

Border Winds Energy Project - PSC Exclusion and Avoidance Areas Evaluation		
Border Winds Energy, LLC and Westwood Professional Services - January 24, 2014		
Exclusion Area Descriptions per Section 69-06-08-01 (1.a.-1.h.)	Impacts? (Yes/No)	Evaluation Process Description and Sources
National Parks	No	None in the project area. National Park System (2009) data sources.
National Memorial Parks Historic Sites and Landmarks	No	NHRP Listed Property "Coghlan Castle" is in the vicinity of project; however, it is over 1 mile from turbines and screened from visual impact by extant trees. SHPO had no further comment in their letter dated January 14, 2014.
National Natural Landmarks	No	None in project area per review of database at the North Dakota State Historic Preservation Office.
National Historic Districts	No	None in project area per review of database at the North Dakota State Historic Preservation Office.
National Monuments	No	None in project area per review of database at the North Dakota State Historic Preservation Office.
National Wilderness Areas	No	None in project area per BLM, FWS, Forest Service, NPS (2009) data sources.
National Wildlife Areas/Refuge	No	None identified in project area per http://www.fws.gov/mountain-prairie/refuges/nd/ndroadmap.JPG .
National Wild, Scenic or Recreational Rivers	No	None in the state per http://www.rivers.gov/north-dakota.php .
National Wildlife Refuges	No	None in project area per USFWS: http://www.fws.gov/refuges/whm/northDakota.html .
National Grasslands	No	None in project area per USFWS: http://www.fs.usda.gov/main/dpg/maps-pubs .
State Parks	No	None in project area per http://www.parkrec.nd.gov/parks/parks.html .
State Forests	No	None in project area per http://www.ndsu.edu/ndfs/state_forest_recreational_opportunities/ .
State Forest Management Lands	No	No known State Forest Management Lands in project area per http://www.ndsu.edu/ndfs/state_forest_recreational_opportunities/ .
State Historic Sites	No	None in project area per review of database at the North Dakota State Historic Preservation Office.
State Grasslands	No	None in project area per http://www.fs.usda.gov/dpg/ .
State Wild, Scenic or Recreational Rivers	No	None in the state per http://www.rivers.gov/north-dakota.php .
State Game Refuges	No	None in project area per ND Game and Fish Department (2012) data sources.
State Game Management Areas	No	None identified in project area per http://www.fws.gov/mountain-prairie/refuges/nd/ndroadmap.JPG .
State Management Areas	No	None in project area per ND Game and Fish Department (2012) data sources.
State Nature Preserves	No	None in project area per http://www.parkrec.nd.gov/naturepreserves/naturepreserves.html .
County Parks and Recreational Areas	No	None in project area per http://www.rolettecounty.com/ .
County Municipal Parks	No	None in project area per http://www.rolettecounty.com/ .
County Parks Owned by Other Subdivisions	No	None in project area per http://www.rolettecounty.com/ .
Hardwood Draws and Enrolled Woodlands	No	Significant, native woodlands will be avoided by the project. Minor impacts may occur, but only where roads and electrical collection cables need to cross shelterbelts and tree lines. Trees and shrubs proposed for impact will be appropriately inventoried per PSC rules and guidelines prior to disturbance and mitigated as required. No enrolled woodland easement areas were noted within Owner's Policy of Title Insurance Pro Forma.
Prime farmland and Unique Farmland	Yes, but negligible	Impacts to prime, statewide importance farmland was evaluated for the current project. 60 of 80 turbines (including alternates) are located within prime farmland and 5 of 80 turbines are located in farmland of statewide importance according to NCRS 2013 farmland mapping. The previously-reviewed and approved project layout was determined to impact only 0.69% of all the prime farmland in the project area, which was considered negligible by the Commission. Minor changes to the project layout are not anticipated to have changed this percentage in a meaningful manner.
Irrigated Land	No	No documented center-pivot irrigation systems within the project area.
Areas critical to the life stages of T&E Species	No	The project is not expected to adversely affect ecological communities or any threatened and/or endangered species as studied through a Rare Species and Natural Community Assessment and closely coordinated with the NDPRD and USFWS. Neither the NDGFD nor the USFWS have objected to construction of the project.

Areas where animal or plant species unique to the state would be irreversibly damaged	No	The project is not expected to adversely affect ecological communities or any threatened and/or endangered species as studied through a Rare Species and Natural Community Assessment and closely coordinated with the NDGFD and USFWS. Neither the NDGFD nor the USFWS have objected to construction of the project.
Areas within 1,200 feet of the center of an ICBM launch or launch control facility	No	ICBM Facilities are located west of The Turtle Mountains near the Minot Air Force Base; No Department of Defense Easements were noted within Owner's Policy of Title Insurance Pro Forma. http://csis.org/blog/aim-points-us-nuclear-arsenal .
Additional Exclusion Area Descriptions per Section 69-06-08-01 (2.a. 1-5)	Impacts? (Yes/No)	Evaluation Process Description
Areas less than 1.1 times the tip height from interstate or state road ROW	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014
Areas less than 1.1 times the tip height +75 feet from centerline of any county or township roadway	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014
Areas less than 1.1 times the tip height from any Railroad ROW	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014
Areas less than 1.1 times the tip height from any 115 kV or greater transmission line	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014
Areas less than 1.1 times the tip height from any non-participating property line	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014
Avoidance Area Descriptions per Section 69-06-08-01 (3.a.-f.)	Impacts? (Yes/No)	Evaluation Process Description
Historical Resources not Designated as Exclusion Areas	No	Archaeological site 32RO67 was recommended for avoidance as its NRHP eligibility has not been assessed. Design of the wind farm will avoid the site.
Areas within the city limits of a city or the boundaries of a military installation	No	Not within city limits -- ND Department of Transportation (2008) data source.
Areas within a 100-year floodplain boundary	NA	FEMA floodplain mapping not available for this area.
Areas that are geologically unstable	No	None in project area per http://www.nd.gov/gis/apps/HubExplorer/#extent=-11098702.48903,6251072.09875,-11038622.9848,6285812.7281&basemap=Map (geology tab).
Wetlands	Yes, but negligible	Minor, permanent impacts on the order of 5,800 square feet for access road construction. Impacts are currently being evaluated by the Bismarck office of the U.S. Army Corps of Engineers.
Woodlands (Significant, native)	No	Significant, native woodlands will be avoided by the project. Minor impacts may occur, but only where roads and electrical collection cables need to cross shelterbelts and tree lines. Trees and shrubs proposed for impact will be appropriately inventoried per PSC rules and guidelines prior to disturbance and mitigated as required.
Areas of recreational significance not designated as exclusion areas	No	There are snowmobile trails near the project area; however, they will not be adversely affected by the project. The snowmobile trails follow 108th Street NE, 48th Avenue NE, and also along Foussard Avenue between St. John and Rolla. North Dakota Parks and Recreation Department (2008) data sources.
Additional Avoidance Area Descriptions per Section 69-06-08-01 (4)	Impacts? (Yes/No)	Evaluation Process Description
Sound levels within one hundred feet of an inhabited residence or a community building will exceed 50 dBA	No	Based on BWE Vestas Turbine Layout provided to Commission with the Petition for Amendment on January 8, 2014, and the Sound Modeling Results from GL-GH from December 2013