BORNISH WIND ENERGY CENTRE

RENEWABLE ENERGY APPROVAL

MODIFICATION REPOR

February 2014















RENEWABLE ENERGY APPROVAL-MODIFICATION REPORT BORNISH WIND ENERGY CENTRE, ONTARIO

Client	NextEra Energy Canada, ULC
Contact	Ben Greenhouse
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Author

G. Constantin

Checked by

E. Crivella

Approved by

E. Crivella

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1 PREAMBLE

Bornish Wind L.P., a wholly-owned subsidiary of NextEra Energy Canada ULC (NextEra), is proposing to develop the Bornish Wind Energy Centre (the "Project") located in the Municipality of North Middlesex, Middlesex County, Ontario. The Project received a Renewable Energy Approval (REA) from the Ministry of the Environment (MOE) on 26 April 2013 [1]. Subsequent to the issuance of the REA approval, the Project location has been modified as compared to REA application dated 23 July 2012. The following sections of this Modification Report describe the proposed modification to the Project and resulting changes to the originally approved REA reports.

1.1 General Project Description

The Project is located in south-western Ontario, in the Municipality of North Middlesex, Middlesex County, Ontario. The Project Study Area has not changed from the original REA submission.

1.1.1 Project Proponent

The Project proponent is Bornish Wind L.P. The proponent has not changed from the initial REA submission. The primary contact for Bornish Wind LP for this Project is:

Ben Greenhouse NextEra Energy Canada, ULC 390 Bay St., Suite 1720 Toronto, ON M5H 2Y2 Phone 1-877-257-7330 www.nexteraenergycanada.com Bornish.Wind@NextEraEnergy.com

2 PROPOSED PROJECT MODIFICATIONS

The proposed change to the construction phase activity is modified language relating to the required set-backs for directional drill entry and exit pits from natural features and wildlife habitats. The placement of the entry and exit pits would remain within the footprint of the underground cabling already permitted under the REA process and will have no direct impact on natural features or wildlife habitats. The proposed language allows for entry and exit pits to be placed closer to natural features than identified in the Natural Heritage Assessment (NHA), providing they are still placed at the correct depth below the natural features.

As the Project location and component layout has not changed, it has been determined that amendments to the Records Review, Site Investigation and Evaluation of Significance Reports are not required. As a minor change in construction activity and associated mitigation measure is being proposed, an amendment to the Environmental Impact Study (EIS) report is required and is discussed in the enclosed report prepared by NRSI. Moreover, since the proposed modification does not change the Project location and component layout, there are no additional impacts to archaeological or build heritage features as well as the MOE-approved Noise Impact Assessment.

The proposed Project modification is summarized in Table 2-1 which documents the following:

- 1. A description of the modification and a rationale for the proposed modification; and
- 2. New potential environmental effects and corresponding mitigation measures.

Issue:

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Approved NHA Commitment	Proposed Modification and Details	Rational for Proposed Modification	New Potential Environmental Effect (altered effect)	New Mitigation Measures and/or Monitoring Requirements
Locate all entry and exit pits at least 30 m from natural features (i.e. woodlands, wetlands) or water bodies.	Locate all directional drill entry and exit pits a sufficient distance from the edge of natural features (i.e. woodlands, wetlands) to maintain a minimum depth of 5 feet below the surface to protect the critical root zone of vegetation. A minimum of 30 m from natural features will be implemented, wherever possible.	There are three locations (between T8 and T9; south of T9; and between T24 and T25) where the specific project location and positioning of the cabling at this location does not allow for a 30 m setback from the nearby natural feature or water body.	The modified placement of the entry and exit pits will continue to remain entirely within the already permitted footprint of the underground cabling, and will have no direct impact on any natural features or wildlife habitats. As construction activities will remain entirely within the already permitted project location, closer entry/exits pits will not result in any further impacts to any natural feature or wildlife habitat, providing that the required depth of 5 feet is maintained below the entire natural feature to protect the critical root zone. A memo in Appendix A has been prepared to describe the modifications to the natural heritage report.	No new mitigation measures required. No new monitoring requirements for this proposed change.

3 EDITS TO THE PROJECT DESCRIPTION REPORT

Table 3-1 documents the edits to the Project Description Report [2] from the modification described above.

Table 3-1 : Edits to the Project Description Report

Section / Page	Original Text	Revised Text
Section 3.1 / Table 3- 2 / p. 27	Horizontal directional drill entry/exit pits should be located at least 30 m from any significant natural feature.	Horizontal directional drill entry/exit pits should be located at least 30m from any significant natural feature a sufficient distance from the edge of any significant natural feature to maintain a minimum depth of 5 feet below the surface to protect the critical root zone of vegetation. A minimum of 30 m from natural features will be implemented, wherever possible.

4 EDITS TO THE DESIGN AND OPERATIONS REPORT

Table 4-1 documents the edits to the Design and Operations Report [3] resulting from the modification described above.

Section / Page	Original Text	Revised Text		
Section 5.1.1 / Table 5-2 / p. 17	Horizontal directional drill entry/exit pits should be located at least 30 m from any significant natural feature.	Horizontal directional drill entry/exit pits should be located at least 30m from any significant natural feature a sufficient distance from the edge of any significant natural feature to maintain a minimum depth of 5 feet below the surface to protect the critical root zone of vegetation. A minimum of 30 m from natural features will be implemented, wherever possible.		

Table 4-1	:	Edits	to	the	Design	and	Operations	Report
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5 EDITS TO THE CONSTRUCTION PLAN REPORT

Table 5-1 documents the edits to the Construction Plan Report [4] resulting from the modification described above.

Section / Page	Original Text	Revised Text
Section 3.1.1 / Table 3-2 / p. 19	Horizontal directional drill entry/exit pits should be located at least 30 m from any significant natural feature.	Horizontal directional drill entry/exit pits should be located at least 30m from any significant natural feature a sufficient distance from the edge of any significant natural feature to maintain a minimum depth of 5 feet below the surface to protect the critical root zone of vegetation. A minimum of 30 m from natural features will be implemented, wherever possible.

Table 5-1 : Edits to the Construction Plan Report

6 EDITS TO THE DECOMMISSIONING PLAN REPORT

There are no changes to the Decommissioning Plan Report [5] resulting from the modification described above.

7 SUMMARY AND CONCLUSIONS

The Project modification described in this Modification Repot does not change the overall conclusion of the REA Report which states that the Project can be constructed, installed, operated and decommissioned without any significant adverse residual effects.

8 REFERENCES

- [1] Ministry of Environment (MOE), Renewable Energy Approval letter (2494-94QQ97) Bornish Wind Energy Centre, 26 April 2013.
- [2] GL Garrad Hassan, Project Description Report Bornish Wind Energy Centre, 19 July 2012.
- [3] GL Garrad Hassan, Design and Operations Report Bornish Wind Energy Centre, 5 April 2012.
- [4] GL Garrad Hassan, Construction Plan Report Bornish Wind Energy Centre, 2 April 2012.
- [5] GL Garrad Hassan, Decommissioning Plan Report Bornish Wind Energy Centre, 25 February 2012.

APPENDIX A NATURAL HERITAGE ASSESSMENT ADDENDUM

300 Water Street 4th Floor, South Tower Peterborough, Ontario KSJ 8M5 Telephone: 705-755-3243 Fax: 705-755-3292 Southern Region Natural Resources Ministry of

> **Richesses naturelles** Ministère des

> >)ntario

January 14, 2014

andrea.garcia@nee.com Toronto, ON M5H 2Y2 390 Bay Street, Suite 1720, NextEra Energy Canada, ULC Andrea Garcia

RE: Bornish Wind Energy Centre NHA Addendum VI

Dear Ms. Garcia,

Centre made subsequent to MNR's letter confirming the Natural Heritage The Ministry of Natural Resources (MNR) has received the document dated January 13, 2014 that describes modifications to the Bornish Wind Energy Assessment in respect of the project.

28, 2013 and December 2, 2013 for the Bornish Wind Energy Centre project. the re-confirmation letters issued on July 16, 2012, February 11, 2013, November add this letter as an addendum to the confirmation letter issued April 2, 2012, and Assessment requirements of Ontario Regulation 359/09 have been met. Please Upon review of the modifications, MNR is satisfied that the Natural Heritage

neather.zurbrigg@ontario.ca or 613-258-8417 If you wish to discuss this matter further, please contact Heather Zurbrigg at

Sincerely,

Southern Region MNR Southern Region Land Use Planning Supervisor Kathy Woeller

cc Charlotte Moore, Natural Resource Solutions Inc. Joe Halloran, Al Renewable Energy Coordinator, Southern Region MNR

Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE



Memo

Project No. 1231

To: Joe Halloran

From: Andrew Ryckman

Date: January 13, 2014

Re: Bornish Wind Energy Centre Natural Heritage Assessment Addendum VI

Introduction

Natural Resource Solutions Inc. (NRSI) was retained in April 2011 by GL-Garrad Hassan on behalf of NextEra Energy Canada, ULC (NextEra) to conduct a natural environment resource assessment in accordance with the Renewable Energy Approval (REA) Regulation, Ontario Regulation 359/09. This assessment included a records review, site investigation, evaluation of significance, and environmental impact assessment of any potentially significant natural features or wildlife habitats at a proposed 72.9MW wind energy generating facility in North Middlesex, Middlesex County Ontario.

The Bornish Wind Energy Centre ('the project') will be owned and operated by Bornish Wind, LP, a wholly-owned subsidiary of NextEra. The project is located in northwestern Middlesex County in the Township of North Middlesex, Ontario, approximately 3.3km south of the Town of Parkhill, Ontario. The general project area is bound to the north by Nairn/Elginfield Road, to the south by Townsend Line, and to the east and west by Broken Front/Scout Road and Fort Rose Road. A transmission line is proposed to run north along Kerwood Road from the substation to Elginfield Road/Nairn Road. This transmission line is then proposed to continue eastward along Nairn Road to an existing 500 kV line and interconnection facilities located west of Petty Street. For the purposes of this memo, NRSI will refer to the areas within 120m of the project location as the 'project area'.

The Records Review, Site Investigation, Evaluation of Significance, and Environmental Impact Study (EIS) for the Bornish Wind Energy Centre were completed by NRSI over the course of 2011/2012 as part of the Natural Heritage Assessment (NHA). As a result of minor changes to the Bornish Wind Energy Centre, several additional addendum reports have been prepared to reflect any changes to the original NHA.

This Addendum Report has been prepared to address a single minor change to proposed construction activities and wording of a single mitigation measure relating to the locations of horizontal directional drilling entry and exit pits at the Bornish Wind Energy Centre. This change and any potential impacts to the previously submitted, and approved, Natural Heritage Assessment documents as a result of this change are identified and discussed in the subsequent sections of this report.

Overview of Project Changes

Since the approval of the NHA and subsequent addendum reports, a single minor change is proposed to be to the mitigation measures associated with the construction phase activities; however, no changes have been made to the Bornish Wind Energy Centre project location, types of construction activities, or potential impacts. The proposed change to the construction phase activity is modified language relating to the required set-backs for directional drill entry and exit pits from natural features and wildlife habitats. The placement of the entry and exit pits would still remain within the footprint of the underground cabling already permitted under the NHA process, and will have no direct impact on any natural features or wildlife habitats, but may be placed closer to natural features than identified in the NHA, providing they are still placed at the correct depth below the natural features.

As the Bornish Wind Energy Centre project location and component layout has not changed, it has been determined that amendments to the Records Review, Site Investigation and Evaluation of Significance Reports are not required. As a minor change in construction activity and associated mitigation measure is being proposed, an amendment to the EIS report is required and is discussed in the subsequent sections of this report.

Amendments to the Environmental Impact Study

As part of this subsequent NHA Addendum for the Bornish Wind Energy Centre, construction plans were reviewed and the change to the presented construction phase activities has been summarized above. This proposed change includes the modified placement of directional drilling entry and exit pits required for the installation of underground cabling. Although a very minor adjustment is proposed, the construction details as presented in the original Natural Heritage EIS (i.e. site preparation and servicing, construction, operation, decommissioning, and approach to impact assessment) still provide accurate information pertaining to the type, extent, duration, and details of the proposed construction activities associated with the Bornish Wind Energy Centre.

For the purposes of this addendum, NRSI has reviewed three separate aspects relating to the potential for changes to the EIS, as follows:

- Changes to Mitigation Measures (i.e. project location now closer to natural features)
- New Mitigation Measures (i.e. project location within 120m of a new feature)
- Changes to Monitoring Requirements

Changes to Mitigation Measures

NRSI biologists have reviewed the change to the construction phase activities, including the modified placement of directional drilling entry and exit pits required for the installation of underground cabling, and have determined there is one change to the mitigation measures presented in the Natural Heritage EIS (NRSI 2012).

The minor change is to a confirmed mitigation measure that is proposed for features that have been identified as significant. The Natural Heritage EIS (NRSI 2012) identifies that entry and exit pits should be at least 30m from natural features (i.e. woodlands,

wetlands, etc.) or water bodies. It has been determined that in order to construct the project, the distance from entry and exit pits to natural features may be closer than 30m in some instances. The modified placement of the entry and exit pits will continue to remain entirely within the already permitted footprint of the underground cabling, and will have no direct impact on any natural features or wildlife habitats. As construction activities will remain entirely within the already permitted project location, closer entry/exits pits will not result in any further impacts to any natural feature or wildlife habitat, providing that the required depth of 5 feet is maintained below the entire natural feature to protect the critical root zone.

NRSI proposes that the following revised wording (Table 1) be applied to the construction mitigation measures relating to horizontal directional drilling, in Tables 11 and 13 of the *Bornish Wind Energy Centre: Natural Heritage Environmental Impact Study* (NRSI 2012):

NHA Commitment	Revised Mitigation Measure
Locate all entry and exit pits at least 30m from natural features (i.e. woodlands, wetlands) or water bodies.	Locate all entry and exit pits a sufficient distance from the edge of natural features (i.e. woodlands, wetlands) to maintain a minimum depth of 5 feet below the surface to protect the critical root zone of vegetation. A minimum of 30m from natural features will be implemented, wherever possible.

The proposed change, identified above, will still protect the critical root zone of all vegetation within adjacent natural features, thus maintaining habitat characteristics and the form and function of the feature. This proposed change is not expected to result in any additional impacts to any significant (or generalized) natural features or wildlife habitats from those already identified and addressed within the approved Natural Heritage Assessment (and subsequent addendums).

Although the construction of the project will still implemented a 30m setback distance, when possible, NRSI is aware of 3 locations where entry and/or exit pits will be closer than 30m from a natural feature. In all instances, the directional drilling will still maintain the appropriate depth below the feature. Each of these instances is briefly outlined in Table 2 below. Figures depicting these specific locations have been provided in Appendix I of this Addendum VI.

Directional Drill Location	Figure Reference	Feature(s) Within 30m of Entry/Exit Pit	Rationale for Change in Mitigation
9a; Between T8 and T9	1	WOD-008	The specific project location and positioning of the cabling at this location does not allow for a 30m setback from the nearby woodland.
9b; South of T9	1	WOD-008	The specific project location and positioning of the cabling at this location does not allow for a 30m setback from the nearby woodland. This drilling location is below a water body, not a natural feature or wildlife habitat. However, since it requires an

Table 2. Proposed Amendment to Horizontal Directional Drilling Mitigation Measures

Directional Drill Location	Figure Reference	Feature(s) Within 30m of Entry/Exit Pit	Rationale for Change in Mitigation
			entry/exit pit within 30m of a nearby natural feature, it has been identified in this addendum.
24; Between T24 and T25	2	WOD-003	A slight alteration to the initially proposed entry/exit pit provides a more feasible construction alternative. This drilling location is below a municipal road, not a natural feature or wildlife habitat. However, since it requires an entry/exit pit within 30m of a nearby natural feature, it has been identified in this addendum.

Although NRSI is aware of the 3 specific locations above, the proposed change in language to the mitigation measure is meant to apply to similar situations, if they arise. NRSI or NextEra will notify the MOE and/or MNR should additional locations be identified that require implementation of the revised mitigation measures. Otherwise, the initially proposed 30m setback will continue to be applied from all natural features or water bodies.

No additional changes to existing mitigation measures are proposed as part of this NHA Addendum.

New Mitigation Measures

It was concluded that there are no additional significant natural features within the project area; therefore, no new mitigation measures need to be implemented for this project.

Changes to Monitoring Requirements

Based on the minor nature of the change to construction activities, and no change to the actual project location, NRSI has determined that the monitoring requirements identified in the Natural Heritage EIS (NRSI 2012) are still appropriate for monitoring of potential impacts of the proposed Bornish Wind Energy Centre.

Summary of Natural Heritage Addendum

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive Records Review, Site Investigation, Evaluation of Significance, and EIS of the Bornish Wind Energy Centre (NRSI 2012). Following the review of the proposed adjustments to construction activities, with no changes to the project location (as discussed above), NRSI has re-considered all aspects of the NHA within this memo to determine if there are new natural features, changes in distances to project location, or new mitigation measures or monitoring commitments required to ensure that potential permanent or adverse environmental impacts are mitigated or studied appropriately. The summary of the result of this review is summarized in Table 3 below.

Addendum Changes	Addendum Result	
Significant Features	No change in previously identified significant features are proposed.	
Changes in Distances to Project Location	No change in project location is proposed, and therefore no changes in distances from project location to significant natural features or wildlife habitats have been identified.	
Mitigation Measures	NRSI proposes a minor change in mitigation measures to allow for directional drilling entry and exit pits to occur within the already permitted project location, at any distance from a natural feature, providing that the minimum depth of 5 feet below the surface is maintained below the entire natural feature. This will ensure that the critical root zone of the associated vegetation is protected. All other mitigation measures, as outlined in the Natural Heritage EIS (NRSI 2012) and subsequent addendums will remain unchanged, and will continue to ensure any potential permanent and adverse impacts are mitigated.	
Monitoring Commitments	NRSI has identified that the monitoring commitments outlined in the Natural Heritage EIS (NRSI 2012) and subsequent addendums are still appropriate to monitor any potentially adverse impacts of this project.	

Table 3. Summary of Natural Heritage Addendum for the Bornish Wind Energy Centre

With this addendum, it is maintained that with the implementation of the planned mitigation measures, monitoring programs, and contingency plans as presented in the *Bornish Wind Energy Centre: Natural Heritage Environmental Impact Study* (NRSI 2012) and subsequent addendums (including this one), there is unlikely to be any significant impacts to natural heritage features, including woodlands, wetlands, or significant wildlife habitat.

I trust that this Addendum provides the level of information required to confirm the proposed change complies with the Natural Heritage Assessment process and continues to maintain no significant impact on natural features or wildlife habitats. If you have any questions, don't hesitate to contact the undersigned.

Best Regards,

Andrew Ryckman Senior Terrestrial and Wetland Biologist

Appendix I Map of Changes to Directional Drill Entry/Exit Pits





