



April 7, 2017

Algonquin Power Co.  
354 Davis Road, Suite 100  
Oakville, ON  
L6J 2X1

Attn: Ariel Bautista, Senior Project Manager

Dear Mr. Bautista:

**Re: Review of Draft Pre-Construction Study – Windlectric Project**

As has been made abundantly clear during the review process related to the Amherst Island Wind Energy Project, Loyalist Township expects a high level of detail in the submissions made by Algonquin Power Co.. The expectations of the Township are not unreasonable, as these details are necessary to assess the potential impacts of the project on residents, municipal infrastructure, Amherst Island heritage, and emergency services during construction - all Township priorities.

To date, Algonquin Power Co. has been reluctant to realize and acknowledge the importance of establishing the legal limits of the municipal road allowances as set out by an O.L.S. Jim Stewart has stated at a previous meeting that this information is in your possession. The ability of all parties to determine and assess the project's impacts and to analyze the ability of the operations plan to actually function to the Township's requirements is contingent on this information.

While Loyalist Township is pleased to have received the Pre-Construction Study, the level of detail contained in the documents was, again, disappointing. Although not an exhaustive list, we offer the following comments based on the information that was provided:

a. Impacted Municipal Infrastructure

This single plan is not an accurate reflection of all the potentially affected municipal infrastructure. Based on previous information and other documents in the Pre-Construction Study, roads, culverts, fences, and guide rail will be affected. The cover letter notes that this map will be a basis of discussion. A detailed inventory of affected or potentially affected municipal infrastructure would ensure a more enlightened discussion.

b. Existing Conditions Evaluation

This report provides an assessment of the existing municipal roads and can form part of a comprehensive report. It is expected that this report will be expanded to include recommendations on the road improvements required to carry the anticipated loads, including the depth of “capping” granular required, as well as specific instructions for the construction of road widenings. The report also needs to be expanded to include an assessment of other municipal infrastructure including, but not limited to, culverts, fences, guiderails and utilities.

Recommendations regarding specific protection or improvements to the municipal infrastructure at each and every location where improvements are required, would then be incorporated into the Pre-Construction Preparatory Work Plans and Drawings.

It is also recommended that this report consider the proposed sedimentation and erosion control measures as it relates to topsoil stripping and stockpiling.

The borehole logs in this report should also include a UTM reference or station and offset.

Environmental Monitor

Please provide additional details (name, contact number, etc.) regarding the Environmental Monitor as a significant amount of work covered by the REA is currently taking place.

c. Pre-Construction Preparatory Work Plans & Drawings

**MR200-MR243**

It is not typical to produce construction drawings at a scale of 1:1000. Please provide the drawings at a scale of 1:500.

All Preparatory Work Plans & Drawings must include a statement that all proposed work contained therein will be implemented prior to the Contractor commencing any work on the Facility, as defined in the REA.

The Contractor has committed to improving municipal roads, to be used during the project, to a 6.0m travelled surface to facilitate bi-directional traffic. The combination of raising the grade, anywhere from 0.1m to 1.5m, widening the driving surface, and maintaining drainage will likely cause the improvements to spill beyond the limits of the road allowance. What measures are proposed to maintain a 6.0m travelled surface in areas where the road allowance cannot accommodate the improvements presented in the typical sections? Specific examples cannot be sited, at this time, as the required details have not be provided.

As mentioned in Item “b”, it is expected that the drawings will include detailed cross-sections for the proposed improvements.

Please provide clarification on exactly what the obstacle-free area is. On several drawings, the ‘limit of obstacle free area’ appears to extend beyond the limits of the road allowance or impact municipal infrastructure. The following are some examples of where this occurs:

- South Shore Road - Station 0+450 right of centreline
- South Shore Road – Station 1+150 right of centreline (extends into the water)
- South Shore Road – Station 2+375 right of centreline (extends beyond the guide rail)
- South Shore Road – Station 2+900 right of centreline (extends beyond the guide rail)
- South Shore Road – Station 4+000 right of centreline (extends beyond the top of slope)
- Concession Road 2 – Station 22+680 right of centreline
- Concession Road 2 – Station 23+900 left of centreline
- Concession Road 3 – Station 33+720 right of centreline

Several drawings note that roadway culverts are to be extended as required, however many appear to be very close to the limit of the road allowance. Some examples are:

- South Shore Road – Station 0+500
- South Shore Road – Station 1+900
- Front Road – Station 15+100
- Concession Road 2 – Station 21+420
- Concession Road 2 – Station 23+800
- Concession Road 3 – Station 34+600
- Concession Road 3 – Station 34+790

Profiles should identify the finished grade for the proposed improvements.

Drawings should include the daylight line for the slope. Some drawings identify the limit of grading, while others do not.

Specific Tree removals should be identified. Some examples are:

- Tree #1 (first tree in the list to be removed in Appendix 13 of the Operations Plan) – the removal of this tree is a requirement of the improvements for the access road to Site S19, S21 and S36, but has not been identified for removal.
- Tree #2 and Tree #3 – Drawing MR200 identifies the need for a road widening in the vicinity of Tree #2 and Tree #3, but the trees have not be identified for removal.

- Tree(s) #4 appear to be located approximately at Station 2+910, but are not identified for removal.

Drawings should include the collector system.

All referenced drawings must be provided.

Boreholes from the 'Municipal Roads Geotechnical Borehole Investigation' should be shown in the profile.

There are also various drafting errors that will not be discussed in detail.

Drawings should show entrances and related civic addresses for residences. Algonquin/Windlectric must commit to installing stakes at 25m intervals, indicating roadway station numbers consistent with their drawings and maintaining these stakes for the duration of the construction project, for the purposes of accurately locating any roadway improvements, collection system location details, tree removals and cultural heritage protection, etc.

d. Collection System Work

The submitted drawings lack sufficient detail to establish potential impacts. All referenced drawings must be provided.

Trench details must be provided (depth, width, location, etc.) as well as crossing details for all culverts.

e. Schedule

The timeframe for the work proposed in the schedule provided does not match the duration of the schedule (several lines/tasks have been hidden in the schedule). Based in the information provided, it is expected the project will last a minimum of 52 weeks. Please provide a current and accurate schedule.

f. Cost Estimates

Cost estimates should include a detailed breakdown of items.

g. Post-Construction Remedial Works Specification

The document referenced in your cover letter is not the document that was provided. A document entitled 'Amherst Island Wind Farm Post-Construction Remedial Specification Municipal Infrastructure', prepared by Pennecon Heavy Civil Limited, was provided. We will provide comments on this document upon receipt of confirmation that this is the correct document.

h. Post-Construction Remedial Works Estimate

Cost estimate should include a detailed breakdown of items.

We now look forward to you addressing each of the detailed points raised in this letter.

Sincerely,



Robert J. Maddocks

Chief Administrative Officer

- c.c. Mayor Lowry and Members of Council  
David Thompson, Director of Infrastructure Services  
David MacPherson, Public Works Manager  
Murray Beckel, Director of Planning & Development  
Chris Raffael, Senior Environmental Officer MOECC  
Tony Fleming, Cunningham, Swan, Carty Little & Bonham LLP  
Dan Fencott, Jewell Engineering  
John Foster, Jewell Engineering  
Guy Laporte, Jewell Engineering  
Sean Fairfield, Algonquin Power Co.  
Jeff Norman, V.P. Business Development