December, 2012

NEXTERA ENERGY CANADA, ULC
SUMMERHAVEN WIND ENERGY CENTRE

Design Refinement Report

Submitted to:
Director, Ministry of Environment
2 St. Clair West, Floor 12A
Toronto, Ontario
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REPORT

Report Number: 10-1151-0035

Distribution:

Ministry of Environment - 1 copy
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Golder Associates

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1.0 INTRODUCTION

This Design Refinement Report (the Report) has been prepared for NextEra Energy Canada, ULC's (NextEra Energy Canada) Summerhaven Wind Energy Centre (the Project). The Report provides a summary of certain refinements made to the Project design since the Renewable Energy Approval (REA) was issued by the Ministry of the Environment (MOE) on March 16, 2012.

2.0 NAME AND CONTACT INFORMATION OF THE APPLICANT

The Project will be owned and operated by Summerhaven Wind, LP a subsidiary of NextEra Energy Canada, ULC (NextEra Energy Canada) a wholly owned subsidiary of NextEra Energy Resources, itself part of NextEra Energy Inc. (NYSE: NEE).

The headquarters for NextEra Energy Canada is located in Burlington, Ontario. The NextEra Energy Canada contact for the Project is:

Ben Greenhouse, Director
NextEra Energy Canada, ULC
5500 North Service Rd., Suite 205
Burlington, Ontario, L7L 6W6
Phone: 905-335-4904
Fax: 905-335-5731
Email: Ben,Greenhouse@nexteraenergy.com

2.1 Proponent Renewable Energy Approval (REA) Team

NextEra Energy Canada has retained Golder Associates Ltd. (Golder) to conduct several of the technical studies and write the REA Application. Contact information for the Golder Project Manager is:

Ian Callum, Project Manager
Golder Associates Ltd.
2390 Argentia Road
Mississauga, Ontario L5N 5Z7
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E-mail: Ian_Callum@golder.com

3.0 DESIGN REFINEMENTS

In summary, the refinements to Project, described in detail in the following sections, consist of a refinement to the model of turbine used at some of the proposed 58 turbine locations (consisting of a blade length reduction), and five refinements to access road and collection cable alignments. A summary of the resulting Project vital statistics is presented in Section 3.1.3.

3.1 Turbine Model Refinement

Of the 58 turbine locations documented in the REA approval, in 26 instances, Siemens 2.221-93 model turbines are now proposed instead of the Siemens 2.221-101 model. The Siemens 2.221-93 has a blade length of 46.5 m, compared to the Siemens 2.221-101 which employs a 50.5 m blade, resulting in a blade swept area of 6,800 m^2 compared to 8,000 m^2. Addendum information to the Golder noise study, submitted as part of the REA application, is provided in attachment A. The addendum summarizes how the approved noise assessment information and assessment findings, which is a combination of the 2011 noise study report and the two (2) 2012 technical memos, will be affected with this proposed refinement in design. As concluded in the addendum, although some noise levels at receptors may have changed, the findings of the Noise Study Report have not changed. Using manufacturer's noise specifications, Golder has predicted noise levels that are at or below the MOE noise level limits at specified wind speeds. Based on these results, the Project will operate within compliance limits as set out by the MOE, and within the noise requirements of REA Number: 2484-8RQUS4.

3.2 Access Road/Collection Cable Refinements

Since approval of the REA, received on March 16, 2012, five access road and collection cable refinements have been proposed. Figure 1 represents an index map showing the locations of these refinements. Detailed depictions of the proposed refinements are provided in this section.

Refinement 1

Since the REA approval, the access road and collection cables alignment to turbine 26 has been refined to avoid archaeological resources that otherwise would have required a Stage 4 Archaeological Assessment. No significant archaeological finds are located in the area of the proposed refinement.

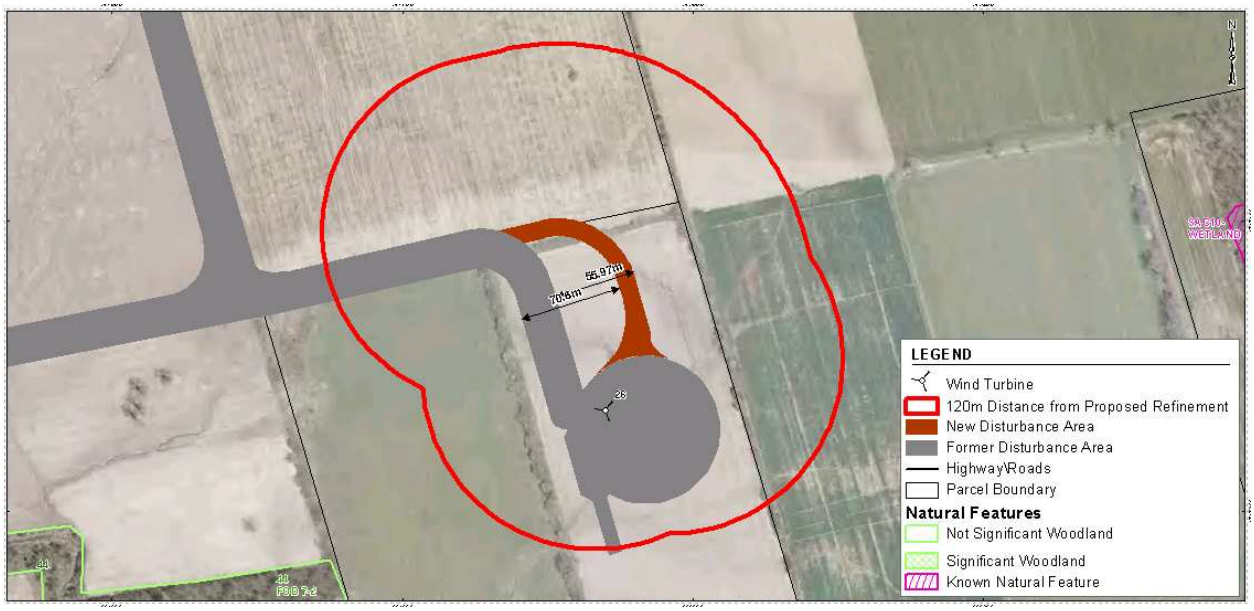


Figure 2: Refinement 1, north of turbine 26

Refinement 2

Since the REA approval, the access road and collection cables alignment to turbine 58 has been refined to avoid archaeological resources that otherwise would have required a Stage 4 Archaeological Assessment. No significant archaeological finds are located in the area of the proposed refinement.

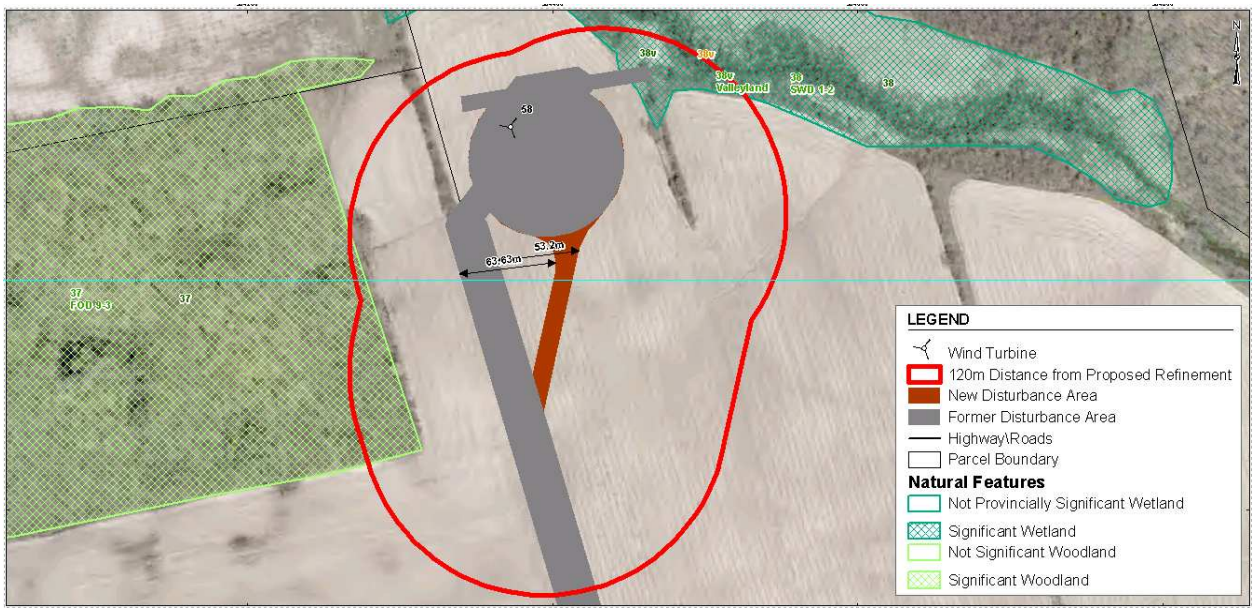


Figure 3: Refinement 2, located south of Turbine 58

Refinement 3

Since the REA approval, the access road and collection cable alignment to turbine 41 has been refined to avoid archaeological resources that otherwise would have required a Stage 4 Archaeological Assessment. No significant archaeological finds are located in the area of the proposed refinement.

Figure 4: Refinement 3, located west of turbine 41

Refinement 4

Since the REA approval, the access road and collection cable alignment to turbine 51 has been refined at the request of the landowner.

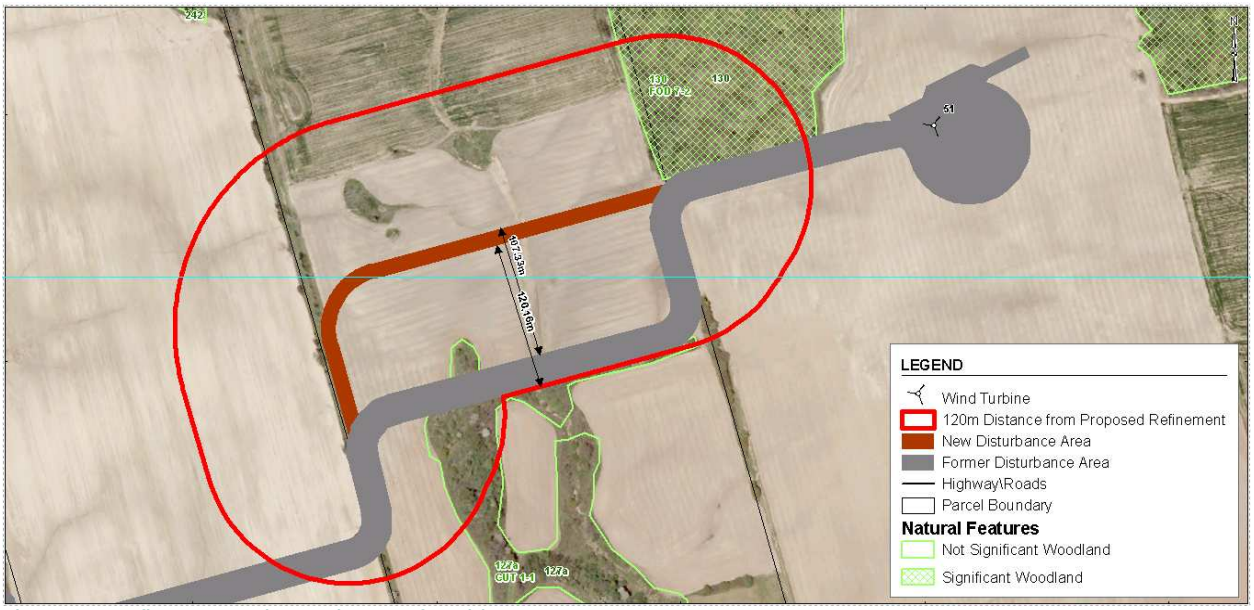


Figure 5: Refinement 4, located west of Turbine 51

Refinement 5

Since the REA approval, a landowner has decided that they no longer wish to be part of the Summerhaven Project. As a result, the access road and collection cable alignment have been shifted to the east to avoid the landowner's property.

Figure 6: Refinement 5, located between Turbine 13 and 14

3.3 Summary of Project Vital Statistics

In consideration of the refinements of the turbine model at 26 turbine locations, and the refinement of five access road and collection cable alignments, the Project's vital statistics are shown in Table 1.

Table 1: Summary of Project Vital Statistics

General	REA Approval	Refinements made since obtaining REA
Project Name	Summerhaven Wind Energy Centre	No refinement
Project Ownership and Operation	Summerhaven Wind, LP	No refinement
Project Lifespan (approval to decommissioning)	27 years	No refinement
Project Nameplate Capacity	128.82 MW	No refinement
Project Area (as shown in Figure 1)		
Location of Project	Privately-owned land near Nanticoke, Ontario	No refinement
Total Project Area	22,583 ha	No refinement

General	REA Approval	Refinements made since obtaining REA
Total Land Area Used by Project Components	298 ha	No refinement
Turbines	**Siemens 101**	**26 of the 58 turbines proposed will be Siemens 2.221-93 model turbines. The remaining 31 turbines are Siemens 2.221-101 as originally proposed.**
Total Number	58	No refinement
Rating	2.221 MW	No refinement
Number of Blades	3	No refinement
Blade Length	49 m	Siemens 2.221-93 turbines have a blade length of 45 m
Hub Height	80 m	No refinement
Rotor Diameter	101 m	Siemens 2.221-93 turbines have a rotor diameter of 93 m
Cut-in Wind Speed	4 m/s	No refinement
Cut-out Wind Speed	25 m/s	No refinement
Rated Wind Speed	12 – 13 m/s	No refinement
Swept Area	8,000 m^2	Siemens 2.221-93 turbines have a swept area of 6,800 m^2
Foundation Dimensions	Approximately 17 m × 17 m × 3 m	No refinement
Access Roads		
Length of 7.3 m-Wide Roads	11 km	See below
Length of 11 m-Wide Roads	36.9 km	47 km (all access roads are 6 m wide within an 11 m wide disturbance)
Electrical Transformers and Cables		
34.5 kV Collector System Cables	132 km (underground))	127.6 km (underground)
230 kV Transmission Cables	7.7 km (overhead)	No refinement
Other Project Structures and Facilities		
Transforming Substation Size	2 ha	No refinement
Switchyard Area	2 ha	No refinement
Operations Building Size	465 m^2, adjacent 200 m^2 parking area	No refinement

4.0 REVIEW OF REFINEMENTS BY OTHER AGENCIES

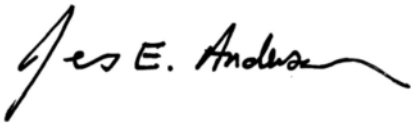
4.1 Ministry of Culture and Tourism

The refinements outlined in this report will be communicated to the Ministry of Tourism and Culture (MTCS) in two separate memos: one dealing with archaeological resources, the second with built heritage. Letters confirming MTCS has no concerns regarding the proposed refinements will be forwarded to MOE upon receipt.

4.2 Ministry of Natural Resources

The refinements outlined in this report will be communicated to the Ministry of Natural Resources (MNR) in a memo. A letter confirming MNR has no concerns regarding the proposed refinements will be forwarded to MOE upon receipt.

Report Signature Page



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EA Project Manager

James E. Anderson, M.A.Sc., MBA, P.Eng
Principal - Project Director

IRC/gf

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FIGURE 1

Summerhaven Project: Refinement Locations

At Golder Associates we strive to be the most respected global company providing consulting, design, and construction services in earth, environment, and related areas of energy. Employee owned since our formation in 1960, our focus, unique culture and operating environment offer opportunities and the freedom to excel, which attracts the leading specialists in our fields. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees who operate from offices located throughout Africa, Asia, Australasia, Europe, North America, and South America.

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