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PUBLIC SERVICE COMMISSION

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: Oliver Wind III, LLC
Case No. PU-11-561

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

**Oliver Wind III Energy Center
Oliver Wind III, LLC
Morton County, North Dakota**

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

October 2012



Prepared for:
Oliver Wind III, 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)
Wind Turbines a\	0.3 acres per turbine	0.2 acres per turbine
Access Roads b\	14 feet per linear foot of road	36 feet per linear foot of road
Collection Lines c\	50 ft per linear foot	0 feet
Collection Substation d\	0 acres	9.85 acres
Construction Laydown Area e\	10 acres	0 acres
<p>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.</p> <p>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.</p> <p>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.</p> <p>d\ Acreage based on shapefiles provided by NextEra.</p> <p>e\ Acreage based on information provided by NextEra; location undetermined.</p>		

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 10/13/11)

Project Component	Temporary Impact (Construction Only)	Permanent Impact (Operation)	Total Impact (Temporary and Permanent)
Wind Turbines a\	9 acres	6 acres	15 acres
Access Roads b\	18.57 acres (11.2 miles)	48.41 acres (11.2 miles)	66.98 acres (11.2 miles)
Collection Lines	73.19 acres (14.5 miles)	0 acres	73.19 acres (14.5 miles)
Collection Substation	0 acres	10 acres	10 acres
Construction Laydown Area	10 acres	0 acres	10 acres
Total	110.76 acres	64.41 acres	175.17 acres

a\ Assumes 30 turbines x 0.5 acres of ground disturbance during construction, 0.2 acre/turbine of that remaining as permanent. The four 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. The overlapping area for turbines and substation were excluded. Total road length is 11.2 miles.

c\ The overlapping area with the access road corridor buffers were removed from impact calculation. Approximately 10 miles of collection lines run parallel to the access roads, with a 150-foot distance designed between the collection line and access road centerlines.

Table 3. Project Impacts (based on layout dated 10/05/12)

Project Component	Temporary Impact (Construction Only)	Permanent Impact (Operation)	Total Impact (Temporary and Permanent)
Wind Turbines a\	9 acres	6 acres	15 acres
Access Roads b\	20.38 acres (14 miles)	57.76 acres (14 miles)	78.14 acres (14 miles)
Collection Lines	62.63 acres (15.1 miles)	0 acres	62.63 acres (15.1 miles)
Collection Substation	0 acres	10 acres	10 acres
Construction Laydown Area	10 acres	0 acres	10 acres
Total	102.01 acres	73.76 acres	175.77 acres

a\ Assumes 30 turbines x 0.5 acres of ground disturbance during construction, 0.2 acre/turbine of that remaining as permanent. The three 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. The overlapping area for turbines and substation were excluded. Total road length is 14 miles.

c\ The overlapping area with the access road corridor buffers were removed from impact calculation. Approximately 10 miles of collection lines run parallel to the access roads, with a 150-foot distance designed between the collection line and access road centerlines.

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 Areas	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.	None	Of these exclusion areas, only native prairie (grasslands) are present within the Project Area; however, native prairie as mapped during field surveys represents 26 percent of the Project Area, and as a result, are not considered unique grasslands for exclusion. They are considered avoidance areas. 15 turbines (and one alternate) are located on native prairie.	14 turbines (and one alternate) are located on native prairie; this is one fewer than the previous layout.
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	An archeological survey was completed and all NRHP-eligible archaeological sites will be avoided.	Previously unsurveyed areas were surveyed in September 2012. One new quarry site was documented between turbine 13 and 14, but will be avoided based on layout dated 10/05/12. 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

Exclusion Area	Present within Project Area?	Description for PSC Permitted Areas	Description for new locations
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. None of the turbines would be located in prime farmland soils. Impacts to prime farmland are expected to be up to 5.4 acres, which is a negligible percentage of the Project Area. An estimated 22 acres of farmland of statewide importance would be permanently disturbed.	None of the turbines would be located in prime farmland soils. Impacts to prime farmland are expected to be up to 5.2 acres, a decrease from the previous layout. Approximately 27 acres of farmland of statewide importance would be permanently disturbed.
Irrigated land	None	N/A	No change
Areas critical to threatened or endangered animal or plant species	Present	The Project Area is in the whooping crane migration corridor, although little suitable wetland habitat is present. No jurisdictional wetlands would be negatively affected by the Project since they will be avoided. Also, there are no recorded whooping cranes observations in the project area to date.	No change. Previously unsurveyed areas were surveyed for wetlands in September 2012.
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 Areas	Description for new locations
Historical resources which are not designated as exclusion areas	None	N/A	No change
Areas within the city limits of a city or the boundaries of a military installation	City limits-None Military-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	Two abandoned coal mines are found in the Project Area. Subsidence hazards related to the potential presence of	No change

		abandoned underground coal mines will be mitigated by thorough field studies and geotechnical analyses and subsequent micrositing.	
Woodlands and wetlands	Present	Wetlands will be avoided to the extent practicable. Woodland impacts are not anticipated.	No change
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: 64 acres Temporary impacts from turbine and road construction, collection line trenching, and 10-acre laydown area: 111 acres. Total: 175 acres	Permanent impacts: 74 acres Temporary impacts: 102 acres. Total: 176 acres
Family farms and ranches	No turbines will be placed within 1,400 feet of occupied residences. Although some land area will be lost to the construction of access roads and turbines, 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	No owner, where impacts are expected, has 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, Oliver III 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

Selection Criteria	Potential Adverse Effects	Any deviations based on new turbine locations?
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 Project construction. During facility operation no significant impacts are anticipated.	No change
Retail service facilities	No adverse impacts 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	Oliver III will utilize station service from Roughrider Electrical Cooperative, which will suggest appropriate configurations for the electrical system, and Oliver III will abide by the recommendations to prevent impacts to the transmission system.	No change
Local institutions	No impacts are anticipated.	No change
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, except for one participating landowner, which may have an exceedance during 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	No turbines will be placed within 1,400 feet of occupied residences.	No change
Aquifers	No impacts will occur.	No change
The impact upon:		
Human health and safety	If mitigative measures are implemented as discussed in Section 7.5.3 and maintenance schedules are met, no impacts to human health and safety are anticipated.	No change
Animal health and safety	No impacts to livestock are anticipated from construction or operation of the facility. The most commonly observed species in the 2008 spring avian surveys, the western meadowlark, red-winged blackbird, ring-necked pheasant, and horned lark are all widespread species and have relatively stable populations. Thus, local mortality is not expected to have population-level consequences for the most commonly observed species. In the 2008 fall avian surveys, the horned lark was the third most commonly observed species and is the most common species found dead at existing wind farms, so some mortality may be expected. Although red-tailed hawks were the most commonly observed raptors in both seasons, mean raptor use was generally low compared to other wind facilities. Oliver III will implement measures to avoid and minimize effects to wildlife by siting facilities away from active raptor nests and wetlands and woodlands to the extent practicable. In addition, Oliver III will mark the transmission line associated with the project and will implement a post-construction Wildlife Response and Reporting System (WRRS) for the Project in order to monitor avian/turbine interaction.	No change

Selection Criteria	Potential Adverse Effects	Any deviations based on new turbine locations?
Plant life	Permanent impacts from turbines, roads, and substation: 64 acres Temporary impacts from turbine and road construction, collection line trenching, and 10-acre laydown area: 111 acres. Total: 175 acres 15 turbines (and one alternate) are sited in native prairie.	Permanent impacts: 74 acres Temporary impacts: 102 acres. Total: 176 acres 14 turbines (and one alternate) are 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 change

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	Oliver III 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 (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	Oliver III 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

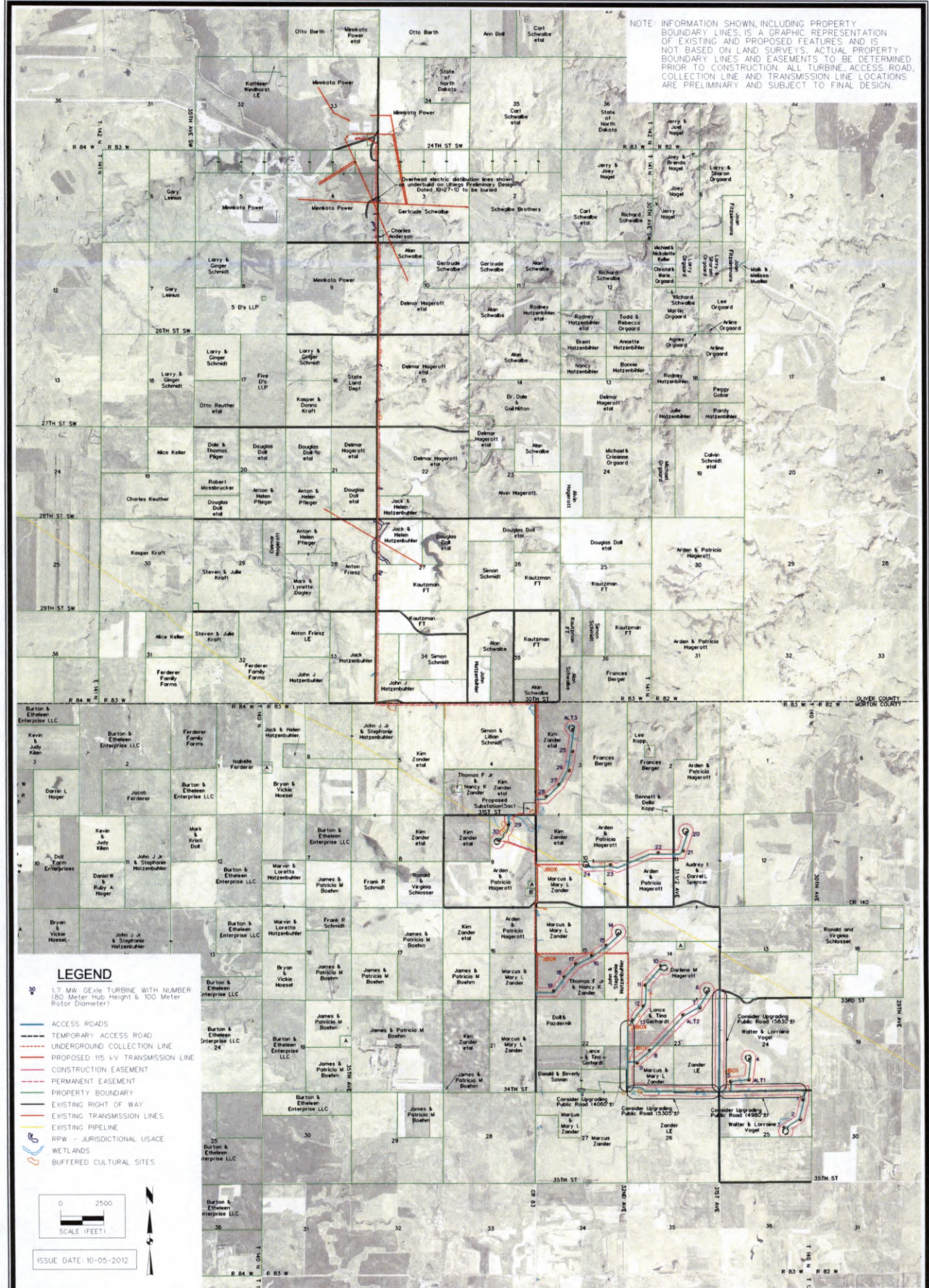
Policy Criteria	Suitable Policy or Practice of Applicant	Any deviations based on new turbine locations?
Non-relocation of residents	No residents will be relocated as a result of the Project.	No change
The dedication of an area adjacent to the facility to land uses such as recreation, agriculture, or 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	Oliver III 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	Oliver III will 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 interconnect and deliver power into the Midwest ISO (MISO) system 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 the associated facilities.	No change
Monitoring of impacts	Oliver III and the EPC contractor will employ best management practices (BMPs) during construction to monitor soil impacts and segregate topsoil. A storm water prevention plan will be prepared for the Project.	No change

Noise and Shadow Flicker Studies

Tetra Tech revised the shadow flicker study based on the latest turbine layout dated September 13, 2012 and the GE 1.6 MW turbine with 100-meter rotor diameter. Eighteen of the receptor locations evaluated would have no shadow flicker impacts; eleven of the receptor locations evaluated would have less than 20 hours per year of predicted shadow flicker impact. Only one of the 31 receptors modeled had expected shadow flicker impacts predicted for more than 30 hours per year at 32 hours, 12 minutes per year, which is approximately 0.7 percent of the potential available daylight hours. This receptor is an occupied residence of a participating landowner. 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.

NOTE: INFORMATION SHOWN, INCLUDING PROPERTY BOUNDARY LINES, IS A GRAPHIC REPRESENTATION OF EXISTING AND PROPOSED FEATURES AND IS NOT BASED ON LAND SURVEYS. ACTUAL PROPERTY BOUNDARY LINES AND EASEMENTS TO BE DETERMINED PRIOR TO CONSTRUCTION. ALL TURBINE, ACCESS ROAD, COLLECTION LINE AND TRANSMISSION LINE LOCATIONS ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN.

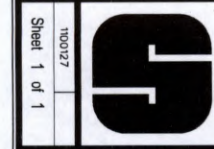


LEGEND

- 1.7 MW GE turbine WITH NUMBER 180 Meter Hub Height & 100 Meter Rotor Diameter
- ACCESS ROADS
- TEMPORARY ACCESS ROAD
- UNDERGROUND COLLECTION LINE
- PROPOSED 115 kV TRANSMISSION LINE
- CONSTRUCTION EASEMENT
- PERMANENT EASEMENT
- PROPERTY BOUNDARY
- EXISTING RIGHT OF WAY
- EXISTING TRANSMISSION LINES
- EXISTING PIPELINE
- RPW - JURISDICTIONAL USAGE
- WETLANDS
- BUFFERED CULTURAL SITES



ISSUE DATE: 10-05-2012



NEXTERA ENERGY - OLIVER III

OVERALL SITE PLAN

OLIVER & MORTON COUNTIES, NORTH DAKOTA

SNYDER & ASSOCIATES

1751 MADISON AVENUE | ATLANTIC, IA | MARYVILLE, MO
COUNCIL BLUFFS, IOWA 51503 | 712-243-6900 | 660-862-8888
712-322-3202 | CEDAR RAPIDS, IA | ST. JOSEPH, MO
319-363-4394 | 816-384-5222

14	CORRECTED LANDOWNERS FROM RECENT SALES	10/5/12	DW
13	MOVED ROAD BETWEEN TURBINES 8 & 9 TO AVOID CULTURAL SITES	10/5/12	DW
12	UPDATED WETLANDS & CULTURAL WITH FILES FROM TERRA TECH	10/5/12	DW
11	UPDATED WITH MICROSOFT MAPS FILES 8-29-12	10/5/12	DW
	DATE		BY
Engineer:	JWK	Checked By:	MGG
Scale:	1"=2500'		
Technician:	DW	Date:	03-19-10
Field Bk.:		Field Bk.:	
Project No.:	1100127		
File No.:			