

Appendix C:

Letter to Ministry of the Environment and Climate Change

Algonquin Power Co.

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July 25, 2014

Ms. Agatha Garcia-Wright
Director
Environmental Approvals Branch
Ministry of the Environment and Climate Change
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

Attention: Ms. Agatha Garcia-Wright, Director, Environmental Approvals Branch

Reference: Amherst Island Wind Energy Project (“Project”)
MOE reference # 1271-96VNH3

Dear Ms. Garcia-Wright;

Further to the discussion held with Ms. Sue Edwards with respect to the Amherst Island Wind Energy Project (“Project”), Algonquin Power Co. (on behalf of Windlectric Inc. – a subsidiary of Algonquin Power Co. (“Algonquin”)) is providing this letter to describe minor Project layout changes, constituting a Technical Change as defined in Chapter 10 of the Renewable Energy Approval (REA) technical guide.

1. Technical Change: Derating Turbines S07, S18 and S26:

- The Ministry of Environment and Climate Change (MOECC) recently contacted Algonquin Power regarding an additional noise receptor (“Bunkie”) located on Lot 11, Front Road Amherst Island. The agency received information from the property owner that his Bunkie has not been considered in the project Noise Assessment Report as a receptor. Note: the closest turbine is more than 600 meters from the supposed Bunkie.
- Algonquin Power does not believe the rudimentary structure is a noise receptor (as defined under the MOECC guidelines) and provided a copy of the previous correspondence sent to the property owner on this subject.
 - a. In addition, the company received information from Loyalist Township indicating there is no evidence that a building permit was ever issued for a building, on this property, as described by the landowner.

- The MOECC has indicated that based on information they have received a revised project noise report, with associated supporting spreadsheet and modelling data, be submitted to consider the Bunkie as a noise receptor.
- Until further evidence is provided to the MOECC to alter their decision the Algonquin project manager has worked with the project engineering consultant to complete a revised noise assessment report. This document has included the Bunkie as a receptor for the analysis. The results require that three turbines be de-rated to ensure compliance with the MOECC noise guidelines assuming the Bunkie is a receptor. The de-rating results in reductions in power level and maximum sound emissions from each turbine. Please find see below a comparison table of the results.
- No additional Stage 2 Archaeological Assessment is required. No additional natural heritage work is required. No new potential effects are anticipated as a result of this modification.
- Please find attached to this letter report the new revised Noise Impact Assessment Report, containing all revised sections, tables and figures:

Summary of Revisions to the Noise Assessment Report:

Revised Noise Assessment Report	Section, Table, Figure
Table B.1	Updated to reflect change of WTG model for S07, S18 and S26
Table C.1	Updated to add Receptor R727 and show reduced noise levels due to turbine change
Table C.2	Updated to show reduced noise levels due to turbine change
Figures A.1 and A.1	Updated to include R727
Figures C.1, C.2 and C.3	Updated to include R727 and show revised 40dBA contour
Appendix B	Updated Contract Acoustic Emissions documents and added additional documents provided by Siemens: <ul style="list-style-type: none"> • Summary SWT-2.3-113 Rev 1 P6.024.12 Test Report Summary • Amherst Island MOE Acoustic Letter from Siemens

2. Potential Negative Environmental Effects, Mitigation and Monitoring Requirements

The following table describes the environmental effects of the Project changes on environmental components and changes to the mitigation and/or monitoring measures required.

Environmental Component	Potential Negative Environmental Effects	Mitigation Measures	Monitoring Requirements
Natural Environment Components			
Air Quality	No additional negative effect	No additional mitigation required.	No new monitoring required.
Soil Quality	No additional negative effect	No additional mitigation required.	No new monitoring required.
Soil Quantity	No additional negative effect	No additional mitigation required.	No new monitoring required.
Groundwater	No additional negative effect	No additional mitigation required.	No new monitoring required.
Surface Water	No additional negative effect.	No additional	No new monitoring

Environmental Component	Potential Negative Environmental Effects	Mitigation Measures	Monitoring Requirements
Quantity		mitigation required.	required.
Surface Water Quality	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Aquatic Habitat and Biota	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Woodlands	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Wetlands	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Wildlife Habitat	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Wildlife	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Socio-Economic Environmental Components			
Noise	Reduction in noise, due to de-rating turbines (S07, S18, S26).	No additional mitigation required.	No new monitoring required.
Public and Facility Safety	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Change in Visual Landscape	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Property Values	No additional negative effect.	No additional mitigation required.	No monitoring required.
Availability of Resources	No additional negative effect.	No additional mitigation required.	No monitoring required.
Recreational Land Use	No additional negative effect.	No additional mitigation required.	No monitoring required.
Infrastructure	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Traffic	No additional negative effect.	No additional mitigation required.	No new monitoring required.
Archaeological and Heritage Resources	No additional negative effect.	No additional mitigation required.	No new monitoring required.

Summary of Revisions to REA Supporting Documents - Maps to be updated:

Report	Figure No.
Project Description Report	5
Design and Operation Report	5

Summary of Revisions to REA Supporting Documents – Text to be updated:

Report	Section No.
Construction Plan Report	Section 1.1 – update the number of each turbine model (i.e. 21 Siemens SWT-2.3-113 2300 kW and fifteen (15) Siemens SWT-2.3-113 2221 kW model wind turbines)
Project Description Report	Sections 1.1 and 3.1 – update the number of each turbine model (i.e. 21 Siemens SWT-2.3-113 2300 kW and fifteen (15) Siemens SWT-2.3-113 2221 kW model wind turbines)
Waterbody Assessment Report	Section 1.1 – update the number of each turbine model (i.e. 21 Siemens SWT-2.3-113 2300 kW and fifteen (15) Siemens SWT-2.3-113 2221 kW model wind turbines)
Design and Operation Report	Sections 1.1 and 3.1 – update the number of each turbine model (i.e. 21 Siemens SWT-2.3-113 2300 kW and fifteen (15) Siemens SWT-2.3-113 2221 kW model wind turbines) Appendix B – Noise Assessment Report
Wind Turbine Specifications Report	Sections 1.1 and 2.1 – update the number of each turbine model (i.e. 21 Siemens SWT-2.3-113 2300 kW and fifteen (15) Siemens SWT-2.3-113 2221 kW model wind turbines)

Conclusion

No new infrastructure is being proposed in this amendment, only the reduction in noise emission and electrical power level resulting from de-rating turbines. The technical change described above will result in a reduction in noise emissions during operations.

We anticipate filing the Modification Report with the Ministry of the Environment and Climate Change shortly. The public notification and consultation would be satisfied by posting the Modification Report with the updated mapping and Noise Assessment Report on the project web site. Finally it is assumed that the current Project REA technical review process, which commenced on January 2, 2014, will not be halted by a submission of this proposed change. If this statement is incorrect please clarify.

If you have any questions or require any further information please do not hesitate to the undersigned at 905-465-4518 or Alex Tsopelas at 905-829-6388.

Regards,

Algonquin Power Co.
On behalf of Windlectric Inc.



Sean Fairfield
Senior Manager – Project Planning
cc: Alex Tsopelas, Algonquin Power Co.
Kerrie Skillen, Stantec Consulting

NOTE:

The revised Noise Assessment Report, which was attached to this letter to the MOECC, can be found in Appendix A of the Modification Report (July 2014)