

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	Section, Table, Figure	
Assessment Report		
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:	
	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	Potential Negative	Mitigation	Monitoring	
Component	Environmental Effects	Measures	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	No additional negative effect.	No additional	No new monitoring
Quality		mitigation required.	required.
Aquatic Habitat	No additional negative effect.	No additional	No new monitoring
and Biota		mitigation required.	required.
Woodlands	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Wetlands	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Wildlife Habitat	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Wildlife	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Socio-Economic I	Environmental Components		
Noise	Reduction in noise, due to de-	No additional	No new monitoring
	rating turbines (S07, S18, S26).	mitigation required.	required.
Public and Facility	No additional negative effect.	No additional	No new monitoring
Safety		mitigation required.	required.
Change in Visual	No additional negative effect.	No additional	No new monitoring
Landscape		mitigation required.	required.
Property Values	No additional negative effect.	No additional	No monitoring
1 7		mitigation required.	required.
Availability of	No additional negative effect.	No additional	No monitoring
Resources		mitigation required.	required.
Recreational Land	No additional negative effect.	No additional	No monitoring
Use		mitigation required.	required.
Infrastructure	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Traffic	No additional negative effect.	No additional	No new monitoring
		mitigation required.	required.
Archaeological	No additional negative effect.	No additional	No new monitoring
and Heritage		mitigation required.	required.
Resources			-

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	Section 1.1 – update the number of each turbine model (i.e. 21
Report	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	Sections 1.1 and 2.1 – update the number of each turbine model
Report	(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)