

**Amherst Island Wind Energy
Project - Renewable Energy
Approval Amendment
Modification Report #3**



Prepared for:
Windlectric Inc.
354 Davis Road,
Oakville, ON L6J 2X1

Prepared by:
Stantec Consulting Ltd.
1-70 Southgate Drive
Guelph ON N1G 4P5

File No. 160960595
March 2015

**AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT
MODIFICATION REPORT #3**

Table of Contents

1.0 INTRODUCTION1.1
1.1 BACKGROUND 1.1
1.2 SUMMARY AND RATIONALE FOR MODIFICATION..... 1.2
 1.2.1 Modification – Project Design Change 1.2

2.0 RESULTS OF EFFECTS ASSESSMENT FOR THE PROJECT MODIFICATION.....2.1
2.1 IMPACTS ON STUDIES/ REA REPORTS 2.1
 2.1.1 Natural Heritage Assessment and Environmental Impact Study 2.1
 2.1.2 Archaeological and Heritage Assessments..... 2.2
 2.1.3 Summary of Impacts/ Changes to REA Reports and Studies..... 2.2

3.0 CONSULTATION3.1
3.1 GENERAL STAKEHOLDER CONSULTATION 3.1
3.2 AGENCY CONSULTATION 3.1
3.3 MUNICIPAL CONSULTATION 3.1
3.4 ABORIGINAL COMMUNITY ENGAGEMENT 3.2

4.0 CLOSURE.....4.1

LIST OF TABLES

Table 1: Summary of Impacts/Changes to REA Reports & Studies..... 2.3

LIST OF APPENDICES

- Appendix A: ESDM Report
- Appendix B: Acoustic Assessment Report
- Appendix C: Correspondence with MOECC

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Introduction
March 2015

1.0 INTRODUCTION

1.1 BACKGROUND

Windlectric Inc. (the Proponent or Windlectric) submitted a Renewable Energy Approval (REA) Application on April 18, 2013 to develop, construct and operate the Amherst Island Wind Energy Project (the Project) within Loyalist Township (the Township) in the County of Lennox and Addington (the County) in eastern Ontario, in response to the Government of Ontario's initiative to promote the development of renewable electricity in the province. Since submission of the REA, Windlectric submitted two REA amendment modification reports (dated June 2014 and July 2014) as a result of reviewing design features of the layout and feedback received from the Ministry of the Environment and Climate Change (MOECC).

The basic components of the proposed Project include up to 36 Siemens wind turbines. The final layout will result in a total installed nameplate capacity of approximately 56 - 75 MW. The number of wind turbines will be dependent upon final selection of the model of the wind turbine most appropriate to the proposed Project.

The proposed Project will also include a 34.5 kilovolt (kV) underground and/or overhead electrical power line collector system, fibre optic data lines from each turbine and/or wireless technology for the communication of data, a transmission line, truck turnaround areas, a submarine cable, an operations and maintenance building, permanent dock, a substation, a switching station, an un-serviced storage shed, one connection point to the existing electrical system, cable vault areas, meteorological tower(s) (met tower(s)), access road(s) to the met tower site(s), and turbine access roads with culvert installations, as required, at associated watercourse crossings.

Temporary components during construction may include staging areas for the turbines, access roads, met tower(s), collector lines and transmission line as well as crane paths, a temporary dock, site office(s), batch plant, central staging areas, and associated watercourse crossings. The electrical power line collector system would transport the electricity generated from each turbine to the substation, along the submarine cable to the mainland and then to a switching station located near to an existing Hydro One Networks Inc. (HONI) 115 kV transmission line.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Introduction
March 2015

Windlectric is submitting this modification to clarify that the temporary batch plant is part of the REA application given that the batch plant is part of the renewable energy project (Amherst Island Wind Energy Project), as defined by the Green Energy Act, 2009 and in the MOECC's *Technical Guide to Renewable Energy Approvals* (2013). The definition of a renewable energy project includes all activities related to the construction of a renewable energy generation facility. Given that the batch plant is required for construction of the Amherst Island Wind Energy Project, it is therefore subject to the REA process.

This report and its attachments provide information regarding the modification. Based on feedback received from the MOECC, the modification is classified as a Project Design Change pursuant to the classification system outlined in the MOECC's *Technical Guide to Renewable Energy Approvals* (2013). As such, this document has been prepared to address the requirements of Chapter 10 "Making Changes to REA Projects" of the Technical Guide.

1.2 SUMMARY AND RATIONALE FOR MODIFICATION

1.2.1 Modification – Project Design Change

This modification is to update the description of the permitting requirements applicable to the temporary concrete batch plant, utilized mainly for turbine concrete foundation construction, that will be used in the construction of the Project by clarifying that this temporary project component will be covered under the Renewable Energy Approval.

As described in the original REA application, a temporary concrete batch plant will be used to produce the concrete for the construction of the Project, primarily for the construction of turbine foundations. As such, as indicated in Section 4.1 of Project Description Report in the original REA application, the batch plant remains one of the key activities for the construction of the renewable energy project, as it is integral to the construction of the renewable energy generation facility. The Design and Operations Report and, in particular, Section 3.5.6.1 of the Project Description Report describe where the batch plant will be located, the dimensions of that area and typical operational procedures that will be used, none of which are changed by the proposed modification. The REA application also contains figures/mapping that illustrates the proposed location of the batch plant, which is not being changed (ex: Figure 1 and Figure 1.2 of the Project Description Report and Construction Plan Report).

As mentioned above, the modification is to update the description of the permitting requirements applicable to the temporary batch plant. It does not change the size, location, or operation of the proposed batch plant (as described in Section 3.5.6.1 of the Project Description Report) or, more generally, the size, layout or nature of the Project Location. Furthermore, this modification has no bearing on the environmental effects of the Project or the associated mitigation measures, and will not result in any physical change in the design, construction or operation of the Project relative to what was originally proposed in the REA application. In this regard, the proposed modification does not involve the addition of any new lands to the

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Introduction
March 2015

Project, does not require any additional assessment of natural heritage or other features and does not change any of the recommendations contained in the original REA application.

For the purpose of clarifying the permitting requirements applicable to the temporary batch plant, Windlectric has confirmed that it will be engaging the services of a third-party mobile temporary batch plant operator. This operator will use its own temporary mobile concrete production equipment that will be brought to the Project Location, and set up and operated at the location specified in the original REA application (i.e., within the central staging area of the Project's construction footprint, west of Stella 40 Foot Road, north of 2nd Concession Road).

As per the requirements listed in Table 1 of O.Reg 359/09, the Project itself is not required to include an Emission Summary and Dispersion Modelling Report (ESDM) in the REA application, as it is not one of the specified project types requiring an ESDM. The original REA application committed to ensure that an ESDM report is completed for the temporary batch plant. The proposed modification does not change that commitment. The ESDM report is being provided now, in this Modification Report, since the temporary batch plant will be covered under the REA. A copy of the ESDM as well as an Acoustic Assessment Report (ARR) for the temporary batch plant are included in Appendix A and B respectively.

The temporary batch plant will require the use of approximately 120,000 litres of water per day during its operation. For clarity, those water takings will be governed by the conditions in the REA and will not require a separate Permit to Take Water (PTTW). The amount of water taking is based on the size of the concrete foundations (approximately 600 m³) and the amount of water required per cubic meter (200 litres / m³) of concrete. As described in the original REA application it is anticipated that water for the concrete will come either from Lake Ontario or otherwise will be trucked from the mainland (stored on site in water tanks). There is no wastewater discharge from the operation of the temporary batch plant.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Results of Effects Assessment for the Project Modification
March 2015

2.0 RESULTS OF EFFECTS ASSESSMENT FOR THE PROJECT MODIFICATION

O. Reg. 359/09 requires that any adverse environmental effects that may result from construction, installation, operation and maintenance activities be described. The term “environment” in O. Reg. 359/09 has the same meaning as in the *Environmental Protection Act*, and includes the natural, physical, cultural, and socio-economic environment.

A screening to identify any new environmental effects that would require additional mitigation or monitoring measures beyond those outlined in the REA documents as a result of the proposed modifications to the Project was completed.

The location and operation of the proposed temporary batch plant was assessed as part of the original REA application. The modification will not result in any physical change in the design, construction or operation of the Project. There are therefore no increased negative environmental effects that will or are likely to occur beyond those originally identified, documented and consulted on during the REA process for the original project.

2.1 IMPACTS ON STUDIES/ REA REPORTS

The modification requires a minor change to: (a) the Project Description Report including appending the ESDM and AAR, and (b) the Construction Plan Report, as further described in Table 1.

2.1.1 Natural Heritage Assessment and Environmental Impact Study

The NHA/EIS (included in the REA Application) identified and assessed natural features within the Project Location and the associated 120 m Zone of Investigation around the limits of the Project Location. The location of the proposed temporary batch plant, that was specified in the original REA application and therefore in the NHA/EIS, has not changed. The NHA/EIS that was submitted as part of the original REA application was accepted by the Ministry of Natural Resources and Forestry (MNRF) in their Confirmation Letter dated December 14, 2012. Because the location of the temporary batch plant has not changed, no additional NHA/EIS was required for this modification.

The modification will not result in potential effects not previously identified and mitigated in the NHA/ EIS.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Results of Effects Assessment for the Project Modification
March 2015

2.1.2 Archaeological and Heritage Assessments

As indicated above, the location of the proposed temporary batch plant was assessed as part of the original REA application and therefore in the Stage 1 Archaeological Assessment, Stage II Archaeological Assessment, Heritage Assessment and Protected Properties Assessment. The Stage 1 Archaeological Assessment, Stage II Archeological Assessment, Heritage Assessment and Protected Properties Assessments were accepted by the Ministry of Tourism, Culture and Sport (MTCs) in their Confirmation Letters dated January 31, 2013; March 13, 2013, April 17, 2013; and April 5, 2013 respectively. Because the location of the temporary batch plant has not changed, no additional Stage 1 Archaeological Assessment, Stage II Archaeological Assessment, Heritage Assessment and Protected Properties Assessment was required for this modification.

The modification will not result in potential effects not previously identified in the Stage 1 Archaeological Assessment, Stage II Archaeological Assessment, Heritage Assessment and Protected Properties Assessment.

2.1.3 Summary of Impacts/ Changes to REA Reports and Studies

The following table provides a list of REA reports that were reviewed by the MOECC, and notes whether changes to the documents are required due the modification proposed. As well, an outline of the specific changes or the justification for no change being required is provided. Any changes to the reports have been addressed by issuance of this Modification Report and its appendices.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Results of Effects Assessment for the Project Modification
March 2015

Table 1: Summary of Impacts/Changes to REA Reports & Studies

REA Reports & Studies	Change (Yes/No)	Figure No.	Discussion of change / Justification for 'no' change
REA REPORTS			
Project Description Report	Yes	n/a	<p>Table 2.2 – remove ESDM from list of permits and authorizations.</p> <p>Section 3.5.6.1 - amend text to update description of permitting requirements and amount of water takings.</p> <p>Section 4.3.2 – amend text to include a summary of the temporary batch plant ESDM report and include the document in an appendix.</p> <p>Section 4.3.3 – amend text to include a summary of the temporary batch plant Acoustic Assessment Report and include the AAR as an appendix. Note: Acoustic Assessment does not require inclusion of wind turbines since the turbines are not erected or operating during the construction phase of the Project.</p> <p>Section 4.3.7 – amend text to update amount of water takings during construction.</p> <p>Appendix B1: Potential Environmental Effects and the Environmental Effects Monitoring Plan during Construction – amend text to update permitting requirements and amount of water takings.</p>
Construction Plan Report	Yes	n/a	<p>Section 2.4 - amend text to update description of permitting requirements.</p> <p>Appendix B: Potential Environmental Effects and the Environmental Effects Monitoring Plan during Construction – amend text to update permitting requirements and amount of water takings.</p>
Design & Operations Report	No	n/a	No changes to project design and operations, therefore no changes required.
Decommissioning Plan Report	No	n/a	No changes to project design or decommissioning plans, therefore no changes required.
Consultation Report	Yes	n/a	Consultation with government representatives has been undertaken for the proposed modification to the Project, and the mechanism to update the project documents is described in Section 3 of this Modification Report.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Results of Effects Assessment for the Project Modification
March 2015

Table 1: Summary of Impacts/Changes to REA Reports & Studies

REA Reports & Studies	Change (Yes/No)	Figure No.	Discussion of change / Justification for 'no' change
ADDITIONAL REPORTS			
Natural Heritage Assessment Report	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the NHA/EIS.
Water Assessment Report	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Water Assessment Report.
Stage 1 Archaeological Assessment	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Stage 1 Archaeological Assessment.
Stage 2 Archaeological Assessment	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Stage 2 Archaeological Assessment.
Underwater Archaeological Report	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Underwater Archaeological Report.
Heritage Assessment Report	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Heritage Assessment Report.
Protected Properties Assessment	No	n/a	No changes to the design, construction or operation of the Project. No change to potential effects or mitigation measures identified in the Protected Properties Assessment.
Wind Turbine Specifications Report	No	n/a	No changes are being made to the turbines.
Noise Assessment Report (Appended to the Design and Operations Report)	No	n/a	No changes are being made to sources of noise for this project.
Property Line Setback Assessment	No	n/a	No changes are being made to the turbine or turbine locations for this project.

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Consultation
March 2015

3.0 CONSULTATION

Consultation regarding the proposed modification was undertaken with the MOECC, MNRF, MTCS, municipalities, stakeholders and local Aboriginal communities. Details are provided in the subsequent sections.

3.1 GENERAL STAKEHOLDER CONSULTATION

Windlectric will provide notification to stakeholders included on the Project distribution list regarding the proposed modification and application to the MOECC for an amendment to the Project's REA application. A Notice of Proposed Change to a Renewable Energy Project will be distributed, and will provide an overview of the proposed change, notification that a Modification Report to amend the Project's REA application has been submitted to the MOECC for review, information regarding availability of the Modification Report on the Project website, and a statement that members of the public can submit comments to the MOECC Approvals Director via the EBR.

The Notice and Modification Report will be posted on the Project website, to ensure the community is adequately informed of the proposed change. The Notice will be mailed to all Project stakeholders, including agencies, municipalities, Aboriginal communities, and community members that are on the Project distribution list. The Notice will also be published on at least two separate days within newspapers with general circulation in the Project area.

3.2 AGENCY CONSULTATION

- Consultation regarding the proposed modification was undertaken with the MOECC via this Modification Document and as per a letter submitted to the MOECC dated February 12, 2015 (Appendix C). The MOECC responded in a letter dated February 24, 2015 (Appendix C).
- The Notice of Project Change has been provided to the MOECC and in a form agreed to by the Director of the Environmental Approvals Branch.
- A copy of this Modification Document has been provided to the MNRF and MTCS for their information. As there are no unassessed areas, and no new effects, we do not need new confirmation letters from these ministries.

3.3 MUNICIPAL CONSULTATION

A hard and/or soft copy of this Modification Document will be provided to:

- Loyalist Township
- County of Lennox & Addington

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Consultation
March 2015

3.4 ABORIGINAL COMMUNITY ENGAGEMENT

A hard and/or soft copy of this Modification Document will be provided to:

- Mississaugas of Scugog Island First Nation
- Curve Lake First Nation – Mississaugas of Mud Lake Curve Lake
- Hiawatha First Nation – Mississaugas of Rice Lake
- Alderville First Nation – Mississaugas of Aderville
- Kawartha Nishnawbe First Nation
- Mohawks of the Bay of Quinte – Tyendinaga Mohawks Territory
- Williams Treaty First Nations

AMHERST ISLAND WIND ENERGY PROJECT - RENEWABLE ENERGY APPROVAL AMENDMENT MODIFICATION REPORT #3

Closure
March 2015

4.0 CLOSURE

The proposed modification has been adequately assessed in accordance with O. Reg. 359/09 and the MOE's *Technical Guide to Renewable Energy Approvals* (2013). It has been determined that the modification would not result in any physical change to the development, construction or operation of the Project, or in any new negative environmental effects or associated mitigation measures beyond those identified as part of the original REA Application submitted for the Project.

This report has been prepared by Stantec for the sole use of Windlectric, and may not be used by any third party without the express written consent of Windlectric. The data presented in this report are in accordance with Stantec's understanding of the Project as it was presented at the time of reporting.

Prepared by -Original Signed By -

Kerrie Skillen, Project Manager

Reviewed by -Original Signed By -

Rob Rowland, Senior Project Manager

**Appendix A:
ESDM Report**

Appendix B:
Acoustic Assessment Report

Appendix C:
Correspondence with MOECC