



File: D03 – Windlectric

May 19, 2016

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

Attn: Alex Tsopelas, Project Manager, Renewables

Dear Alex:

Re: Review of Emergency Response and Communication Plan

Thank you for providing the above-noted report for our review. Our consultant, AECOM, has prepared a response compiled from their observations as well as Loyalist Township staff comments on the report. We are pleased to attach these for your review and comment.

Please do not hesitate to contact the undersigned at 613-386-7351, ext. 117, should you have any questions.

Yours truly,

David MacPherson, C.E.T.
Public Works Manager
DM/ka

Encl.

May 19, 2016

Mr. David MacPherson C.E.T.
Manager of Public Works
Loyalist Township
263 Main Street, P.O. Box 70
Odessa, ON K0H 2H0

Dear Mr. MacPherson:

Project No: 60483242

**Regarding: Review of Emergency Response and Communication Plan
Amherst Island Wind Energy Project**

We have completed our review of the report titled “Amherst Island Wind Project; Emergency Response and Communication Plan” submission package, dated March, 2016, c/o Algonquin Power (AP), received April 26, 2016. Our comments are as follows:

General Comments

This document represents a portion of one component of the “Operations Plan” that Windlectric is to prepare in accordance with the Road Use Agreement (RUA); specifically, the Emergency Response and Communication Plan is one of three requirements of the Public Safety Plan component of the Operations Plan (Item # 40.c)iii) in the RUA). At the time of this review, the other portions of the Public Safety Plan and other components of the Operations Plan have not been received for review and/or updated per previous comments. This review is based on the information available at this time, and additional comments may result following reviews of the other Plan components once they are received.

This plan does not address;

- maintenance of emergency routes;
 - It is anticipated that this will be addressed in the Public Safety Plan as per item #40.c)i) of the RUA – a plan to mitigate impacts on emergency services – Proponent to confirm?
- traffic concerns/traffic delays;
 - It is anticipated that this will be addressed in the Public Safety Plan as per item #40.a)vi) of the RUA – a plan to evaluate and mitigate impacts on vehicle traffic to and from the ferry dock, bicycle traffic, school functions, student transportation, parking, and agricultural traffic - Proponent to confirm?
- impacts on ferry operations;
 - it is anticipated that this will be addressed in the Traffic and Construction Management Plan as per item #40.a)xv) of the RUA – a plan to mitigate impacts on ferry operations – Proponent to confirm?

As noted in our letter dated March 9, 2016, this document has merit as a component of a safety plan that can be shared with workers and sub-contractors, but it does not address safety issues and commitments made to residents of Amherst Island. Furthermore, Item # 35 in the RUA identifies that the Operations Plan will "...demonstrate...how the Municipality's residents' access to emergency services will be maintained at all times." This document also does not address Windlectric's commitment to implement a public communications plan.

We request that the Proponent submit to the Township a schedule of submissions, in order to identify when the different components of the Operations Plan packages, including the above noted items, are expected to be received for review.

Comments

1. Emergency Preparedness

a. Initial Comment No. 5.d) (March 9/16):

Unclear if fencing will be used for designated work areas as a preventative measure?

AP Document Revision (April 2016):

Clarified fencing will generally not be utilized around work areas other than silt fencing required as part of the Wildlife Management Plan or erosion and sediment control plan.

AECOM Comment (May 2016):

It is suggested that the proponent indicate in the document that they commit to utilize fencing to secure areas/excavations as may be required by MOL/OHSA requirements where applicable. It is also suggested that the proponent confirm in the document in general that they will be following all procedures/requirements of MOL/ OHSA/ legislations as applicable (i.e. this document does not override or replace those requirements).

2. Emergency Response

a. Initial Comment No. 6.a) (March 9/16):

Contractors, landowners, others are responsible for calling 911 and then notifying construction manager – contradicts Emergency Notification Procedure.

AP Document Revision (April 2016):

Text amended for consistency.

AECOM Comment (May 2016):

It is noted that the order is still inconsistent in different locations in the document: on page 7/8 and 11, text reads that (persons) shall immediately notify the Construction Manager or Operations Manager who will then call 9-1-1, however in other locations for emergency protocols such as on page 13/14, text indicates that order is to call 9-1-1 and then inform Construction Manager or Operations Manager. Should latter process be the adopted approach? It is suggested that all text be coordinated and consistent.

b. Initial Comment No. 6.d) (March 9/16):

High Angle/Confined Space Rescue Protocol:

- i. Second bullet states to bring injured person to ground level or a safe area; please identify who would be doing this. (e.g. – during construction – contractor responsible for this? During operation – service ground crew?).

- ii. Last bullet states to call competent third party contractors as required – would this timeframe be a concern, due to access considerations to the island? Should those personnel working on the units be trained in both high angle and self rescue?

AP Document Revision (April 2016):

Amended text in document.

AECOM Comment (May 2016):

Amended text references appendices which are incomplete and state “TBD”.

There is no information on “self rescue” – does proponent intend to add details on this?

c. Initial Comment No. 6.f) (March 9/16):

Emergency Response Protocol – Fire/Explosion

- i. Has the protocol considered fires in the turbine unit? Do the turbines have fire suppression systems built in? The recommendation from Emergency Services is that the operator be responsible for maintaining a foam bank with a type and quantity of foam to ensure a sufficient supply to deal with any flammable liquid emergency, both in the turbines as well as the storage/maintenance facility. Foam proportioning equipment would need to be obtained for the Amherst Island Station and training would have to be provided to personnel on this equipment and proper foam application.

AP Document Revision (April 2016):

AP has amended text with respect to procedures for fires within structures including turbines. AP has noted that “Turbines do not have fire suppression systems. As prescribed by the Ontario Fire Marshall, any fire in a turbine should be *“allowed to burn itself out while staff and fire personnel maintain a safe area around the turbine and protect against the potential for spot ground fires that might start due to sparks or falling material.”* Please provide a further description of the foam bank and proportioning equipment referred to.”

AECOM Comment (May 2016):

Loyalist Township Fire Chief provided the following comments:

The comment regarding the foam supply is based on the unknown quantity of lubricants that may be stored in the proponent’s maintenance/storage facility. If the proponent brings supplies of fluids with them to the site and take them back at the end, this may have an impact on the need/concern. If large quantities of flammable liquids are to be stored on site, the proponent must comply with Part 4 of the Ontario Fire Code. Loyalist Township does not have this compliance requirement on Amherst Island based on the existing land uses on the Island, and therefore does not have foam storage on Amherst Island. If this equipment, and supplies for this operation are required, this should be provided by the Proponent. These requirements cannot be determined until the Proponent provides clarification and confirmation of what materials and how much quantity are to be stored on Amherst Island.

d. Initial Comment No. 6.g) (March 9/16):

Emergency Response to Scheduled Maintenance

- i. The Township requires a timeline for receipt of the schedule; e.g. a 7 day lead time on receiving regular maintenance activities notifications would be preferred.

AP Document Revision (April 2016):

AP has amended text and identified that a quarterly schedule will be provided. AP has further identified that unplanned maintenance may be required at any moment.

AECOM Comment (May 2016):

The Township has requested seven (7) days lead time on notifications for regular maintenance activities, due to limited personnel on the island. Suggest that the Proponent also expand on protocols for emergencies during maintenance and how this document addresses maintenance period, or clarify if additional documents will be issued to cover the maintenance/operational period (e.g. protocols for notifying Township and emergency services for any works following construction period/during operation period?).

e. Initial Comment No. 6.h) (March 9/16)

Emergency Response Protocol – Severe Thunderstorm and Lightning
Suggest that the protocol also identify what would occur in event that a lightning strike causes materials/structural damage – emergency services to be notified; they have identified they would set up a safe perimeter / close road traffic as required and keep everyone out while allowing operations staff to deal with the situation.

AP Document Revision (April 2016):

AP has amended text.

AECOM Comment (May 2016):

Suggest emergency response protocol section added for structural damage includes notifying emergency services.

3. Appendix A – Organizational Chart

a. Initial Comment No. 9.a) (March 9/16):

Clarify in the text/organizational chart how sub-consultants/contractors to be notified of/or report health and safety issues.

AP Document Revision (April 2016):

Amended text in document.

AECOM Comment (May 2016):

The organizational chart is not clear on the notification process for emergencies and decision making – will this be amended further in future document revisions?

4. All Appendices

a. Initial Comment No. 10.a) (March 9/16):

Need to include contact information for barge operations, include Township and representatives, as well as Fire Chief.

AP Document Revision (April 2016):

Text has been amended, fire chief has been inserted.

AECOM Comment (May 2016):

Contact information for the barge has not been included. The Fire Chief has indicated that a reliable contact number/contact information for the barge / tug captain is important, as the fire department cannot access marine radio and the barge operations will not be

able to access the fire department radio. Appendices are incomplete and lacking significant details, identified as "TBD".

5. Clarification – Emergency Services References

The document includes references to the "Fire Department" and "Emergency Services" – the formal reference would be "Loyalist Township Emergency Services" – the proponent may wish to clarify this and update to one reference for consistency.

Closing

David Kielstra and Guy Laporte, Senior Engineer, both of AECOM, have assisted in preparation of this letter.

Sincerely,
AECOM Canada Ltd.



Marissa Mascaro, P.Eng.
Project Engineer
Marissa.Mascaro@aecom.com

GML:gl