

# ***RENEWABLE ENERGY APPROVAL***

## **PROJECT DESIGN CHANGE SUMMARY REPORT**

### **BORNISH WIND ENERGY CENTRE**

**JULY 2012**





**RENEWABLE ENERGY APPROVAL  
APPLICATION – PROJECT DESIGN  
CHANGE SUMMARY REPORT**

**BORNISH WIND ENERGY CENTRE,  
ONTARIO**

Client	NextEra Energy Canada, ULC
Contact	CONTACT
Document No.	1008-CAMO-R-08
Issue	B
Status	Final
Classification	Client's Discretion
Date	19 July 2012

Author  
N. O'Blenes

Checked by  
Darcy Boudreau

Approved by  
N. O'Blenes

GL Garrad Hassan Canada, Inc.

151 Slater Street, Suite 806, Ottawa, Ontario CANADA  
Phone: (613) 230-3787 | Fax: (613) 230-1742  
[www.gl-garradhassan.com](http://www.gl-garradhassan.com)

## **IMPORTANT NOTICE AND DISCLAIMER**

1. Acceptance of this document by the Client is on the basis that GL Garrad Hassan Canada, Inc. (hereafter “GL GH”), a GL Group member operating under the GL Garrad Hassan brand, is not in any way to be held responsible for the application or use made of the findings and the results of the analysis herein and that such responsibility remains with the Client.

This Report shall be for the sole use of the Client for whom the Report is prepared. The document is subject to the terms of the Agreement between the Client and GL GH and should not be relied upon by third parties for any use whatsoever without the express written consent of GL GH. The Report may only be reproduced and circulated in accordance with the Document Classification and associated conditions stipulated in the Agreement, and may not be disclosed in any offering memorandum without the express written consent of GL GH.

GL GH does not provide legal, regulatory, insurance, tax and/or accounting advice. The Client must make its own arrangements for consulting in these areas.

This document has been produced from information as of the date hereof and, where applicable, from information relating to dates and periods referred to in this document. The Report is subject to change without notice and for any reason including, but not limited to, changes in information, conclusion and directions from the Client.

2. This Report has been produced from information relating to dates and periods referred to herein. Any information contained in this Report is subject to change.

## KEY TO DOCUMENT CLASSIFICATION

Strictly Confidential	For disclosure only to named individuals within the Client's organization
Private and Confidential	For disclosure only to individuals directly concerned with the subject matter of the Report within the Client's organization
Commercial in Confidence	Not to be disclosed outside the Client's organization
GL GH only	Not to be disclosed to non-GL GH staff
Client's Discretion	Distribution for information only at the discretion of the Client (subject to the above Important Notice and Disclaimer)
Published	Available for information only to the general public (subject to the above Important Notice and Disclaimer)

### REVISION HISTORY

<b>Issue</b>	<b>Issue Date</b>	<b>Summary</b>
A	7 July 2012	Initial issue for review
B	19 July 2012	Addition of Agency Letters and Natural Heritage Addendum

## TABLE OF CONTENTS

<b>1</b>	<b>PREAMBLE</b>	<b>1</b>
<b>2</b>	<b>DESCRIPTION OF PROJECT</b>	<b>2</b>
2.1	Project Name and Project Proponent	2
2.2	General Project Description	2
2.3	Description of the Energy Source, Nameplate Capacity, and Class of Facility	4
2.4	Contact Information	4
2.4.1	Project Proponent	4
2.4.2	Project Consultant	4
<b>3</b>	<b>CHANGES TO PROJECT DESIGN</b>	<b>6</b>
3.1	Design Change 1 – Reconfigured Collector Cable between Turbines 20 and 21	6
3.1.1	Description of Change	6
3.1.2	Rationale for Change	6
3.1.3	Archaeological Assessment	7
3.1.4	Natural Heritage	7
3.2	Design Change 2 – Reconfigured Collector Cabling and Access Road to Turbines 15 and 16	7
3.2.1	Description of Change	7
3.2.2	Rationale for Change	8
3.2.3	Archaeological Assessment	8
3.2.4	Natural Heritage	9
3.3	Design Change 3 – Reconfigured Collector Cable to Turbine 24	9
3.3.1	Description of Change	9
3.3.2	Rationale for Change	10
3.3.3	Archaeological Assessment	10
3.3.4	Natural Heritage	10
3.4	Design Change 4 – Reconfigured Access Road to Turbines 24	11
3.4.1	Description of Change	11
3.4.2	Rationale for Change	11
3.4.3	Archaeological Assessment	11
3.4.4	Natural Heritage	12
3.5	Design Change 5 – Permanent Meteorological Tower Location	12
3.5.1	Description of Change	12
3.5.2	Rationale for Change	13
3.5.3	Archaeological Assessment	13
3.5.4	Natural Heritage	14
3.6	Design Change 6 – Relocation of Parkhill Substation, Re-configuration of Associated Transmission Lines and Access Road	14
3.6.1	Description of Change	14
3.6.2	Rationale for Change	15
3.6.3	Archaeological Assessment	15
3.6.4	Natural Heritage	15

<b>4</b>	<b>STANDARDIZATION OF TURBINE DISTURBANCE AREAS</b>	<b>15</b>
	4.1.1 Archaeological Assessment	16
	4.1.2 Natural Heritage	16
<b>5</b>	<b>NOISE IMPACT ASESMENT</b>	<b>16</b>
<b>6</b>	<b>CONSULTATIONS</b>	<b>17</b>
<b>8</b>	<b>REFERENCES</b>	<b>18</b>
<b>APPENDIX A</b>	<b>ORIGINAL VS. MODIFIED PROJECT DESIGN MAPS</b>	
<b>APPENDIX B</b>	<b>CONFIRMATION LETTERS FROM MTCS AND MNR</b>	
<b>APPENDIX C</b>	<b>PROJECT DESIGN CHANGE – STAGE 2 ARCHAEOLOGICAL ASSESSMENTS</b>	
<b>APPENDIX D</b>	<b>NATURAL HERITAGE ADDENDUM</b>	

## **1      PREAMBLE**

NextEra Energy Canada, ULC (the “Client”) is proposing to develop the Bornish Wind Energy Centre (the “Project”) which is subject to Ontario Regulation 359/09 (Renewable Energy Approvals (REA) [1] under Part V.0.1 of the Ontario Environmental Protection Act (EPA)) and Regulation 521/10 [2]. Bornish Wind LP (the “Proponent”), was awarded a FIT Contract for this Project in July 2011, and is seeking a Renewable Energy Approval from the Ontario Ministry of the Environment (MOE). Bornish Wind LP is a wholly-owned subsidiary of NextEra Energy Canada ULC. The parent company of NextEra Energy Canada ULC is NextEra Energy Resources, LLC, a global leader in wind energy generation with a current operating portfolio of over 8,800 wind turbines across North America.

Subsequent to the public release of the Project’s REA reports in April 2012, the Project design has undergone a number of modifications with respect to the original Project layout. Descriptions of and rationales for these changes are presented herein, as are the implications that these changes are anticipated to have on the Archaeological and Natural Heritage Assessments.

This Project Design Change Summary Report has been prepared in accordance with Chapter 10, Section 3 of MOE’s “Technical Guide to Renewable Energy Approvals” [3].

## 2 DESCRIPTION OF PROJECT

### 2.1 Project Name and Project Proponent

The name of the project is Bornish Wind Energy Centre (hereafter referred to as “the Project”); Bornish Wind LP is the Project proponent (the “Proponent”).

### 2.2 General Project Description

As explained in the Project Description Report, the proposed Project Study Area comprises two main parts, the Wind Energy Centre Study Area, which contains the wind farm itself and its associated infrastructure, and the Transmission Line Study Area, consisting of a proposed 115 kV transmission line to run from the Project’s substation to a switchyard directly adjacent to the substation, and then to a Point of Common Coupling (PCC) on Hydro One’s 500 kV transmission line at the east end of the Transmission Line Study Area. It is important to note that the 115 kV line running from the switchyard to Hydro One’s existing 500 kV line is common to three of NextEra’s Projects, i.e. Adelaide, Bornish and Jericho Wind Energy Centres.

The wind farm Project area is located in south-western Ontario, in the Municipality of North Middlesex, Middlesex County, Ontario. More specifically, the Project is located south of Elginfield Road, east of Pete Sebe Road, north of Elmtree Drive and west of Fort Rose Road. The total Project area is approximately 5,177 ha. Project components will be installed on privately-owned agricultural lots within this area; however, it is anticipated that the Project’s collection system may be partially located on public rights-of-way. General geographic coordinates of the Project area are presented in Table 2-1.

**Table 2-1: Geographic coordinates of the Wind Energy Centre Study Area**

Location	Easting	Northing
Northwest corner	435927	4777569
Northeast corner	434798	4770596
Southwest corner	449163	4775470
Southeast corner	448036	4768497

The Project also comprises a proposed transmission route which is to run from the Project’s substation to a switchyard directly adjacent to the substation, and then to a Point of Common Coupling (PCC) on Hydro One’s 500 kV transmission line at the east end of the Transmission Line Study Area. The proposed transmission route is to travel from the switchyard east along Elginfield and Nairn Roads within municipal rights-of-way to an existing Hydro One 500 kV transmission line. As the proposed route is using existing rights-of-way, limited environmental studies were undertaken for this section; however, general natural heritage information in the vicinity of the transmission line route is provided in the Natural Heritage Assessment reports.

The location of the Wind Energy Centre Study Area was defined early in the planning process for the proposed wind energy facility, based on the availability of the wind resource, approximate area required for the proposed Project, and availability of existing infrastructure for connection to the electrical grid. The Project Study Area was used to facilitate information collection and Records Review.

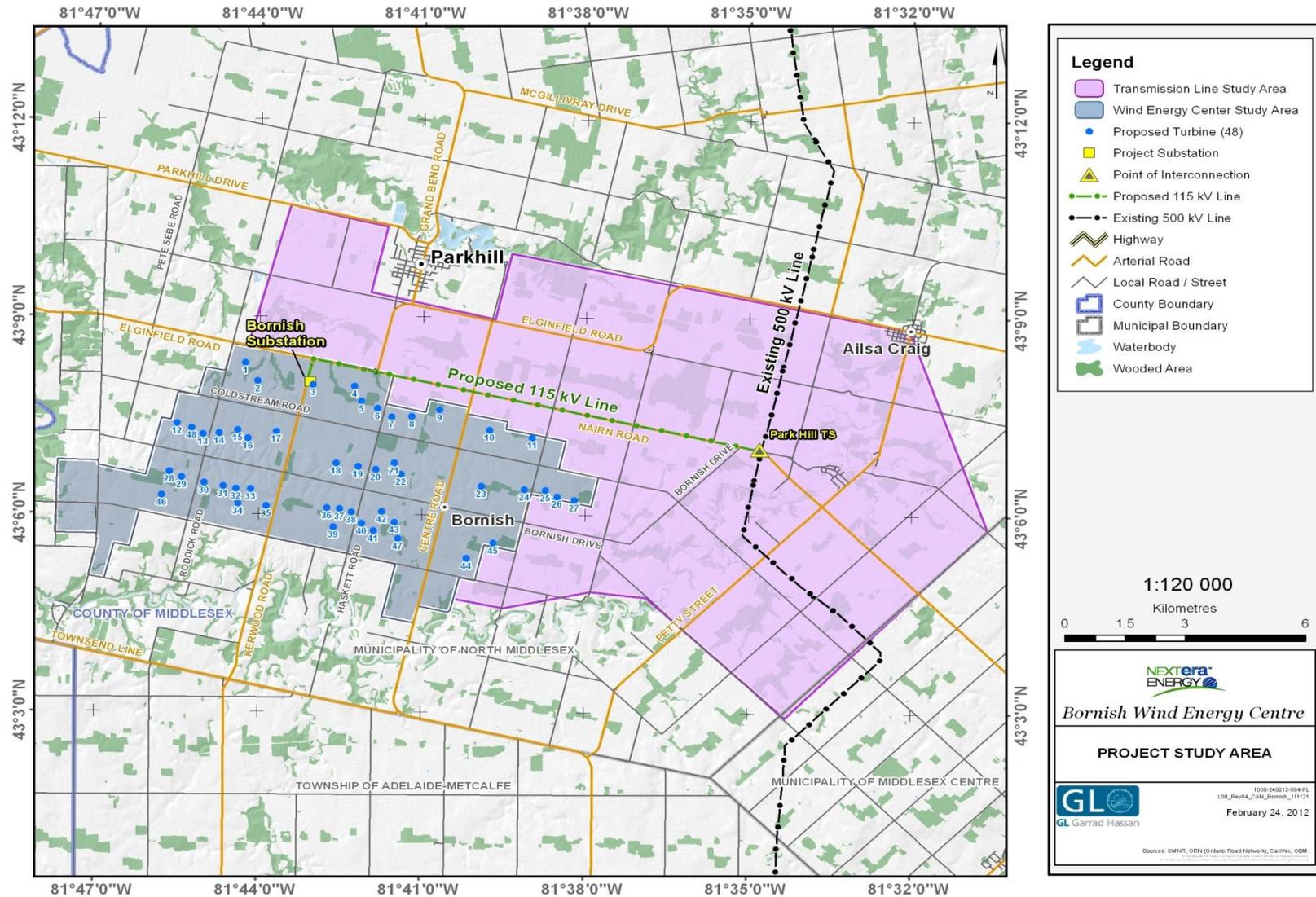


Figure 2-1: Project location

## **2.3 Description of the Energy Source, Nameplate Capacity, and Class of Facility**

The wind turbine generators of the Project will convert the wind’s energy into electricity to feed into the Hydro One transmission system. This Project is considered to be a Class 4 Wind Facility. The Project is proposed to consist of 45, 1.62 MW turbines with a total nameplate capacity of up to 72.9 MW, although 48 turbine locations will be permitted.

## **2.4 Contact Information**

### **2.4.1 Project Proponent**

The Project proponent is Kerwood Wind Inc., a developer of wind energy. The primary contact for Kerwood Wind Inc. for this Project is:

The Project proponent is Bornish Wind LP, a developer of wind energy. The primary contact for Bornish Wind LP for this Project is:

Adam Camp  
NextEra Energy Canada, ULC  
North Service Road, Suite 205  
Burlington, ON L7L 6W6  
Phone 1-877-257-7330  
Fax 905-335-5731  
[www.NextEraEnergyCanada.com](http://www.NextEraEnergyCanada.com)  
[Bornish.Wind@NextEraEnergy.com](mailto:Bornish.Wind@NextEraEnergy.com)

### **2.4.2 Project Consultant**

GL Garrad Hassan Canada, Inc. (hereafter referred to as “GL GH”), a member of the GL Group and part of the GL Garrad Hassan brand, has been retained to lead the environmental assessment for the Bornish Wind Energy Centre.

The Environmental and Permitting Services team of GL GH has completed mandates throughout Canada, the United States and in many other parts of the world. These mandates include permitting management, permit applications, environmental impact assessment, and various environmental studies for more than 15,000 MW of wind and solar-PV projects.

GL GH’s environmental team is composed of over 20 environmental professionals, including environmental impact specialists, planners, GIS, technicians and engineers.

GL GH has no equity stake in any device or project. This rule of operation is central to its philosophy, distinguishing it from many other players and underscoring its independence.

GL GH's contact information is as follows:

Nancy O'Blenes  
GL Garrad Hassan Canada, Inc.  
19 Carmody Lane  
Uxbridge, ON L9P 1A5  
Tel.: (416) 801-6822  
nancy.oblenes@gl-garradhassan.com

Further information about GL GH can be found at: [www.gl-garradhassan.com](http://www.gl-garradhassan.com).

### 3 CHANGES TO PROJECT DESIGN

#### 3.1 Design Change 1 – Reconfigured Collector Cable between Turbines 20 and 21

##### 3.1.1 Description of Change

The revised collector cable routing for Turbine 21 runs approximately 215 m east of the intersection of the collection line for Turbine 20, at this point the collection line is proposed to run diagonally northeast to connect to Turbine 21. The original design proposed the collection line to run approximately 415 m east of the intersection then north to Turbine 21 and will be removed from the optimized layout.

Figure 3-1 below shows a screenshot of this design change.

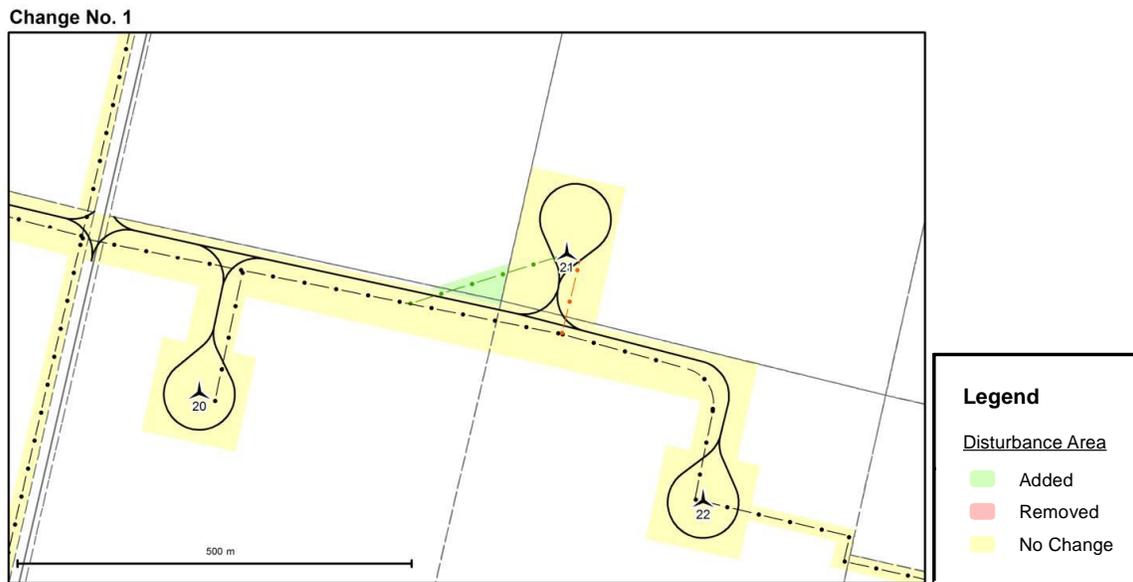


Figure 3-1: Design Change 1

##### 3.1.2 Rationale for Change

Pursuant to consultation with the construction team the underground collection cabling for Turbine 21 has been re-configured to reduce the length of cable required to connect Turbine 21 to the Project. This change has resulted in an approximate 88 m reduction in the length of collection cable required to connect Turbine 21 to the Project.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment which is available as part of the final REA submission package

### **3.1.3 Archaeological Assessment**

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### **3.1.4 Natural Heritage**

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

## **3.2 Design Change 2 – Reconfigured Collector Cabling and Access Road to Turbines 15 and 16**

### **3.2.1 Description of Change**

The access road and collection system to Turbines 15 and 16 have been reconfigured to travel south of Turbine 17 for approximately 231m and west to Turbine 16 for approximately 550 m. The original design proposed the access road and collection system to travel south and east from Turbine 14; this will be removed from the optimized layout.

Figure 3-2 below shows a screenshot of this design change.

Change No. 2



Figure 3-2: Design Change 2

### 3.2.2 Rationale for Change

Pursuant to consultation with the effected landowners the proposed layout was optimized to reduce the impact on the operation of active agricultural land by re-routing the access road and collector cable to follow the edge of crop lines as closely as possible.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment which is available as part of the final REA submission package

### 3.2.3 Archaeological Assessment

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### 3.2.4 Natural Heritage

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

### 3.3 Design Change 3 – Reconfigured Collector Cable to Turbine 24

#### 3.3.1 Description of Change

The collector cable to Turbine 24 has been re-configured to reduce the extent of cable bends as proposed in the original layout submission.

Figure 3-3 below shows a screenshot of this design change.



Figure 3-3: Design Change 3

### **3.3.2 Rationale for Change**

Pursuant to consultation with the effected landowner and the construction team, the layout has been optimized as the extent of cable bend proposed in the original submission is not feasible in practice.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment which is available as part of the final REA submission package

### **3.3.3 Archaeological Assessment**

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### **3.3.4 Natural Heritage**

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

### 3.4 Design Change 4 – Reconfigured Access Road to Turbines 24

#### 3.4.1 Description of Change

The access road to Turbine 24 has been moved approximately 40 m south of the original proposed design.

Figure 3-4 below shows a screenshot of this design change.

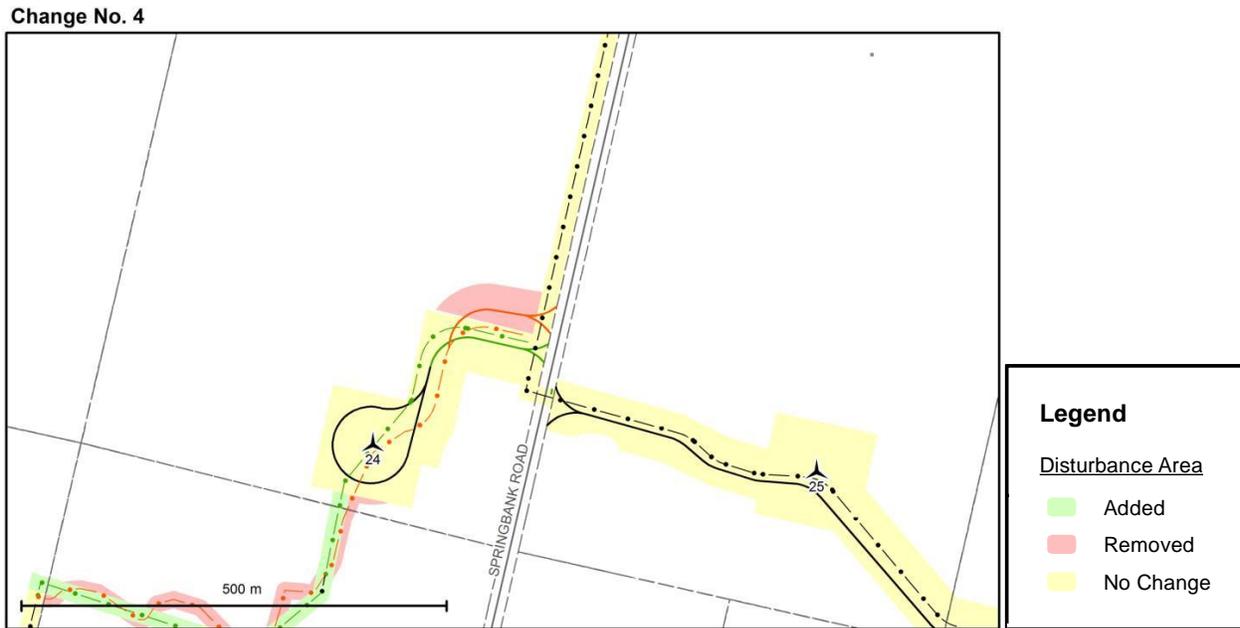


Figure 3-4: Design Change 4

#### 3.4.2 Rationale for Change

Pursuant to consultation with the effected landowner, the proposed layout was optimized to reduce the impact on the operation of active agricultural land by moving the access road south, more closely hugging the edge of the agricultural field and reducing the amount of active agricultural land effected.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment which is available as part of the final REA submission package.

#### 3.4.3 Archaeological Assessment

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### **3.4.4 Natural Heritage**

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

## **3.5 Design Change 5 – Permanent Meteorological Tower Location**

### **3.5.1 Description of Change**

The permanent meteorological tower is located in the southwest section of the Project area. The proposed location is approximately 212 m west and approximately 125 m north of Turbine 28.

Figure 3-5 below shows a screenshot of this design change.



**Figure 3-5: Design Change 5**

### 3.5.2 Rationale for Change

At the time the Site plan was released for public consultation the final location of the permanent meteorological tower had not been confirmed. As a result of consultation with the effected landowner a final location has been confirmed.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment, which is available as part of the final REA submission package.

### 3.5.3 Archaeological Assessment

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### 3.5.4 Natural Heritage

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

### 3.6 Design Change 6 – Relocation of Parkhill Substation, Re-configuration of Associated Transmission Lines and Access Road

#### 3.6.1 Description of Change

The Parkhill substation has been relocated approximately 135 m west and approximately 520 m north of the original proposed location. The change in the substation location has resulted in reconfiguration of the transmission line, runs approximately 208 m west and approximately 700 m north of the original location.

Figure 3-6 below shows a screenshot of this design change.



Figure 3-6: Design Change 6

### **3.6.2 Rationale for Change**

In consultation with the construction team and the Ausable Bayfield Conservation Authority (ABCA) the substation was re-located to a more favourable position.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment which is available as part of the final REA submission package.

### **3.6.3 Archaeological Assessment**

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

### **3.6.4 Natural Heritage**

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

## **4 STANDARDIZATION OF TURBINE DISTURBANCE AREAS**

For all turbine locations a standard disturbance area of 121 m x 121 m was applied for construction purposes, this was done in consultation with the construction team and the effected landowner. The

additional area is minimal in comparison to the original proposed disturbance area design and will be reduced following construction in accordance with the details outlined in the Construction Plan Report.

Specific to the noise impact assessment, this change does not have a negative effect on points of reception identified by the Noise Impact Assessment, which is available as part of the final REA submission package.

#### **4.1.1 Archaeological Assessment**

A Stage 2 archaeological study (Appendix C) of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on archaeological resources is anticipated as a result of this change.

MTCS had previously issued a written letter informing the MOE that the MTCS was satisfied with the archaeological recommendations made during Stage 1 and Stage 2 archaeological assessments concerning those archaeological sites impacted by the original Project design [4] (see Appendix B). Subsequent to the above-described Project design change and per MOE requirements [3], MTCS was duly notified of the design change and the details thereof. Pursuant to follow-up Stage 2 archaeological assessment and reporting to the said regulatory body and its review of the additional reporting provided, it is confirmed that the MTCS has determined that the Project design change has been addressed by this additional Stage 2 archaeological assessment. A copy of the re-issued MTCS satisfaction letter has been included in Appendix B of this report.

#### **4.1.2 Natural Heritage**

A Natural Heritage review of the natural features within 120 m of the Project design change identified in Figure 3-1 was conducted and concluded that no negative impact on natural heritage features is anticipated as a result of this change.

MNR had previously issued a written letter [6] confirming that the Natural Heritage Features within 120 m of the original Project Location have been adequately studied and effectively addressed through proposed mitigation measures (see Appendix B). Subsequent to the above-described Project design change and as per MOE requirements [3], MNR has been duly notified of the design change and the details thereof. Pursuant to follow-up discussions with the said regulatory body and its review of the documentation provided, it is confirmed that the MNR has determined that the Project design change does not alter the conclusions drawn in the previously conducted Natural Heritage Assessment [7]. A copy of the MNR correspondence confirming that the original confirmation letter is therefore still valid has been included in Appendix B of this report.

### **5 NOISE IMPACT ASESMENT**

Subsequent to the submission of the Noise Impact Assessment dated January 2012, provided for public review and consultation, NextEra has received updated technical specifications for the GE 1.6 turbine, the noise model has been re-run using the updated specifications which can be found in Appendix E of the Noise Impact Assessment (July 2012).

This change does not have a negative effect on points of reception identified by the Noise Impact Assessment, which is available as part of the final REA submission package.

## **6      CONSULTATIONS**

Pursuant to the above-described Project design changes and in accordance with MOE guidelines [3], the Proponent took the necessary measures to notify the public, municipalities, and Aboriginal communities of these changes. The proposed design changes were presented to the stakeholders as part of the final public meeting. In addition to this report being made available for public review, presentation boards (36” x 48”) were used to highlight the design changes and bring them to the attention of the public. Subject matter experts were made available at the meeting to address any questions or concerns stakeholders may have regarding the Project including the potential impact of the changes presented herein. Any comments received, along with a copy of the presentation material, will be included in the consultation report as part of the complete REA application submission.

## 8 REFERENCES

- [1] Ontario Regulation 359/09, made under the *Environmental Protection Act*, Renewable Energy Approvals under Part 1.0 of the Act.
- [2] Ontario Regulation 521/10, made under the *Environmental Protection Act*, Renewable Energy Approvals under Part 1.0 of the Act.
- [3] Draft Technical Guide to Renewable Energy Approvals, Ontario Ministry of the Environment, 2012.
- [4] Ministry of Tourism and Culture Letter, April 2012.
- [5] Stage 2 Archaeological Assessments, Golder Associates, 2012.
- [6] Ministry of Natural Resources Letter, April 2012.
- [7] Bornish Wind Energy Centre, Natural Heritage Assessment, Natural Resources Solutions Inc, 2012.

## **APPENDIX A ORIGINAL VS. MODIFIED PROJECT DESIGN MAPS**

## **APPENDIX B      CONFIRMATION LETTERS FROM MTCS AND MNR**

## **MTCS – Archaeological Assessment – Bornish Wind Energy Centre**

## **MNR – Natural Heritage Assessment – Bornish Wind Energy Centre**

## **MTCS – Archaeological Assessment – Parkhill Interconnect**

## **APPENDIX C      PROJECT DESIGN CHANGE – STAGE 2 ARCHAEOLOGICAL ASSESSMENTS**

### **Additional Stage 2 Archaeological Assessment – Bornish Wind Energy Centre**

## **Additional Stages 1-2 Archaeological Assessment – Parkhill POI**

## **APPENDIX D      NATURAL HERITAGE ADDENDUM**