

Appendix H

MOE Environmental Features Screening Checklist (Ontario Regulation 116/01)

Environmental Features Screening Criteria Checklist (MOE, 2001)

Ostrander Point Wind Energy Park

Criterion: Will the project....	Potential Effect		Additional/Supporting Information
	Yes	No	
1.0 Surface and Ground Water			
1.1 have negative effects on surface water quality, quantity, or flows?	✓		<ul style="list-style-type: none"> • potential for temporary water quality impairment due to construction of facilities in close proximity to or crossing of a watercourse • the Project will not require significant alteration of surface runoff patterns • the Project operations do not involve the storage of surface water
1.2 have negative effects on groundwater quality, quantity, or movement?	✓		<ul style="list-style-type: none"> • depending upon groundwater levels, it may be possible that some dewatering activities will be required when installing the tower foundations and transmission line poles • withdrawals of groundwater are expected to be below the threshold for a Permit to Take Water from the MOE (i.e., project withdrawal would be <50,000 l/d)
1.3 cause significant sedimentation, soil erosion, or shoreline or riverbank erosion on or off site?	✓		<ul style="list-style-type: none"> • construction will require excavation (e.g., foundations and access roads); however, the sites are of limited topographic relief and hence erosion of excavated materials is not anticipated • potential for temporary water sedimentation due to construction of facilities in close proximity to or crossing of a watercourse • sediment and erosion control measures will be implemented as required
1.4 cause potential negative effects on surface or groundwater from accidental spills or releases into the environment?	✓		<ul style="list-style-type: none"> • materials on-site that have potential to be spilled are limited to fuel, lubricating oils, and other fluids associated with access road, transmission line and turbine construction, maintenance, and operation and could be spilled • large quantities of these materials are not contained within the turbine or on-site and do not represent a significant potential negative effect on the surface or groundwater in the event of accidental spills • standard containment facilities and emergency response materials will be maintained on-site as required
2.0 Land			
2.1 have negative effects on residential, commercial, or institutional land-uses within 500 m of the site.	✓		<ul style="list-style-type: none"> • lands for the access roads, electrical lines, turbines, and pad-mounted transformers will be required for the lease period (i.e., 25 years with renewal options); this infrastructure will be located on Crown land which is currently vacant • the 44 kV transmission line to the Milford Distribution Station is proposed to follow an existing road right-of-way and therefore will not remove land from its current land use • construction has potential for nuisance effects, e.g., noise, dust

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2.2 be inconsistent with the Provincial Policy Statement, provincial land use, or resource management plans?	✓		<ul style="list-style-type: none"> the Project will be planned and developed in a manner that is consistent with the PPS no effects on provincial land-use or resource management plans are anticipated the PPS permits the development of renewable energy systems on rural and agricultural lands
2.3 be inconsistent with municipal land use policies, plans, and zoning bylaws?	✓		<ul style="list-style-type: none"> the Project will be located on Crown land
2.4 use hazard lands or unstable lands subject to erosion?	✓		<ul style="list-style-type: none"> according to the Prince Edward County Official Plan, the southern portion of the Study Area, and parcels along the transmission line route are designated as Environmental Protection Areas. The Environmental Protection designation describes all wetlands, organic soils and areas prone to flooding, erosion or poor drainage construction will occur in a manner which minimizes soil erosion
2.5 have potential negative effects related to the remediation of contaminated land?	✓		<ul style="list-style-type: none"> according to the Prince Edward County Official Plan, no contaminated lands have been identified in the Study Area or along the transmission line route as the site is a former gunnery range operated by the Department of National Defense in the 1940's, there is potential for unexploded ordnances within the Study Area
3.0 Air and Noise			
3.1 have negative effects on air quality due to emissions of nitrogen dioxide ("NO _x "), sulphur dioxide ("SO ₂ "), total suspended particles ("TSP"), or other pollutants?	✓		<ul style="list-style-type: none"> reciprocating engine equipment (e.g., excavators, haulage trucks,) will be used during the construction phase of the Project operation of the wind turbines will not result in negative effects on air quality since no emissions of NO_x, SO₂, or particulate matter are generated by the wind turbines
3.2 cause negative effects from the emission of greenhouse gases (carbon dioxide and methane)?	✓		<ul style="list-style-type: none"> emissions of carbon dioxide or methane will be generated by construction equipment and to a lesser degree by operation vehicles operation of the wind turbines will not result in negative effects from the emissions of greenhouse gases since no emissions are generated by the wind turbines
3.3 cause negative effects from the emission of dust or odour?	✓		<ul style="list-style-type: none"> during construction, dust will be generated, with emissions of short duration and limited to the lands surrounding the work areas no emissions of odour are anticipated
3.4 cause negative effects from the emission of noise?	✓		<ul style="list-style-type: none"> during construction, noise will be generated with emissions of short duration and limited to the lands surrounding the work areas

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4.0 Natural Environment			
4.1 cause negative effects to rare, threatened, or endangered ("VTE") species of flora or fauna or their habitat?	✓		<ul style="list-style-type: none"> • mechanical and aerodynamic noise will be emitted from the operating wind turbines • there is potential for limited environmental noise effects at sensitive off-site receptors during operation of the wind plant and as such the Project underwent a detailed Environmental Noise Impact Assessment prior to release of the ERR
4.2 cause negative effects on protected natural areas such as areas of natural and scientific interest ("ANSI"), environmentally sensitive areas ("ESA"), or other significant natural areas?	✓		<ul style="list-style-type: none"> • the Natural Heritage Information Centre and the Ministry of Natural Resources have identified historical sitings of VTE species within the general area of study for the Project • area habitats support such species and disruption/alteration of the habitat could cause potentially negative effects • the Black Creek Valley Marshes and Forest Life Science ANSI is located well outside the Study Area; however, is in the northern area of the proposed transmission line • the site contains areas of open woodland/tall shrubland communities; however, its significance regarding whether it would qualify as a significant woodland has yet to be assessed from the municipal perspective as per the Natural Heritage Reference Manual for the Provincial Policy Statement
4.3 cause negative effects on wetlands?	✓		<ul style="list-style-type: none"> • there are provincially significant and unevaluated wetlands within the Study Area and along the proposed transmission line route • Turbines will be located outside of provincially significant and unevaluated wetlands.
4.4 have negative effects on wildlife habitat, populations, corridors, or movement?	✓		<ul style="list-style-type: none"> • installation of new electrical generation and transmission infrastructure within the Study Area may have potential to affect wildlife habitat • wildlife usage or movement may be temporarily altered during the construction phase due to the temporary introduction of new sounds and activities • during operation, turbines may alter the movement patterns of some avian species

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4.5 have negative effects on fish or their habitat, spawning, movement, or environmental conditions (e.g., water temperature, turbidity)?	✓		<ul style="list-style-type: none"> crossing of inland watercourses for power line installations and access roads has the potential for negative effects on watercourses, although at present they are generally seasonal and restrictive in size
4.6 have negative effects on migratory birds, including effects on their habitat or staging areas?	✓		<ul style="list-style-type: none"> there is potential to affect migratory birds due to collision with the turbine tower and/or blades and/or bird usage of the area immediately surrounding the wind turbines migrating birds utilize the habitats on site as staging and resting areas during migration often funneling along the length of the peninsula
4.7 have negative effects on locally important or valued ecosystems or vegetation?	✓		<ul style="list-style-type: none"> the Study Area falls within an Important Bird Area, as well as Environmental Protection Lands depending upon the final location of the electrical lines and access roads, their construction may have potential to cause localized effects to vegetation within the work areas none of the plant species are considered species of special concern, threatened or endangered according to either the Committee on the Status of Endangered Wildlife in Canada or the Committee on the Status of Species at Risk in Ontario
5.0 Resources			
5.1 result in inefficient (below 40%) use of a non-renewable resource?		✓	<ul style="list-style-type: none"> wind energy is a renewable resource
5.2 have negative effects on the use of Canada Lands Inventory Class 1 to 3 (i.e., prime agricultural lands), specialty crops, or locally significant agricultural lands?		✓	<ul style="list-style-type: none"> the Study Area was last cultivated for agricultural purposes over 50 years ago, therefore the Project will not effect significant agricultural lands
5.3 have negative effects on existing agricultural production?		✓	<ul style="list-style-type: none"> no agricultural activities are currently occurring within the Study Area
5.4 have negative effects on the availability of mineral, aggregate, or petroleum resources?		✓	<ul style="list-style-type: none"> there are no known petroleum resources within the Study Area there are no known designated mineral or aggregate resources within lands optioned for the Project no deposits of sand and gravel in the Study Area that have been selected for resource protection by the province
5.5 have negative effects on the availability of forest resources?		✓	<ul style="list-style-type: none"> construction of the wind turbines, access roads, and ancillary facilities will not affect merchantable forest resources

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5.6 have negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas?	✓		<ul style="list-style-type: none"> the Project will be located on unoccupied Crown land that is currently accessible by road
6.0 Socio-Economic			
6.1 have negative effects on neighbourhood or community character?	✓		<ul style="list-style-type: none"> within the Study Area there are presently no commercial scale wind turbines the proposed Project will introduce up to 12 commercial scale wind turbines into the area as well as a 44 kV transmission line the Project will change the present rural/recreational community character of the area, but as a land use, wind plants are compatible with rural and recreational as the area will still be accessible to recreational users
6.2 have negative effects on local businesses, institutions, or public facilities?		✓	<ul style="list-style-type: none"> area businesses will benefit financially from construction activities and fulfilling operational supplies no significant negative effects to local businesses, institutions, and public facilities are expected as a result of the Project long-term positive effect on area's tax base through County property taxes applied against the wind plant
6.3 have negative effects on recreation, cottaging, or tourism?	✓		<ul style="list-style-type: none"> potential for inconvenience of visitors and cottagers on roads during the construction phase as construction supplies, materials, and workers are transported
6.4 have negative effects related to increases in the demands on community services and infrastructure?		✓	<ul style="list-style-type: none"> limited numbers of personnel will be required to operate the wind plant, therefore there is only a nominal demand on/for public services (e.g. housing, hospitals, and schools) the Project will not be physically connected to community services or infrastructure and hence no increases for these services is anticipated (e.g., no new demand for potable water, wastewater connections, etc.)
6.5 have negative effects on the economic base of a municipality or community?		✓	<ul style="list-style-type: none"> through the Project, Gilead will contribute new resources to the economic base of the municipality (e.g. through annual taxation) with limited demand for municipal services to the extent possible local goods and services will be procured during construction, operation, maintenance, and decommissioning of the Project where these are available in sufficient quantity and quality and at competitive prices, creating a positive economic effect
6.6 have negative effects on local employment and		✓	<ul style="list-style-type: none"> to the extent possible, where appropriate training and experience have been accrued, local persons will be employed during the construction phase and will provide operational

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labour supply?			supplies, creating a positive effect for local labour and employment
6.7 have negative effects related to traffic?	✓		<ul style="list-style-type: none"> • the transport of equipment and supplies during the construction phase will result in additional (temporary) road use carrying excess loads, large tower components, supplies, equipment, and personnel • during operation, supplies will be intermittently delivered to the Project as required, with no significant negative effects anticipated during this stage of the Project's lifecycle
6.8 cause public concerns relating to public health and safety?	✓		<ul style="list-style-type: none"> • potential exists for accidents and malfunctions and thus there may be general public safety concerns with the new infrastructure • possible perceived health effects related to electric and magnetic fields, and operating wind turbines (due to shadow flicker, environmental noise, ice shed, etc.) • operation of the wind turbines will not contribute greenhouse gases or other atmospheric pollutants
7.0 Heritage and Culture			
7.1 have negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes?	✓		<ul style="list-style-type: none"> • a Stage 1 Archaeological Assessment identified elevated potential for archaeological resources within the Study Area • a Stage 2 Archaeological Assessment will, as required, be completed and submitted to the Ministry of Culture to obtain a letter of clearance prior to construction • should such resources be encountered during construction, they will be handled as per the requirements of the Ministry of Culture
7.2 have negative effects on scenic or aesthetically pleasing landscapes or views?	✓		<ul style="list-style-type: none"> • the wind plant will be visible for a considerable distance across the relatively flat landscape, with some persons finding the wind turbines aesthetically pleasing, others being indifferent, while others possibly finding them a disruption to natural sight lines

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8.0 Aboriginal			
8.1 cause negative effects on First Nations or other Aboriginal communities?	✓		<ul style="list-style-type: none"> • there are no known First Nations or Aboriginal communities within the Study Area • based on information provided by the Ministry of Indian and Northern Affairs, there are no comprehensive land claims within the Study Area; however, a specific claim has been submitted by the Alderville First Nation • the Mohawks of the Bay of Quinte have been identified as being located in the vicinity of the Study Area
9.0 Other			
9.1 result in the creation of waste materials requiring disposal?	✓		<ul style="list-style-type: none"> • construction wastes such as excavated soils, equipment packaging and wrappings, and scraps will be produced • the Project will generate waste associated with turbine construction, maintenance, and operation that will require recycling and/or disposal
9.2 cause any other negative environmental effects not covered by the criteria outlined above?	✓		<ul style="list-style-type: none"> • potential accidents and malfunctions related to seismicity, ice shed, and third party damage are commonly identified by stakeholders as potential project issues

Source of criteria used: *Guide to Environmental Assessment Requirements for Electricity Projects, March 2001 (MOE, 2001)*