

# EAST DURHAM WIND ENERGY CENTRE

## Natural Heritage Assessment Report Summary

OCTOBER 2012

East Durham Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra), is proposing to construct a wind energy project in the Municipality of West Grey, Grey County, Ontario. The Project will be referred to as the East Durham Wind Energy Centre (the “Project”) and will be located on private lands east of the Community of Durham and west of the Village of Priceville. The wind turbine technology proposed for this Project is the GE 1.6-100 model wind turbine. With a total maximum nameplate capacity of up to 23 MW, the Project is categorized as a Class 4 facility. The project consists of up to 16 GE model wind turbines with 14 turbines that are 1.6-100 (1.62 MW), Turbine 6 is 1.34-100 (1.34 MW) and Turbine 2 is 1.39-100 (1.39 MW). Although NextEra is seeking a Renewable Energy Approval (REA) for up to 16 wind turbines, only 14 will be constructed for the project.

The purpose of the Natural Heritage Assessment (NHA) Report is to first identify ecologically significant natural features (for example, important wildlife habitat) within 120 metres (m) of the proposed Project Location (the Project Location is defined as the outer limit of where disturbance may occur due to construction or operation of the Project), and to determine potential effects, mitigation measures and residual effects, if any. Residual effects are “left over” effects once mitigation measures have been applied.



The NHA is prepared in accordance with the requirements outlined in Ontario Regulation 359/09, the regulation governing renewable energy projects in Ontario in addition to the Ministry of Natural Resources’ (MNR) Natural Heritage Assessment Guide for Renewable Energy Projects. The report is reviewed and signed-off on by the MNR prior to submitting the Renewable Energy Approval to the Ministry of the Environment.

Corresponding section references are provided below to assist with reviewing the associated reports.



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### RECORDS REVIEW - SECTION 2

Information gathered during this stage of the process was used to determine if there are any of the following natural features within the Study Area:

- ✦ Provincial Parks and Conservation Reserves;
- ✦ Wetlands;
- ✦ Woodlands;
- ✦ Valleylands;
- ✦ Rare species and significant wildlife habitats; and,
- ✦ Areas of Natural and Scientific Interest (ANSIs).

This involved contacting the Ministry of Natural Resources (MNR), the Ministry of the Environment (MOE), the local Conservation Authorities and the Municipalities to obtain any records they keep of these natural features within the Study Area.

### SITE INVESTIGATION - SECTION 3

After the Records Review, Site Investigations were conducted to confirm that the findings of the Records Review were correct, to identify any additional natural features not documented in the Records Review, and finally to define the boundaries and characteristics of the features (for example, what types of plants and animals live in a particular woodland).

The results of the Site Investigation revealed:

- ✦ 17 wetlands/wetland complexes identified as either provincially significant or candidates for significance;
- ✦ 5 woodlands;
- ✦ 7 valleylands; and,
- ✦ Numerous Candidate Significant Wildlife Habitats, including important habitats for bats, turtle wintering area, frogs, deer yarding areas and birds, waterfowl, as well as Generalized Candidate Significant Wildlife Habitats (waterfowl stopover and staging areas (aquatic), deer movement corridors, bat hibernacula).

These natural features were carried forward to the evaluation of significance stage.

### EVALUATION OF SIGNIFICANCE - SECTION 4

At this stage, natural features are evaluated to determine if they are significant according to provincial criteria. If a feature is determined to be significant, an Environmental Impact Study (EIS) must be conducted to identify potential effects, propose mitigation measures and describe how the potential effects will be addressed through the environmental effects monitoring plan.

Of the natural features identified through the Site Investigation, the following were determined to be significant or treated as significant and therefore were addressed in the EIS:

- ✦ 13 wetlands;
- ✦ 4 woodlands;
- ✦ 7 valleylands; and,
- ✦ 16 Candidate Significant Wildlife Habitats, as well as Generalized Candidate Significant Wildlife Habitats.

### ENVIRONMENTAL IMPACT STUDY - SECTION 5

For each natural heritage feature identified as significant, potential effects were assessed and mitigation measures/monitoring commitments proposed depending on the type of project infrastructure affecting the feature.

Below is a summary of some of the potential effects, mitigation measures and monitoring commitments from the effects assessment. For the full effects assessment, please refer to the Natural Heritage Assessment Report.

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### POTENTIAL EFFECTS FROM CONSTRUCTION/ DECOMMISSIONING - SECTION 5.3 and 5



- ✦ Increased erosion, sedimentation and turbidity (i.e. an increase in soil in wetlands, water bodies and other significant features) from clearing vegetation for construction of access roads, and temporary crane paths. To avoid or lessen these effects, erosion control fencing will be used and kept in place until the disturbed areas are stabilized, all stockpiled materials will be kept away from the features and periodic monitoring will occur during construction to ensure compliance with these mitigation measures.
- ✦ Damage to vegetation while operating construction equipment. To avoid or lessen these effects, protective fencing will be installed around construction areas to ensure that no work occurs outside the identified zones, and periodic monitoring will occur during construction to ensure compliance.
- ✦ Intrusion into features (intentional or accidental) during construction or decommissioning activities. Disturbance or mortality of wildlife and alteration or barriers to wildlife movement.
- ✦ Soil and water contamination from accidental spills of oils, gasoline or grease. To avoid or lessen these effects, a spill response plan will be developed to outline steps to be taken to contain any chemicals and avoid contamination of features. The Design and Operations Report contains an Emergency Response and Communication Plan which outlines action to be taken should a spill occur, including notifying the MOE's Spills Action Centre, if required, and the local municipalities.

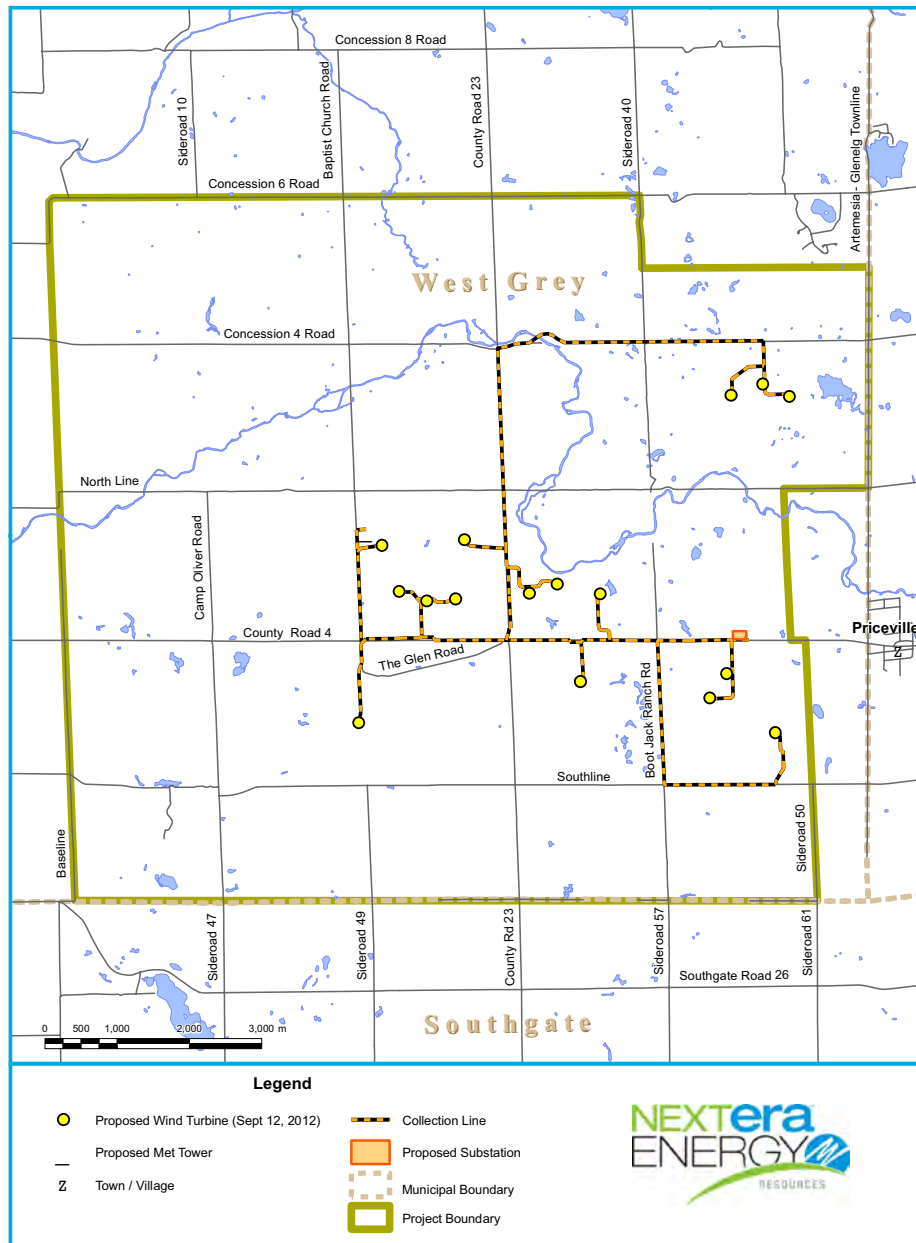
### POTENTIAL EFFECTS FROM OPERATIONS - SECTION 5.4

- ✦ Disturbance or mortality to wildlife (e.g. birds and bats) from collisions with turbines. To avoid or mitigate these effects, operational mitigation techniques will be implemented if impacts are observed to be above provincial thresholds. Monitoring will consist of three years of post-construction mortality surveys for birds and bats which will be submitted to the MNR.

The overall conclusion of the Natural Heritage Assessment Report is that this Project can be constructed and operated without any remaining effects that could harm the environment. Post-construction monitoring related to effects on wildlife, including birds and bats, will be undertaken to confirm this conclusion.

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### Have A Question?

We hope you find this Plain Language Summary helpful. In case you would like additional information or have any questions, please contact us directly:

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