECH	10/8/12	DW
22	REMOVED CULTURAL BETWEEN SEC 16&21 142-78 & STRAIGHTENED ROAD	10/2/12	DW
21	UPDATED WITH MICROSITED ARRAY DATED 8-22-12	9/11/12	DW

Engineer: JWK | Checked By: MGG | Scale: 1" = 2500'
Technician: DW | Date: 08-04-11 | Field Bk: | Pg:
Project No: 1110232
File No:

Sheet 1 of 1

1110232

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