

# BLUEWATER WIND ENERGY CENTRE

## Noise Assessment Report Summary

MARCH 2012

Varna Wind Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra) is proposing to construct a wind energy project in the Municipalities of Bluewater and Huron East in Huron County, Ontario (see map on back page). The project will be referred to as the Bluewater Wind Energy Centre (the "Project") and will be located on private lands in the vicinity of the shoreline of Lake Huron. While NextEra is seeking a Renewable Energy Approval (REA) for 41 wind turbines, only 37 are proposed to be constructed for the Project.

The purpose of the Noise Assessment Report is to ensure that sound produced from the operating wind turbines and the transformer substation remain within Provincial guidelines at certain Points of Reception (Points of Reception are on page 2).



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### STUDY PROCESS

According to Ontario Regulation 359/09, the regulation governing renewable energy approvals in the Province, turbines must be sited at least 550 metres (m) and transformer substations at least 500 (m) from non-participating Points of Reception. In addition, sound levels at non-participating points of reception cannot exceed 40 decibels (dBA) once the turbines and transformer substation are in operation. The Ministry of Environment (MOE) also requires that the sound effects from existing wind turbines are included in the analysis. There is one wind farm within 5 kilometres of the Bluewater Wind Energy Centre. It is called The Zurich Wind Farm and consists of one wind turbine.

### POINTS OF RECEPTION

A Point of Reception, or noise receptor, is a location where sound created by the Project is received. The following table describes the number and type of Points of Reception that were included in the noise analysis and whether MOE guidelines apply.

Points of Reception include buildings used for overnight stay, such as houses or apartments, in addition to schools, day care centres, churches, etc. Note that the noise analysis also considers potential Points of Reception on vacant lands where there are currently no buildings or structures. These are referred to as Vacant Lot Points of Reception.

Number of Points of Reception	Description	Remarks
625	Non-participating	MOE guidelines apply
76	Participating	MOE guidelines do not apply
272	Vacant Lot Non-Participating	MOE guidelines apply
69	Vacant Lot Participating	MOE guidelines do not apply



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Any Point of Reception classified as non-participating is subject to noise level limits outlined in the MOE guidelines. Participating Points of Reception are not subject to noise level limits because the parcels of land host infrastructure associate with the Project.

### RESULTS

After modelling predicted noise levels from the proposed turbines, transformer station and the existing Zurich Wind Farm, it was concluded that:

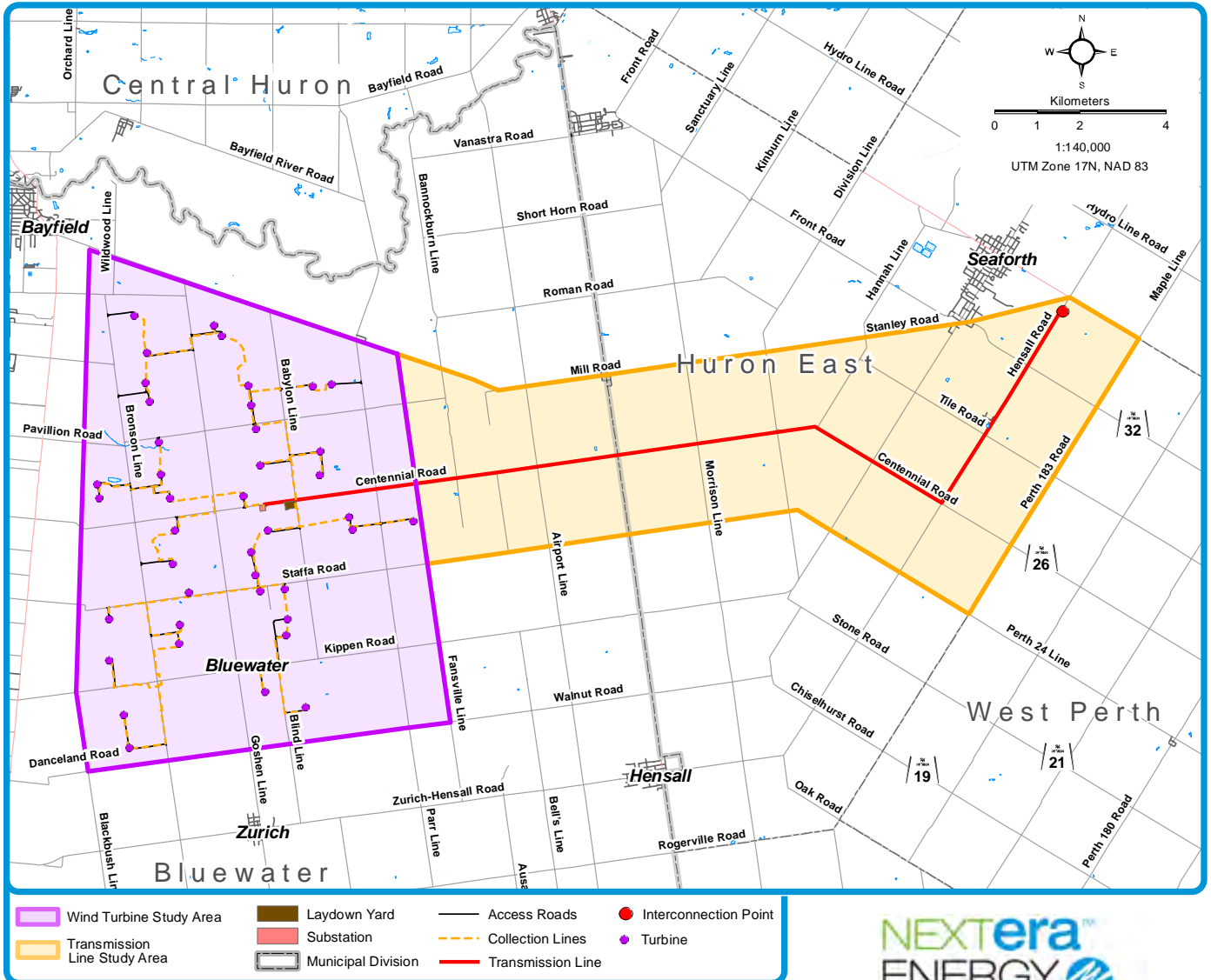
- All Non-Participating Points of Reception comply with MOE guidelines for wind turbines meaning that they are predicted to be below the 40 dBA noise threshold and are greater than 550 m from the nearest wind turbine.
- All Non-Participating Vacant Lot Points of Reception comply with MOE guidelines for wind turbines meaning that they are predicted to be below the 40 dBA noise threshold and are greater than 550 m from the nearest wind turbine.
- A 5 m high noise barrier will ensure the transformer substation is in compliance with MOE noise limits.





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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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